

ZAMPARONI, Valdemir. Leprosy: disease, isolation, and segregation in colonial Mozambique. *História, Ciências, Saúde – Manguinhos*, Rio de Janeiro, v.24, n.1, jan.-mar. 2017. Available at: http://www.scielo.br/hcsm.

Abstract

Drawing on documents produced between the early nineteenth and mid-twentieth centuries, mainly medical reports, this paper indicates the prevailing conceptions in the colonial medical community and local populations about leprosy, its manifestations, and how to deal with it. It focuses on the tensions concerning the practice of segregating lepers and its social and sanitation implications. To comprehend the roots of the discourses and strategies in the Portuguese and colonial medical environment, the trajectory of the definitions of isolation, segregation, and leprosy are traced, as are their use in or absence from the writings of missionaries, chroniclers, and doctors in Angola and Mozambique as of the second half of the seventeenth century.

Keywords: leprosy; medicine; colonialism; segregation; healing practices.

Valdemir Zamparoni

Professor, Departamento de História, Programa Multidisciplinar de Pós-graduação em Estudos Étnicos e Africanos/Universidade Federal da Bahia. Praça Inocêncio Galvão, 42 40060-055 – Salvador – BA – Brazil vzampa@gmail.com

Received for publication in May 2014.
Approved for publication in November 2015.

http://dx.doi.org/10.1590/S0104-59702016005000028

The origins

Dictionaries tell us that the first written records in Portuguese of the terms ayslado and aislhado (archaic forms of isolado, "isolated" in Portuguese) date from 1557 and that the etymology of "isolate," meaning "shaped like an island," first appears in 1653, while it takes on the meaning of "getting away from the crowd" in 1697, and "distancing one body from contact with another" in 1758. It derives from the Latin insula and the Italian isolato, isola, with the meaning of "removed," "solitary," "made into an island," "separate." Meanwhile, the word segregado (segregated) first appears in written Portuguese in 1563. Its roots lie in the Latin segregare and its meaning has remained unaltered to the present day: to separate, divide, distance, isolate, dissociate, repel, remove, take away, and deprive (Bluteau, 1720; Carvalho, Deus, 1890; Houaiss, 2001). It is no coincidence that although the two terms have old roots, they gained currency in the Portuguese language precisely in the sixteenth and seventeenth centuries, when Europeans, especially the Portuguese, were engaged in extensive overseas endeavors, coming across and confronting new landscapes, beings, and cultures that were alien and exotic to them. The exercise of thinking about themselves in the face of multiplicity, differences, and extremes made the terms useful identity markers in that context (Todorov, 1989).

As the Europeans gradually had more contact with and acquired more knowledge of such diverse environments, animals, and human beings, the differences could have been naturalized and the terms could have then fallen out of use. Yet that is not what happened. With their expansion across distant lands, markers of different orders to designate "us" – Europeans – and "them" – everyone else – were gradually developed and established over the centuries. When it came to Africa, the centuries of slave trafficking and subsequent years of colonial rule were instrumental in cementing these perspectives, which ended up spawning theories and practices of social segregation and isolation. The most striking historical example is the Apartheid regime in South Africa. Even so, the colonial system as a whole could perfectly well be defined as the "art" of "separating, dividing, choosing, distancing, isolating, dissociating, repelling, removing, taking away, and depriving." The discourses, theories, and effects of this "art" in the social dimension of daily life are relatively well known from the historiography on Mozambique (Capela, s.d., 1977; Penvenne, 1982, 1995; Zamparoni, 1998, 2007).

Studies of medicine and medical practices in Europe have devoted great attention to isolation-related aspects, especially since Foucault's (1961, 1963) pioneering work. However while there is a growing body of work about the impact of western medicine on Africa as a whole, it only addresses the specific target of this research obliquely (Comaroff, Comaroff, 1992; Feierman, Janzen, 1992; Vaughan, 1991, 1995; Ranger, Slack, 1995; Bado, 1996; Horton, 1997; Hunt, 1999). The scenario in the Portuguese colonies in Africa, Mozambique included, is not very encouraging. Some academic studies have adeptly identified the meanings of the presence of western medicine over the centuries (Shapiro, 1983; Bastos, 2007; Rodrigues, 2011). But the isolation and segregation of the sick is practically absent from the theories and practices adopted in the local medical environment and in the way the subject was dealt with according to the local people's own knowledge bases.

The disease that has received most attention in medical debates about isolation and segregation is leprosy. For a long time it was seen as a *sui generis*, in that it is exclusively human, and as Avicenna called it, a "universal disease" and "universal canker" (Bluteau, 1716). Reports of leprosy in vast regions of the world date back to antiquity. Convinced of the oneness of body and spirit, Europeans in the Middle Ages saw physical deformities as a sign of divine punishment and an unequivocal indication of the presence of sin and evil. People with leprosy spread panic wherever they went: hated and feared, they were accused of poisoning water wells, water bodies, and rivers, and of plotting to usurp the powerful and rule the towns and countryside. Perceived as representing such a great real or imagined threat, they were severely persecuted, strictly segregated, and cruelly tortured and killed: burned alive in public squares or shut up in their own homes (Pinto, 1995; Ginzburg, 2007). Moore (1987) sees the implacable persecution of lepers as part of a broader move to target all deviants – prostitutes, heretics, Jews, sodomites – identified as enemies of the faith and the burgeoning states whose powers stemmed from it.

There are those who argue that the medieval images of leprosy took root in the people's imaginary and transited virtually intact to modern and contemporary times (Brody, 1974, p.197). There are others who hold that the contemporary stigma is a phenomenon strictly linked to the nineteenth century colonial movement, when it was discovered that leprosy was endemic to areas coveted by the colonial powers. It was at this time that the disease is believed to have acquired its "tropical" appendage and association with savage, inferior peoples (Gussov, 1989, p.201 e s.; Obregón Torres, 2002, p.120). Yet I do not see why these two theses should be seen as contradictory, because although leprosy did not seem endemic in the sixteenth century, gradually vanishing from the social and cultural traditions of part of Europe (Obregón Torres, 2002, p.48), the fears, phantasmagoria, images, reactions, and procedures associated with it could have hibernated in the deepest substrates of the collective European subconscious and reemerged in the new cultural conditions of nineteenth and twentieth century imperial Europe (Ginzburg, 2007).

Whenever there were significant flows of people – in the more distant past there were the Roman wars of conquest, the crusades, the expansion of Islam, and other migrations – leprosy spread with them (Pinto, 1995). From the fifteenth century onwards, the overseas expansions triggering more intense movements of seafarers and traders involved in buying and selling goods – especially slaves – took the disease to the Americas, which had hitherto been free of it. The presence of Africans with leprosy seems to have gone unnoticed by the Portuguese chroniclers of the seventeenth and eighteenth centuries. Cavazzi (1965), who lived in Congo, Matamba, and Angola between 1654 and 1677, devoted some pages to "diseases and their treatments," stating that the natives suffered from many ailments inherent to the climate, but making no reference to leprosy. The same applies to Cadornega (1972), in whose História geral das guerras angolanas (General history of the Angolan wars) dozens of pages are devoted to the "diseases of the land," the local healing arts, the healing properties of local plants, but leprosy is only referred to as being hereditary amongst the kings of Spain (p.372). Not a word on it or any other disease with which it may have been confused in the local environment. Luiz António de Oliveira Mendes (1812), in his pioneering and striking speech on the diseases that most frequently affected the "negroes" recently removed from

Africa – specifically from Angola –, given in a public session of the Portuguese Royal Academy of Science (Academia Real das Ciências) in 1793, in which he described these diseases in detail, as well as their causes, symptoms, and ways of treating and avoiding them, made no mention of leprosy. What could be behind this silence? Could it be the process of "forgetting" the disease that impaired the memory of Europeans, as mentioned earlier? Could it be such a negligible ailment in the midst of the local nosology that it failed to attract the attention of such close observers? Was there some African knowledge about the different stages of the disease that may have informed the traffickers – African and European – so that they were able to exclude enslaved Africans with leprosy at source, even those that did not have its tell-tale symptoms? Or could there have been some African know-how in treating the disease that was so efficient that its very existence was not even noted by foreigners? The fact is that it was not exclusive to Africa; nor, indeed, were any of the "exotic" tropical diseases that so attracted the attention of medical practitioners in that continent. Even today, perhaps for the very same reason, leprosy seems to attract little attention on the part of researchers of diseases in Africa.

Medical reports are increasingly being exploited as key documental sources, allowing the way medical practice was managed *in situ* to be explored, bearing in mind the asymmetries of power and cultural diversity in colonial contexts. Reports by doctors working in Mozambique in the late nineteenth and early twentieth century published by the Mozambique Department of Health (Repartição de Saúde de Moçambique) and documents from the Health Archive (Fundo de Saúde) at the Mozambique Historical Archives (Arquivo Histórico de Moçambique) indicate that throughout colonial times, leprosy was a constant concern. In this article, I investigate the different schools of thought and proposals put forward by these agents of western medicine concerning the identification of the disease, epidemiological issues, and how to fight the disease, as well as the ways they viewed the natives, their patients, and I take some first steps towards apprehending the conceptions of the local people about leprosy and isolation not just of the sick, but also of the "indigenous" population.

On definitions

Before the instruments and methods of bacteriology were developed, the various symptoms of leprosy led to much confusion in its identification. In the early 1700s, Raphael Bluteau (1716) produced a dictionary (named after himself) in which he defined leprosy as a "contagious malaise" of "venomous appearance" caused by "depraved blood," which corrupted the "natural state of the body." However, not satisfied with this alone and inspired by the encyclopedic spirit of his day, he sought to bring together the tentative medical knowledge on the disease accumulated until his time. He set forth the arguments of Avicenna, Pliny, Cornelius Celsus, Vossius, Duarte Madeira Arrais, and others, but confusion soon set in. Sometimes the term appeared in the plural, *Lepræ*, as used by Pliny, and sometimes in the singular, *Lepra*, as the author himself preferred, "like the Greeks, ecclesiastical authors, and many extremely able doctors" (Bluteau, 1716, p.83). The confusion was heightened when it came to identifying its etiology. According to Bluteau, Duarte Madeira Arrais (1600-1650) stated that leprosy "is consistent with *Morbo Gallico* in a general sense" (p.83) and could turn

into it, just as *Morbo Gallico* could turn into leprosy. Bluteau noted that other doctors called leprosy *Leontisis*, or "lion's disease," because it made the patients' eyes "bright and filled their forehead with wrinkles" (p.84), just like when the lion roars. Others called it *Satiriasis* because it caused priapism; and others still, alluding to the difficulty medicine had in "taming and overcoming this ailment" (p.84), called it *Morbus Herculeus*.

However, the biggest difficulty was how to tell leprosy from elephantiasis; indeed, many thought they were one and the same disease. Bluteau (1716) wrote that Girolamo Mercuriale (1530-1606), drawing on Plutarch, reported that Arab doctors called leprosy *Elephantiasis*. This confusion between the "Arabs' elephantiasis" (present-day elephantiasis or lymphatic filariasis) and the "Greeks' elephantiasis" (which effectively corresponded to leprosy) dated back to antiquity (Bado, 1996, p.59). Even so, Bluteau sought to align himself with Gerardus Joannes Vossius (1577-1649) – who himself was citing Cornelius Celsus –, in whose De Vitiis Sermonis he stated that they were two very different ailments, and that the Arabs' elephantiasis was what the Latins called "vitiligo," marked by "white nodules of different sizes and rough skin, like an elephant, which is why the Greeks called it Elephantiasis" (Bluteau, 1716, p.83). However, in his book on the etymology of Latin languages, Vossius himself said that elephantiasis was a kind of leprosy. Faced with this quandary, Bluteau (1716, p.84) opted to "conciliate these opinions," stating that the Arabs' elephantiasis was a kind of leprosy that was "far more frightful and horrific than common leprosy, so much so that it has been observed that the wounds of this horrific leprosy have blood full of lucent, white corpuscles like grains of corn, which are separated from the same blood once washed and filtered." Unfortunately, Antonio de Moraes Silva's late eighteenth century edition of Bluteau (Bluteau, Silva, 1789, p.16) impoverishes the arguments, omitting the whole controversy, and merely states that leprosy was "a kind of pox that covers the skin with very ugly scabs, both white and black, which consumes the flesh with unusual voracity."

In the nineteenth century and even in the twentieth century, the etymological and etiological confusion prevailed. Jacques de Salis di Celerina (1846), who for nine years worked as the chief physician in Mozambique for the Portuguese crown and as a private clinician with the Board of Naval Health, engaged in studies for a "medical topography" that resulted in his "Brief description of the diseases of the East Coast of Africa." Setting forth in order of importance the fevers, dysenteries, and pulmonary diseases, their symptoms and treatments, he did not overlook dermatoses or, indeed, "elephantiases," albeit very briefly. He distinguished a scrotal form of elephantiasis – "very common amongst the indigenous" 1 – but then he confused the "Arabs'" elephantiasis with the "Greeks'." He said it was well known in Mozambique and that it only affected "Moors, Arabs, Mujojos, and negroes," and that it was normally incurable (p.70). Perhaps because the diseases were not from the "country" of interest of the medical topographies of his day and did not affect Europeans, Celerina did not give them any attention neither did he described the treatments employed by him or by native "healers," even though he did so when it came to an epidemic of matunica or mapute (ailment affecting the mouth, larynx, and pharynx) that struck the region of the then "prison" of Lourenço Marques between 1837 and 1839, and when writing about tick-bite fever, which existed in the Rios de Sena region, both of which were considered exotic pathologies. Celerina's predecessor as chief physician, Luís Vicente de Simoni (1819 and 1821), who worked

v.24, n.1, jan.-mar. 2017 5

at the civil and military hospital of the island of Mozambique, then the capital of the colony, in the spirit of the neo-Hippocratism then in vogue, was keen to identify the causes of the diseases of the land, the methods for curing and preventing them, and their relationship with the climate and the social environment (Rodrigues, 2005; Wagner, 2012), compiling his observations in the *Tratado médico sobre clima e enfermidades de Moçambique* (Medical treatise on the climate and infirmities of Mozambique) (Simoni, 1821). In this work, he focused especially on fevers and some of the healing practices of urban "domestic medicine" on the island – based on a mixture of Asian, African, and European knowledge – but made not one single reference to leprosy. Later, while working in Rio de Janeiro, where he was one of the founders of the Society of Medicine, he did address the subject (Araújo, 1946, p.386-387).

On the west coast, Porfirio Teixeira Rebello wrote a "Military medical report from the city of Benguela..." in 1886 in which he stated that one prominent disease amongst the endemic diseases in the region was "elephantiasis of the Greeks," sometimes marked by "hypertrophic dermatosis," or sometimes by "extensive hypertrophies and profound ulcerations," concluding that "these morbid processes, peculiar to the indigenous and particularly to the black race only, are, in a longer or shorter time, the cause of death" (Rebello, 1890, p.26). Without doubt, this "ethnicization" and "racialization" was indicative of how few "white" people there were in those lands and the fact that the authors' thoughts were marked by the growing consolidation of "scientific" racism and the views of medical topography – or geography – dating back to the eighteenth century.² This medical discipline sought to understand why some pathologies were only found in certain tropical areas and peoples, or why other diseases had different or unexpected impacts on them (Edler, 2011, p.183-184), especially in view of the imperial plans to settle communities of Europeans in these "exotic lands." In late nineteenth century Portugal at the height of the race for imperial power, one of the doctors who most strongly defended the "colonial hygiene and acclimatization" of the settlers in Africa was Manuel Ferreira Ribeiro, who wrote several works on the subject (Ribeiro, 1871, 1887, 1890a, 1890b) that contain not the slightest reference to leprosy or its countless and varied designations, even in the works published after Hansen had identified Mycobactherium Leprae in 1873.

In the Portuguese colonies, people with leprosy were referred to using any of many designations. In Moraes Silva's edition of Bluteau (Bluteau, Silva, 1789), they were adjectivized as "lepered", "Lazarated," and "infected" (in Portuguese: *leprosos*, *lazarentos*, and *gafos*). The term "leproso" has its roots in Antiquity, the second draws on the Biblical source. The most interesting term is the last one, which appears in early records (1177) in the Portuguese language (Leão, 1606; Machado, 1953) and which was already considered an "antiquated" word by Duarte Nunes de Leão in the seventeenth century. Indeed, Frei Joaquim de Santa Rosa de Viterbo (1799) included it in his *Elucidário...*, which contained old words that had fallen out of use and were actually unused at the time of writing. The word appears in the first edition of Bluteau (1713, v.4) as an equivalent of "leper" or a person suffering from a certain kind of leprosy – which did not just corrode and eat away the flesh, but also "twisted" the fingers like the claws of birds of prey. It seems, in fact, that in the metropolis the terms *gafo* and *gafaria* (for "leper" and "leper colony") had ceased to be used by the sixteenth century. At least the literature on the disease in Portugal does not apply the term to later centuries (Conde, 1988; Beirante, 2008; Rocha, 2014). However, it was still in circulation in the following centuries

in neighboring Spain (Obregón Torres, 2002, p.71), and curiously enough it continued to be used in Portugal's overseas possessions until the twentieth century, as corroborated by the documents analyzed.

On native knowledge

In Africa in the first decades of the twentieth century, and in some cases in the late nineteenth century, leprosy often attracted the attention of the more watchful doctors and missionaries, who noticed that it was known by the African people they came into contact with. One of the shrewdest observers was a Swiss missionary, Henri Junod.³ In his meticulous, well-known ethnography written between the 1890s and the early 1900s on the people he called *Tsonga* in the south of Mozambique, he said that leprosy (*nlhokonyo*), referred to as *nhlulabadayi*, or the "disease that defeats doctors" (Junod, 1996, p.397, 409), was well known by that people, for whom it was one of the two most feared contagious diseases, the other being pulmonary tuberculosis (*lifuva*) (p.408). A quarter century later, another doctor, Francisco Ferreira dos Santos (1923, p.60), found that although leprosy was a mild endemic, it manifested with relative frequency and was identified by the "natives" at its "mutilating, tuberculous, and ulcerative" stages. To overcome this dreadful disease, they had specialists in its treatment, including ones that Junod (1996, p.389) classified as "indigenous doctors" (*n'angas*), considered the most skillful of all.

According to Junod's (1996, p.407) account "concerning the causes of diseases," the *Tsonga* were "mired in the deepest superstition" and the way their doctors worked was consistent with this. In practical terms, like any other doctors, they sought to diagnose the causes, but the *n'angas* barely took account of the physical symptoms, nor did they do "auscultation or palpation, nor exams of secretions, blood, saliva, or urine – because these things are repugnant and should be covered with sand as quickly as possible!" (p.407). The main and indeed the almost universal diagnostic method was to throw small bones into the air to see how they fell, as their position would reveal the presence, the circumstances, and the root causes of the ailment: the spirits of the gods, the bringers of bad luck, or *makhumu*, meaning, contamination caused by contact with dead and impure people and, less commonly, the heavens. Once the cause had been identified, different courses of action were prescribed.⁴

Junod (1996, p.409) added that although leprosy was greatly feared, lepers were not segregated, and lived in the village with all the other villagers. However, the idea of contagion by contact was not unfamiliar: lepers would have the same meals, but would eat after everyone else. They could take part in the "beer festivals," but they should be "equipped with their own cup, while the other guests would receive theirs from the village chief." In parts of western Africa, a similar state of affairs prevailed. Excepting the Draconian measures found in precolonial Dahomey, where lepers were confined to specific areas, prevented from going out, and condemned to death if they entered a village or town (Bado, 1996, p.136), in parts of the Sudanese Sahel, the people did not bother if they lived alongside lepers. This position can be explained by the conception of the disease as being ruled by supernatural forces or by men with extraordinary evil powers, and the belief that to protect themselves from contagion, they could turn to "magical protection" (p.138). On the Ivory Coast, especially

around Assinie, where cases of mutilating leprosy were common, the people believed that the disease was caused by witchcraft $(cocob\acute{e})$, whereby the lepers' fingers were stolen and reappeared on people who had extra fingers (appendices that looked like fingers) (p.146).

Amongst the *Tsonga*, the notion of contagion also led them to enforce specific rules when it came to burying people with leprosy. People from the leper's family could meet in the village square, but they did not dare "even attend the burial" (Junod, 1996, p.409). This was the job of their kin by alliance or friends. The grave was dug alongside the hut where the person had died, and their body was taken out through a purpose-made hole in the wall and deposited directly into the grave, without any of the habitual funeral rites. All the dead person's belongings were broken and thrown far away in the deepest part of the forest, because of fears that some member of the family should touch them and thus die. In certain cases, they could be left in the hut, but only provided the whole village moved away from there immediately (Junod, 1996, p.409). Uncommon supernatural forces were so strongly associated with the people who died of leprosy that their fat was sometimes extracted or powder was made from the ashes of their bones and used as an ingredient in the most powerful ordalia, which were designed to identify criminals and especially the fearful sorcerers, bringers of bad luck (p.455).

Junod (1996, p.389, 397) tells us that the n'angas who specialized in treating leprosy guarded their knowledge jealously and absolutely refused to reveal their secrets, which might explain why the Swiss missionary did not say what treatments were used to fight this disease, unlike many others whose healing procedures he described in detail.

The colonial doctors working in the early 1900s without Junod's ethnographic concerns added little information about the local forms and treatments of leprosy. However, some had the sense to ask the "indigenous" people for their own ideas about the disease. One such was Mário Andrade e Silva, a doctor in whose investigation in the south of Mozambique in the 1940s he discovered from the old men, his "informants," that leprosy was considered a very evil disease, sent by God or, according to a few, acquired in circumstances of misfortune. For others, it was caused by curses cast by others (xicuembo); many added that leprosy resulted from the action of a snake (*nhoca*) that the patient had in their belly, which caused the nodules, ulcers, and other symptoms of the disease. In some areas of the same region, the consumption of fish from lakes was blamed for causing leprosy (Silva, 1943, p.9). The thesis was not original or even local exoticism. Its roots are far older and could be linked to the Talmudic tradition that made such an association and imposed restrictions on the consumption of certain types of fish in Judaism and later in Islam. These religions only allow the consumption of fish from the sea, or saltwater or freshwater lakes. In other words, any fish from freshwater or stagnant lagoons that did not fulfill the requirements were not allowed. The restriction on certain types of fish – and sometimes their consumption with milk – is also found in Ancient Egypt and its association with leprosy was spread by many Muslim scholars, including Avicenna (980-1037), Al-Damiri (1341-1405), and Ibn Ajurum (?-c.1323). More recently, German theologian and orientalist Johann David Michaelis (1717-1791) found a correlation between a decrease in leprosy and the reduced consumption of fish by Jews. According to Bado, this argument was widely supported. Indeed, leprologists in the nineteenth century recommended that their patients should not be served fish (Bado, 1996, p.61; Gomes, 1815, p.11-12). One

supporter of this belief was a British doctor specialized in leprosy, Jonathan Hutchinson (Silla, 1996, p.618). He did not agree with the contagion hypothesis and, in a lengthy study, stated emphatically that the causes of the disease lay in some ingredient or parasite produced by or introduced to fish. Silla notes the multiple places and environments (popular, religious, and scientific) around the world where this belief prevailed, which demonstrates that over the millennia, ideas flowed as freely as oxygen, and were absorbed, rearranged, reconsidered, appended, and dispersed over long distances, making it impossible to attribute their origin to one single source (p.614).

Mário Andrade e Silva (1943) also discovered from the elders that in the "olden days" there were few cases of leprosy, and that in its rare manifestations, the patients were banished from their villages into the wild, where a hut would be built for them to live. "He was given water and food every day, which was left in a pan at the entrance to the *hut*, placed there for this purpose. In other words, there was forced isolation and great repugnance towards any contact with any leper" (p.8; emphasis in the original).

In a more recent deposition (interview held in Chicuque in 2013), Marcos Nhantumbo, a former nurse and member of the Methodist Evangelical Church in Inhambane, confirms the practice, which he came across in the 1940s:

They couldn't even spend time with their family. They had to be kept really isolated from their family. They had to be somewhere in the wild where they could build a hut. Someone would take food, leave it there, turn around and run home. They'd remain there and eat it however they could, and the person who left the food looked like they were going to catch something, they couldn't come into contact (interview held in Chicuque on June 4, 2013, reproduced in Jaime, 2015, p.157).

Even so, while people with leprosy were kept away from the collective, this practice was not isolationist, at least not compulsorily, because the people with leprosy did not have their freedom of movement completely restricted. Nonetheless, it is no surprise that there was some kind of social pressure on them not to mix with healthy people. Silva (1943, p.27) found that those measures were gradually dropped, because with the growing adoption of western dress, lepers looked less repellent, since their lesions and ulcers, which had been on display when they wore a loincloth, were no longer visible, and direct contact with the lesions was unlikely. Stigma, which in its original conception refers to bodily signs designed to "expose something unusual and bad about the moral status" of those that had them, and whose symbols "obtrude [themselves] upon attention" (Goffman, 2008, p.11, 112), lost ground here as the bodily signs of the disease were no longer on display, no longer repelled the gaze, and were therefore no longer a cause for exclusion.

In another case described by Silva (1943, p.28), the lepers refused to obey the rules of behavior and the place in society designated for them and took action against the circumstances of their exclusion, testing the limits of the collective in a quest for their reinclusion in society (Goffman, 2008, p.132). Aware that they could contaminate others, they adopted strategies to "pollute" objects and make them unusable by the others. Segregated, barred from the community's annual cashew festival – full of symbolic significance in many parts of Mozambique – one of the lepers surreptitiously entered the proceedings and dipped one of his limbs into one of the containers where the cashew fruit pulp was being fermented.

Now polluted, to the dismay of the healthy people, the drink was given to the lepers, who ended up being able to partake of the libation, like the other members of the community. They voluntarily, openly, and deliberately refused to accept the place in society designated for them and acted – according to the social mores – in an "unexpected and, in some ways rebellious manner" (Goffman, 2008, p.153). By so doing, they demonstrated how the stigma that excluded them from the festival could be exploited to allow their reinclusion into society, if not into the "normals" group, at least into a ceremony involving the cashew fruit libation, which was so important for the community. It could be that some of these excluded people had previously been granted full access to the celebrations, making their exclusion feel all the more unfair, despite the marks they bore on their body.

A similar fear of the pollution caused by leprosy is described superbly by Miguel Torga, nom de plume of Adolfo Correia da Rocha, a doctor and contemporary of Mário Andrade e Silva's, who wrote, in 1944, about a small village called Loivos – a village that was not in Africa, amongst the "primitive" people, but in Christian Portugal. When the villagers found out they were consuming olive oil supposedly contaminated by a leper called Julião, they were "petrified, overtaken by disgust, anguished ... they wanted to rip out their stomachs, their entrails, cleanse themselves of the venom, immediately throw up the leprosy they already felt contaminated by" (Torga, 1967, p.76). Overnight, Julião "was singled out, damned, excommunicated, viewed as a repulsive foe." People even refused to give him alms, and did not want to admit that in their land "there grew such black evils" (p.75-76). It was a time of "enforced solitude," according to Delumeau (1989, p.123), which prompts us to reflect upon the validity of Mary Douglas's (1976, p.23) argument that "primitive rules⁵ of uncleanliness pay attention to the material circumstances of an act and judge it good or bad accordingly," but not the rules of Christianity. It might be more prudent to draw on another of her conclusions: "The idiom of pollution lends itself to a complex algebra which takes into account the variables in each context" (p.21).

The truth is that at a given moment in his investigation, Silva (1943, p.8) observed that the population had ceased to be fearful and started to allow lepers to live in their villages in their own huts, or even with their families, and to take part in community life. Even those whose bodies were already at the mutilating stage of the disease, demanding greater care because they were more repulsive, were not isolated, which sometimes led to situations of heightened tension, especially when it came to conjugal relations. Men and women alike were disgusted at the prospect of having sexual intercourse with their partners with leprosy, and the disease was generally a cause of marital breakdowns. However, in the patrilineal, patriarchal south of Mozambique, the strict rules of marriage meant that women who left their husbands could cause disputes (*milandos*) connected to the *lobolo*, and they were often obliged to return and care for their husbands.

Also on the matter of the absence of any radical segregation between the people in this land, another doctor, the chief of health in Manjacaze, in the same region investigated by Mário Andrade e Silva, stated a decade earlier that he felt "pity" and "repugnance" to see "beings with infected wounds breastfeeding children or eating with other indigenous people" because it was "their belief that contagion only occurs when someone hits or mistreats one of these lepers" (Seixas, 1930, p.187).

Even lacking sufficient knowledge about the "thinking of the indigenous," their cosmogony, their diseases and healing practices, it was common in the colonial medical milieu to state that this thinking was inherently irrational and their habits were rooted in superstition. A talk given at the first Congress on Tropical Medicine in Western Africa (Luanda, August 1923) stressed that there was a great deal of witchcraft, a taboo, which made the life of individuals dangerous when they came into contact with certain objects or persons or undertook particular acts, which should be avoided, and if the practice of exorcism was beyond the family's skills, the diviner or witchdoctor was called to set it in action (Santos, 1923, p.49).

Despite being convinced that "from gestation to death, superstition reins over every detail of indigenous life," he shared with Junod the conviction that "some witchdoctors had knowledge of drugs with medicinal effects, knowing how to use purgatives and astringents for intestinal afflictions, emollients for severe catarrh of the airways, and were also not unfamiliar with the use of cupping and scarification, in cases of congestion, making use of a bull's horn" (Santos, 1923, p.49). However, most of his colleagues did not recognize the African healers' (n'angas) abilities, and some even doubted the intellectual capacity of the Africans in general.

On prejudice, on reactions

Well into the twentieth century, trained in the spirit of scientific racism, imbued with imperial arrogance, and aligned with the colonial project, colonial doctors generally regarded natives as savages to be brought into line. At the same Congress on Tropical Medicine in Western Africa in 1923, Firmino Sant'Anna (1924, p.73), one of Francisco Ferreira dos Santos's work colleagues stated categorically that "well organized, effective" medical care for the "indigenous" was not only one of the colonizers' main responsibilities as "mentors of inferior races," but it was also one of the most fruitful ways for "infiltration, acquisition of prestige and assurance of predominance."

As the "aborigines" lived in an environment rife with resistant diseases (namely: sleeping disease, malaria, relapsing fever, dengue, filariasis, smallpox, plague, leprosy) and others that resulted from their "ignorance, their defective habits and their indolence" (Sant'Anna, 1924, p.74), like bowel infections, hookworm infections, parasitic skin lesions, plus their "imprudence and laxness, compounded by the adversity of the taxing natural conditions," which made life "precarious and uncertain," doctors should take action in order both to break down such ingrained habits and to alleviate the "numerous ailments" that afflicted them, prolonging their life and numerous offspring. Actions of this kind "would be indelibly imprinted on their spirit" and would be one of the main benefits the "savage peoples" could obtain from their subjection to "superior races, whose value they would have no difficulty understanding" (Sant'Anna, 1924, p.72-73). Drawing on his scientific authority as a doctor, Firmino Sant'Anna felt at liberty to issue authorized, authoritarian opinions on subjects that went beyond his scientific knowledge (Bourdieu, 1983). In a colonial context, the line between the field of science and the field of subjective opinion was crossed without the slightest compunction.

In a bid to wring changes to this context, the head of the Mozambique Health Services stated, in 1930, that the installation of health facilities throughout the inlands of the colony

was essential to attract "unruly indigenous people clinging to their traditional beliefs," who would thus take a liking to "our scientific skills," and the success of the undertaking would, at the same time, raise the opinion of Portuguese colonial action in the eyes of those who, through "all means" possible, were keen to "undermine our civilizing actions" (Santos, 1930, p.XVIII). It is impossible to tell whether the facilities were in fact put in place, and it is not within the scope of this work to assess whether the prestige of colonial actions was indeed enhanced. The fact is that the colonial state did not assure an organized offer of medical care and the "indigenous" did not rush gratefully to the colonial doctors. Indeed, the "indigenous" seemed to take conscious stances towards western medicine. Knowing its benefits and its limitations, they played a skillful game of proximity and distancing. The 1927 report by the Chinde health chief, Luís Soromenho, clearly illustrates the

practical sense of the 'indigenous' people's choice of treatment for their ailments. When they ascertain, through direct observation, that the white man has remedies or treatments that are superior to those used by their healers in curing the infirmities that afflict them, they will spontaneously submit to such treatments, attending health clinics, first aid posts, infirmaries or hospitals, where they can receive the medicine (Soromenho, 1930, p.CLI).

The report also mentions that the "indigenous" vehemently resisted any attempt to be hospitalized when they had leprosy, mild fevers, or other diseases whose treatment by the doctors they did not deem superior to that offered by the *n'angas*. Even those "indigenous" who had close contact with the "whites" would only seek out "white doctors" when the *n'angas* proved impotent (Soromenho, 1930, p.CLIII-CLIV). When it came to leprosy, a disease for which neither western nor "indigenous" doctors knew "any curative remedy," they did not even go to appointments or hospitals to "ask for any remedy to alleviate their suffering" (p.CLI), and hospitalization in such cases usually only occurred under duress.

Even when the doctors used their administrative structure – meaning their recourse to the strength of the *cipaios* (soldiers) working for the administrative divisions (*circunscrições*) – to get the lepers to submit to triage, "dialogue" between the parties was not easy. It was hampered by greater cultural barriers than merely linguistic ones. The different conceptions of health and disease held by the western world, especially the practitioners of medical science, and the world of their putative patients spawned misunderstandings that were hard to circumvent.⁶ One such misunderstanding would happen on first contact, and the doctors reported it was "very hard" and "very confusing" to take their history. Sometimes, the patient would refer to a distant forefather from his/her extended family who had been a leper; others would refer to a leper from their village. Another hurdle was denial, when they would just say they had never met anyone with leprosy, even though "some of them, who denied having contact with the sick, had a relative who was a leper, with whom they lived, who was present with them at the time of the examination" (Silva, 1943, p.8).

This doctor thought that the "indigenous" people gave false information intentionally and did not know why they would hide the fact that there was "Hansen's disease" in their families, because while they may know some "African remedies" to use on the lesions, they themselves did not have "faith in drugs" (Silva, 1943, p.8-9). He failed to realize that their notion of etiology was very different from that of medical science. There were reasons

why the patients refused not only to admit to their diseases but even to indicate kinsmen in the same plight. As the disease was interpreted as being of metaphysical origin and those who had it of having occult powers, it was better to abstain from denouncing them to the agents of the administrative and medical authorities so as to avoid any unforeseeable consequences (Honwana, 2002, p.207-241). The lepers sought to hide themselves, and they counted on their relatives' and friends' help for this by letting them know where the medical agents were and what they wanted. Also, they were not unfamiliar with the dreadful reputation of the colony's "leper colonies."

On isolation

At the cusp of the twentieth century, Mozambique had just one leper colony, on Elephant island in Lourenço Marques bay. It was built exclusively for the "indigenous" who wandered around the streets of the capital city and the southern districts of the colony, because in a society deeply scarred by racial hierarchy, mixing was inconceivable. The few white lepers – constituting as they did a smaller community – were sent for treatment in the Transvaal, whose authorities in turn deported the black Mozambican miners recruited to work there at the first sign of the disease. The insular exclusion of the patents constituted the reemergence of the medieval ancestral tradition of isolating lepers, now rooted in and justified by medical knowledge drawing on the science of bacteriology. Locally, it was incorporated into the broader "social hygiene" policy for urban Lourenço Marques, conceived as a "white space" where the presence of the "indigenous" should be limited and strictly regulated. Successive legislation and directives of different kinds all reflected this attitude (Penvenne, 1995; Zamparoni, 1998, p.250-332).

Elephant is a small island around 35km from the capital. It is a few hundred meters in area, but its land is unfit for agriculture and there is no drinking water, making the life of the two hundred men and women isolated there very hard indeed. The inhospitable environment only went to heighten the atmosphere of misery and neglect, and the tension sometimes spilled out into violence. In April 1909, a group of lepers were involved in some "disorder," the nature of which I have been unable to identify, and, according to the sources, were kept in handcuffs for an unbelievable six months, until the end of October (Secretaria..., 26 out. 1909). The correspondence between the different colonial administrative bodies indicates that the management of the island and its internees was not delegated to the health authorities, as one might imagine, or even to the Department of Indigenous Affairs (Secretaria dos Negócios Indígenas). The fact that a sergeant was put in charge of the colony indicates perfectly the prison nature of the place (Azevedo, 5 out. 1909). The Elephant island leper colony was seen more as a space for the exclusion of social undesirables than a place for medical treatment. In their body and skin, the internees felt the concrete manifestation of the dictionary definitions of isolation.

But these lepers did not submit to their state, and demonstrated their dissatisfaction in a number of petitions. Most of them were claims for money not received when they were repatriated from the Transvaal. Many hundreds of pages of correspondence on the subject circulated between the different government bodies involved: health, indigenous affairs,

indigenous affairs in Johannesburg, treasury, and local administrative departments. After jumping through endless hoops, a few lucky ones eventually received what they were owed, but most were already dead or completely crippled when the knots in the red tape were finally unpicked (Secretaria..., 30 maio 1918).

In June 1918, there were 203 lepers living on Elephant island: 143 men and 60 women. The chief of Indigenous Affairs, citing the "promiscuity of the moral order" and the risk of contagion of the newborns, proposed that the women with leprosy be kept on another island, but this never happened. Even earlier (1909), the Department of Health had suggested to the Department of Indigenous Affairs that it would be good to separate parents from their non-leper children and deliver them to relatives, "thus relieving them from contagion of assuredly dangerous consequences" (Azevedo, 18 nov. 1909). The suggestion seems to have gone unheeded until 1918, when the proposal for children over 2 that did not have leprosy to be taken away from the island and handed to relatives was again aired. If this was not possible, the administrators of the different administrative divisions should find indigenous families to bring them up "like adopted children" until they reached adulthood (Secretaria..., 13 maio 1918). Clearly, the focus was to remove children from contact with people with leprosy and put them in a "healthy" social environment, give them a family, even if adoptive, and socialize them. A far cry from Brazil's "preventorium" model, by which children were separated from their parents and kept segregated in health and education institutions called "educatoriums" (Monteiro, 1998; Curi, 2002; Alvarenga, 2013). In the Mozambican colony, deeply marked by the idea of social segregation, the Brazilian model was not even cogitated. A shortage of resources may have had an influence. But the measure of taking children away from their parents seems to have been inspired by what had been done in Hawaii since 1865, when the parents reacted violently to the practice (Benchimol, Sá, 2004, p.63).

The administrator of the Maputo division, aware of the complex rules of kinship and the fears associated with the disease locally, answered that it would be very hard to find families willing to adopt these children (Administrador..., 16 maio 1918). Whatever the case, despite the objections, 15 children were in fact forcibly removed from their mothers' arms and distributed to the administrative divisions in the district of Lourenço Marques. Four boys were kept at Miguel Bombarda hospital, where they were given food in exchange for their work in the hospital and their future employment as nurses with the Department of Health. It is impossible to ascertain from the sources whether any of them did in fact become nurses. The families that adopted the children were promised a lump sum of £10, to be spent on the "care and expenses needed for them" (Secretaria..., 30 maio 1918). There is no record of any families actually doing so.

Years before, in 1910, Augusto Cabral (1910, p.131), then the governor of the district of Inhambane, said that there were a great number of lepers of both sexes, which he estimated to account for 1% of the total population of that district, and called for the immediate creation of an administrative unit to isolate them in order to prevent that percentage from rising. Finding that the number of lepers in the province was very high⁹ and that Elephant island could not house them, the creation of another leper colony on Inhamafo island, Angoche, in the north of the province, was cogitated in 1914 for the indigenous lepers from the districts

of Quelimane and Mozambique (Secretaria..., 1914b). It would appear, however, that this plan was never carried through.

Mário Andrade e Silva (1943, p.10) was himself familiar with the conditions in which Mozambique's lepers were maintained and treated, because in late 1938, then the under-chief of health of Manjacaze, he had counted on the "administrator's good collaboration" (i.e., use of the *cipaios'* brute force) to get all the 580 lepers he diagnosed interned on Massavelene island in Inhampavala lagoon. Just one "indigenous" nurse was sent to provide care for the lepers in early March 1939, and in the meantime many fled and others died, leaving only 335 in the colony.

This is all evidence of the application of the term "isolate" in its extreme sense in colonial lands: *isola*, island. Stranded away from the world on an island, the internees were all but abandoned to their fate. There was no food and the supply of medicines was patchy and unreliable. In Massavelene, the lepers who were not incapacitated were forced to do agricultural labor, but for many reasons, including climatic considerations, the harvests were insufficient, and the scarce food of poor nutritional value provided by the state did not arrive in a timely manner and failed to meet their needs.

They did not receive regular supplies of clothing, equipment for farming or fishing, seeds for their crops (machambas), or soap. The first-aid post was a "miserable hut" like the others that served as housing for the lepers, and the medication was limited to "chaulmoogra oil for rubbing, dabbing the lesions with methylene blue solution, and, only occasionally, the use of vials of sodium gynocardate."10 It was ineffective (Silva, 1943, p.10). Children lived with their mothers and the doctor recognized it was impossible to remove them by force. Abandoned by the district government, the sick were occasionally visited by their relatives – thus breaking down the barriers of isolation – in view of the fact that prohibiting visits was hard to do given the severe shortage of resources. He writes that the only ones who provided any moral support for the internees were indeed these relatives and the occasional American protestant missionary, and they would also take foodstuffs and "some medications, clothing, and other supplies" (p.10). Basically, he explained, the "indigenous" interned on the island lived in "very poor conditions" and "the state of these miserable folk, underfed, with dreadful scraps of clothing" made him feel "pity" (p.11). He said it was the state's "duty and obligation" to do more and better, to "look out for them and give them at least the level of life they had outside, alongside their people" (p.10). Despite the picture he painted, the author did not question the compulsory isolation model itself, and concluded that the initiative was "worthwhile provided the most basic of resources were not lacking" (p.10).

It is therefore easy to understand how afraid the lepers were of being discovered and forcibly sent to the island. The terror was so great that even individuals with mutilating lesions hid their condition as best they could and preferred to pay the heavy "hut tax"¹¹ than declare their condition and be exempted from the tax (Silva, 1943, p.9). Earlier, medical colleagues had noted the fear that compulsory isolation awakened amongst the people. One of them was Manuel Monteiro (1930, p.CLXXIII). In "Inquérito sobre a lepra" (Enquiry into leprosy), completed in 1927, he had observed how hard it was to ascertain the exact number of lepers, not just because of the "very complicated question" of the different forms of yaws, chronic

ulcers, and skin lesions in evidence, but primarily because the people with the most advanced lesions fled "in fear of being isolated far from their lands and being given dog meat (*sic*) to eat!"

The success of the "democratic" policy adopted in Norway, with partial isolation, which had led to leprosy being all but wiped out of the country, seemed to indicate that this was the best method to follow (Obregón Torres, 2002, p.121). Nonetheless, the practice of absolute isolation observed in colonial settings, especially in Hawaii (Obregón Torres, 2002, p.138-158; Benchimol, Sá, 2004, p.35-116), 12 made the subject controversial. The medical world was split (Pandya, 2003). What divided it were different positions about the transmission methods. On the one side were those who believed there was a hereditary factor involved, while on the other were the contagionists. The first Congress on Leprosy, held in Berlin in 1897, did not reach any unanimous conclusions, although the majority of the theses defended transmission by contagion and thus more radical control measures, notably mandatory notification, surveillance, and compulsory isolation of lepers, since leprosy was believed to be all but incurable and lepers a real danger (Obregón Torres, 2002, p.154-155; Benchimol, Sá, 2004, p.29). These conclusions were ratified at the second congress held in 1909 in Bergen, Norway, under the chairmanship of Hansen. However, there was a vocal group that disagreed with the theory that interpersonal transmission was a key factor. Made up of such figures as Henry Leloir, Mouritz, Halloppeau, Chantemesse, Sommer, Leboeuf, Noc, Scott, Joly, Carrasquilla, Muñoz Rivas, Blanchard, and Brazilian Adolpho Lutz, this group believed leprosy was spread by external agents, especially mosquitoes (Benchimol, Sá, 2004, p.72-73). At the second congress, a recommendation was approved to have this potential form of transmission studied further. With new openings and hypotheses on the table, by the time of the third congress, held in 1923 in Strasbourg, France, presided by Edouard Jeanselme, isolation was only recommended for specific circumstances, and not universally or mandatorily, and in a humane manner when it was employed (Maciel, 2007, p.201-211).

In colonial Mozambique, the medical community was also divided between those who supported absolute and relative isolationism. The justifications for these preferences were not always of a scientific nature. Even so, as the local doctors themselves admitted in the early 1920s, there was no plan in the colony for the prevention of leprosy, and as the different studies undertaken by the medical community diverged on how to obtain concrete results in fighting the disease, the practice of keeping the lepers isolated in precarious conditions on Elephant island and, until the late 1920s, in Rivane (Inhambane), was maintained. Expanding the number of leper colonies was considered, as the hygienists believed this might be the best solution for isolating people with open lesions – almost all those who had been counted –, but there was a hurdle blocking this option: there were no coastal islands of easy access that had the minimum conditions required for the maintenance of such establishments. Furthermore, as Francisco Ferreira dos Santos (1930, p.62) observed, there was a need to respect the "ethnic diversity of the different tribes."

When it came to the different methods, the local doctors thought that care for "indigenous" lepers should be provided in separate establishments at the most on a regional ambit, in line with the international thinking of the day. While central leper colonies that served large areas or even a whole province could be advantageous in administrative terms, they were loathed by the local people, who saw them "not [as] care homes, but [as] abominable prisons"

(Sant'Anna, 1924, p.115). They called for strict scientific inquiry, and once the bacillus and the danger of contagion presented by the most severe cases had been eliminated, they proposed introducing the system of separate establishments in areas with a "racially homogeneous" population (p.115) where lepers could "live off the resources of the region and live according to their uses and customs" (Santos, 1930, p.62) and could receive visits from family members and friends without excessive difficulty, while nonetheless receiving all necessary care and surveillance. They were therefore in line with the guidelines set forth at the third congress in Strasbourg (Maciel, 2007, p.2009).

Despite these arguments in favor of separate villages, towards the end of the 1920s a large leper colony was planned for the Bazaruto islands. The budget was £36,000 for the building and £17,000 a year for maintenance and the living costs of 1,400 internees. If similar establishments had been built to house all the lepers in the colony, the costs estimated by the project would have been £375,000 for infrastructure and £140,000 a year for running costs. Only by making such an investment would it be possible to "house lepers in conditions identical to those adopted in other colonial countries" (Direção..., 1930, p.28).

The neighboring Union of South Africa, "where all the problems of social defense are resolved without restrictions," had built a leper colony in Pretoria, where around two thousand patients were kept "under strict, obligatory isolation for all forms of leprosy" (Direção..., 1930, p.28). This establishment was deemed "exemplary." But if something of a similar nature were to be built in Mozambique, "capital corresponding to four years' worth of private tax revenues [from the indigenous] from the whole colony [would have to be invested] as well as half the revenue from indigenous welfare for its maintenance" (Direção..., 1930, p.28-29). The coffers of the indigenous welfare fund could not stretch to such a sum and the plans never got off the drawing board.

On the leper villages

Medical debate about the best methods for treating people with leprosy and preventing the disease from spreading ultimately fell foul of the limited financial wherewithal of the colony. What therefore prevailed was the idea of leper villages, and proposals started to be put forward for models for these and rules for their functioning. Conceived as the work of perfect social engineering, the state would be responsible for implementing them and carefully overseeing the way they were run. A very detailed model was put forward by Monteiro (1930, p.CLXXIII-CLXXIV), whose arguments were as follows. The establishments should be set up on arable land with an abundance of water and should be large enough to not give the impression of isolation. In these lands, "comfortable huts" should be built to house the people, according to the "use of the land," as well as an "infirmary hut for anti-leprosy treatments; another for dressings, and others for isolating those with open lesions with bacillary excretions, and finally, others for the mutilated and ulcerous." There should also be a hut to house "an indigenous nurse or village chief responsible for order and discipline" and "other facilities" like a nursery and school.

The state would distribute arable land to the able bodied, supplying them with tools, seeds, and livestock. The detailing of the proposal was such that the individual tools and animals

were listed and the patients' duties were carefully apportioned. Those with mild lesions with no bacillary excretions – in other words, the most able bodied –, would work the land and raise the livestock. The able bodied who had bacillary excretions would be hospitalized and treated until they dried up. The invalids would be hospitalized separately from the others and the State would cover the cost of feeding and clothing them. Thus, the costs would be lower, because the able bodied lepers would grow more than enough food for their own needs and would sell the surplus to the state, which would supply it to the invalids. With the resulting funds, the able bodied would cover their running and clothing costs. Villagers near to health facilities could easily receive regular visits from a doctor and nurse and effective treatment. The children should be handed over to healthy families "overseen as required by the doctor," or ideally sent to a nursey run by a "semi-civilized indigenous woman" since there were no "specialized indigenous nurses" (Monteiro, 1930, p.CLXXIV).

Far from being impoundments run under rules that prevented all contact with the rest of the population, while villages of this type could not assure the isolation considered necessary by doctors, with a physical barrier against contagion, they did seem to meet the aspirations of the population when it came to managing the disease. The 1931 report by the Niassa chief of health states that the Ajaua and the Angune would not find such an establishment odd, because it was their practice to isolate people with certain diseases at a distance from their communities, lepers included. The Angune had their own leper community where lepers from neighboring villages lived (Direção..., 1933, p.27).

Convinced by medical, financial, and "indigenous policy" reasons that the villages were the ideal solution, they were quickly put into practice. By 1931, five were already under construction: in Chibuto (Lourenço Marques district), Homoíne (Inhambane district), Pebane (Quelimane district), Angoche (Mozambique district), and São Paulo de Maate (Cabo Delgado district). The last of these was built after a colony maintained by the Niassa Company was shut down and transferred to the state together with its other assets. Situated to the north of the island of Ibo, the colony was established on the island of Molandulo, with no potable water or arable land. In view of these circumstances, the lepers were transferred to the mainland some ten kilometers from Porto Amélia, inside the Maate mission. There, they worked the land and lived in "perfect liberty" under the surveillance of just one indigenous employee, with "practice in dressings" obtained in the Porto Amélia hospital. Every day, this employee distributed the rations and changed whatever dressings were needed. According to the records, despite the "weak surveillance," there were few escapees and some lepers from the neighboring areas "entered of their own free will," "thereby showing that they were not repelled by the idea of submitting to the regime there, although the conditions under which the colony operated are still very deficient and rudimentary," because it had to be kept with "very limited resources" (Direção..., 1933, p.92-94). Grouped together in these sanitary Shangri-la-esque communities, the lepers would enjoy a "degree of comfort, clothing, food" and due clinical care, and receiving due clinical care, "a great step forward for the just, rational, humane prevention and reduction of this affliction would be taken" (Monteiro, 1930, p.XXVII).

Aside from this idealized consensus, a closer look at the sources shows that quite different motives brought the doctors' and local people's opinions into convergence against absolute

isolation. If this was not the best solution for preventing contagion, what it did do was prevent conflict and was certainly very convenient for the colonial administration for its low cost, in view of the constraints on the public coffers.

Outside the official ambit of the colonial administration, the American Methodist Episcopal Church also kept a leper colony in Mozambique. In this, as in other missions across Africa, the medical work was at the service of the gospel (Comaroff, Comaroff, 1991, 1992; Ranger, Slack, 1995; Ranger, 1996; Jaime, 2015), and the missionaries made this very clear. Charles John Stauffacher, the first missionary doctor with the church, opened a small leper colony soon after arriving in Inhambane in 1913, and although the most common diseases in the area were bilharzia, elephantiasis, pneumonia, diarrhea, and syphilis, he focused his attention on helping lepers in order to "cure their souls" (Methodist..., 1913, p.475). Years later, he included tuberculosis in his priorities: "Our dream, our hope, and our prayers are concentrated on the field of leprosy and tuberculosis. In many centers where there is the light of healing for the body and the soul, both ailments are to be found" (Jaime, 2015, p.124).

According to the missionaries, the "white plague" in the USA could not be compared with the affliction in Inhambane, since "lack of care and unhygienic conditions" (Stauffacher, 14-20 jun. 1917, p.33) took the lives of hundreds every year. They offered treatment with chaulmoogra oil, which they believed cured patients in isolation and those living with their families. Many lepers spontaneously sought care and the chance to stay there, but there was no way to do that. Stauffacher (14-20 jun. 1917, p.33-34) lamented: "The hardest part of our work is to refuse these forsaken sick ones a place to stay, but to put them with other patients, we feel would be criminal", although it was "inconsistent to tell them of love of Christ and then drive them away." Despite this, the number of people attended was limited. In 1924, only five women, one man, and one youth were taken in. A proposal was made to transfer and expand the small colony annexed to the Chicuque missionary station – to which it represented "great danger" – and for this they counted on an initial sum of five thousand dollars, with the prospect of an additional injection of twenty thousand (Jaime, 2015, p.124).

The new facilities had stone houses with beds, but not enough for everybody. Gloves were reserved for use by the white missionary doctors. The nurses, who were black women, had, in their own words, to trust in God to protect them during the daily care they provided for patients at different stages of the disease. Despite these conditions, there were cases of patients who, even with amputated fingers, had their wounds healed and were deemed cured and sent home (Isabel Álvaro Zucule, in an interview given in Mazambanine, Maxixe, on June 20, 2013, reproduced in Jaime, 2015, p.158).

One informant stated that the lepers were not selected for internment only from the believers; another said they did not accept just anybody. Even if someone was a "pagan" they could say they were believers just to get in, but most of them ended up converting (Jaime, 2015, p.157). One way or another, the missionary work was ongoing, and included not only doctors and nurses, but also evangelists who would visit them every day.

Although the leper colonies were built on isolationist grounds, the informants – reporting on experiences as of the 1940s – agreed that the Methodist Episcopal Church took measures to teach their community that lepers could spend time with other people: "So, as the church brought togetherness and salvation, that culture of separating the lepers could not carry on,

and a hospital had to be built for that" and "there were special houses for the lepers, but we spent time with them, especially at the religious services, we would sit with them on the same benches and take part in the same service" (depositions of Marcos Nhantumbo and Isabel Álvaro Zucule reproduced in Jaime, 2015, p.157).

Like the leper villages devised by Monteiro, the isolation proposed by this church was not intended to be absolute, allowing patients access to the community of believers of all "races" from time to time. However, they were not all so liberal in practice. Firmino Sant'Anna (1924) argued that the constitution of "racially homogeneous" groups should extend out beyond the leper community and be applied to the whole colonial population, especially in the towns. He held that while the "absolute community of races" might constitute the "highest expression of a spirit of justice and equity for the subjugated," it would be an "error of catastrophic repercussions." Aside from reasons of a moral and social order, there was "opposition of the morbid adaptations, the considerable differences of faculties of resistance and susceptibility to certain diseases," which justified a "strict delimitation of the areas of permanent habitation, keeping the ethnic groups present in the fixed population of these heterogeneous centers as separate as possible in their domestic life." By so doing, the "indigenous and Europeans, including in this last designation the assimilated groups," should "live in their own neighborhoods separated by the interposition of a free zone, where all constructions would be forbidden, of a few hundred meters in width" (p.138). In this proposal of extreme social hygiene, moral and cultural order took precedence over biological considerations, insofar as the "assimilated" - a sociocultural statute - were grouped with the Europeans and not their racial counterparts. There can be no doubt that this was not just a simple proposal for the medicalization of social life, but a clear adoption – adapted to the reality of the Portuguese colonies - of the ideas and practices of segregation observed in the neighboring Union of South Africa.

Final considerations

For a long time, the meaning of leprosy has surpassed the dimension of individual suffering and for centuries has seemed to represent a burden of misery and suffering to which humankind must submit. The mutilating, disfiguring deformities caused by the advanced stage of the disease have made those with it be seen as sub-human, abnormal, with bodies that do not fit into the social norms and whose presence bothers others. Images, myths, rituals of purification, and procedures of many different kinds have been put into practice across the world, but isolation, physical and psychological segregation, the ostracism of individuals and their kin, seem to have always been the common denominator when dealing with the patients, whether to avoid contagion or to relieve the eyes of others from the sight of bodies that seem to offend nature.

In the early twentieth century, although the bacillus had already been identified, there was no absolute agreement on the treatments and the way they should be administered, sparking tensions in the medical community and considerable mistrust on the part of the African populations they were given to. These people knew and feared the disease. They had their own explanations for it – which were not so very far from those of the medical

community and the western world only a short time before. They were deeply mistrustful of the methods employed by western medicine in the treatment of all diseases, but they were particularly afraid of the extreme social isolation measures proposed by doctors, whose discourses were rooted in the scientific racism that had marked the academic community in the nineteenth century.

While the medical professionals themselves had similar roots, medical training, and ideological backgrounds, and belonged to the same colonial structure, they were subjective in their individual actions. They did not submit passively to the colonial order or scientific knowledge obtained at its universities, but were active in constituting both as they interacted in the concrete conditions they faced in colonial lands.

Nonetheless, while the proposed approaches may have been different, there were two assumptions that were broadly agreed upon. The first was that, although leprosy was not the principal disease affecting Africans, it did seem to be one that continued to torment the mindset of the medical community with age-old phantoms from the past, which saw it as a social hygiene problem to be faced bravely and resolutely. The second was the conviction that wherever there was a significant European presence, the social environment had to be cleansed, excluding black men and women – not just those who were sick – and creating socially segregated territories. This strategy was part of a set of hygiene measures taken from the late 1800s onwards by the colonial administration, whose diligent mentors and agents were doctors, with the stated aim of making the colonial towns healthy, targeting the non-white communities.

Yet this strategy was not implemented in a linear fashion and was not received without resistance by those it targeted, either because they did not share the same conceptions about the meaning of the disease or because they did not accept the treatments proposed. On occasion, however, and for different reasons, they did converge in practical solutions, such as the leper villages.

NOTES

- ¹ For more on the meanings and definitions of the term in Portuguese colonial vocabulary, see, for example, Moutinho (2000); Zamparoni (1998, 2008).
- ² The scope of this paper does not include weighing up the long trajectory of "scientific racism" and its critical fortunes. I would recommend a few contemporary works that influenced Portuguese colonial thinking: Cuvier (1798); Morton (1839, 1844); Le Bon (1910, 1927); Lapouge (1896); Martins (1893, 1920).
- ³ For more on the personal and intellectual trajectory of Henri Alexandre Junod, see Harries (2007); Gajanigo (2006). His documents can be found in the Junod Archives, available at: http://uir.unisa.ac.za/handle/10500/3407.
- ⁴ For an analysis of the current perceptions amongst the Makhuwa people in the Namaíta district of Nampula province, northern Mozambique, see Palhota (2012). I record here the latent danger of anachronism that could make us tributaries of a Eurocentric anthropological perspective, today a minority, which holds that African people have no history, with the past and the present being interchangeable.
- ⁵ I should explain here that the author does not agree or operate with classifications of this kind, deriving from an anthropology borne within the ambit of the colonial venture of which Douglas and her main interlocutors were agents.
- ⁶ For similar, more contemporary circumstances in South Africa, see Ngubane (1992). Also see note 4.
- ⁷ Mário Andrade e Silva, who normally uses the terms "leprosy" and "leper," surprises here for his use of "Hansenian," albeit only once, which I believe to be its first use in colonial lands. After a long debate that

began in the 1940s about how to break down the stigma, in 1976 Brazil started using Hansen's disease instead of leprosy. For more on the subject, see an article by the main instigator of this change, Rotberg (1975).

- ⁸ For more on a different context but also with racial contours, see Henrique (2012).
- ⁹ According to the "Statistical map of the number of people with leprosy, tuberculosis, and cripples in the divisions of the district of Inhambane in 1914," there were 671 registered lepers in Inhambane that year (Secretaria..., 1914a). In 1923, Francisco Ferreira dos Santos (1923, p.60) indicated that there were around five thousand lepers listed in the province, and that Elephant island could cope with no more than 150.
- ¹⁰ This is a soluble, injectable salt extracted from chaulmoogra oil. For more on the use of the oil extracted from the seed of this Indian fruit in the treatment of leprosy, see, amongst others, the contemporary writings of Madeira (1924) and Santos, Souza, Siani (2008).
- ¹¹ This was the main tax levied on the "indigenous." It was charged according to the number of housing units. Its fiscal, economic, and social impacts can be better understood from Capela (1977) and Zamparoni (2007).
- ¹² On the short experience of Brazilian Adolfo Lutz in those parts, see Benchimol, Sá (2004, p.35-116).
- ¹³ Although Goan doctors who had trained at the Medical School of Goa were working in Mozambique (Bastos, 2011), the documents consulted for this paper did not reveal their origin and therefore made it impossible to ascertain any different behaviors deriving from this.

REFERENCES

ADMINISTRADOR...

Administrador da Circunscrição do Maputo. Telegrama 3906. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 16 maio 1918.

ALVARENGA, Antónia Valtéria Melo. *Nação, país moderno e povo saudável*: política de combate à lepra no Piauí. Teresina: EdUFPI. 2013.

ARAÚJO, Heráclides César de Souza. História da lepra no Brasil, períodos colonial e monárquico (1500-1889). v.1. Rio de Janeiro: Imprensa Nacional. 1946.

AZEVEDO, José de Oliveira Serrão de. Of.762. Repartição de Saúde à Secretaria dos Negócios Indígenas. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 18 nov. 1909.

AZEVEDO, José de Oliveira Serrão de. Of.657. Repartição de Saúde ao Secretário dos Negócios Indígenas. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 5 out. 1909.

BADO, Jean Paul.

Medicine colonial et grandes endemies en Afrique. Paris: Karthala. 1996.

BASTOS, Cristiana.

Corpos, climas, ares e lugares: autores e anónimos nas ciências da colonização. In: Bastos, C. e Barreto, R. (Org.). *A circulação do conhecimento*: medicina, redes e impérios. Lisboa: Imprensa de Ciências Sociais. p.25-58. 2011.

BASTOS, Cristiana.

Medical hybridisms and social boundaries: aspects of Portuguese colonialism in Africa and India in the nineteenth century. *Journal of Southern African Studies*, v.33, n.4, p.767-782. 2007.

BEIRANTE, Maria Ângela.

A gafaria de Évora. In: Beirante, Maria Ângela. *O ar da cidade*: ensaios de história medieval e moderna. Lisboa: Colibri. p.235-251. 2008.

BENCHIMOL, Jaime L.; SÁ, Magali Romero. Adolpho Lutz e as controvérsias sobre a lepra. In: Benchimol, Jaime; Sá, Magali Romero (Org.). *Adolpho Lutz*: hanseníase = leprosy. v.1, livro 2. Rio de Janeiro: Editora Fiocruz. p.27-116. Disponível em: http://books.scielo.org/id/74ph9. Acesso em: 9 mar. 2015. 2004.

BLUTEAU, D. Raphael. *Vocabulário português e latino.* v.7. Lisboa: Paschoal da Silva. 1720.

BLUTEAU, D. Raphael. *Vocabulário português e latino.* v.5. Lisboa: Paschoal da Silva. 1716.

BLUTEAU, D. Raphael. *Vocabulário português e latino*. v.4. Lisboa: Paschoal da Silva. 1713.

BLUTEAU, Rafael; SILVA, Antonio de Moraes. *Dicionário da Língua Portuguesa*. t.2. Lisboa: Simão Thaddeo Ferreira. 1789.

BOURDIEU, Pierre.

O campo científico, In: Ortiz, Renato (Org.). *Pierre Bourdieu*: sociologia. São Paulo: Ática. p.122-155. 1983.

BRODY, Saul Nathaniel.

The disease of the soul: leprosy in medieval literature. Ithaca: Cornell University Press. 1974.

CABRAL. Augusto.

Raças, usos e costumes dos indígenas do distrito de Inhambane: acompanhado de um vocabulário em shitsua, guitonga e shishope. Lourenço Marques: Imprensa Nacional. 1910.

CADORNEGA, António de Oliveira de. *História geral das guerras angolanas*. Anotado e corrigido por José Matias Delgado. Lisboa: Agência Geral do Ultramar. 1.ed. 1680. 1972.

CAPELA, José.

O imposto de palhota e a introdução do modo de produção capitalista nas colônias. Porto: Afrontamento. 1977.

CAPELA, José.

O movimento operário em Lourenço Marques, 1898-1927. Porto: Afrontamento. s.d.

CARVALHO, António José de; DEUS, João de. *Dicionário prosódico de Portugal e Brasil*. Porto: Lopes & Companhia. 1890.

CAVAZZI, João António.

Descrição histórica dos três reinos do Congo, Matamba e Angola. v.1. Lisboa: Junta de Investigações do Ultramar. 1965.

CELERINA, Jacques de Salis di.

Esboço sobre as moléstias da Costa Oriental d'África. *Annaes Marítimos e Coloniaes*, 6ª série, v.1. Lisboa: Imprensa Nacional. 1846.

COMAROFF, John; COMAROFF, Jean. *Ethnography and the historical imagination*. Boulder: West View Press. 1992.

COMAROFF, John; COMAROFF, Jean. *Of revelation and revolution*: christianity, colonialism and consciousness in South Africa. v.1. Chicago: University of Chicago Press. 1991.

CONDE, Manuel Sílvio.

Subsídios para o estudo dos gafos de Santarém (séculos XIII-XV). *Estudos Medievais*, v.8, p.99-170. 1988.

CURI, Luciano Marcos.

Defender os sãos e consolar os lázaros: lepra e isolamento no Brasil (1920-1940). Dissertação (Mestrado em História) – Universidade Federal de Uberlândia, Uberlândia. 2002.

CUVIER, Georges.

Tableau elementaire de l'histoire naturelle des animaux. Paris: Baudouin. 1798.

DELUMEAU, Jean.

O medo no Ocidente. São Paulo: Companhia das Letras. 1989.

DIREÇÃO...

Direção dos Serviços de Saúde e Higiene. *Relatório* e Estatística dos Serviços de Saúde, ano de 1931. Lourenço Marques: Imprensa Nacional. 1933.

DIREÇÃO...

Direção dos Serviços de Saúde e Higiene. *Relatório dos Serviços de Saúde, 1928 e 1929*. Lourenço Marques: Imprensa Nacional. 1930.

DOUGLAS, Mary.

Pureza e perigo. São Paulo: Perspectiva. 1976.

EDLER, Flávio Coelho.

Pesquisas em parasitologia médica e circulação do conhecimento no contexto da medicina colonial. In: Bastos, Cristiana; Barreto, Renilda (Org.). *A circulação do conhecimento*: medicina, redes e impérios. Lisboa: Imprensa de Ciências Sociais. p.173-198. 2011.

FEIERMAN, Steven; JANZEN, John M. (Ed.). *The social basis of health and healing in Africa*. Berkeley: University of California Press. 1992.

FOUCAULT, Michel.

Naissance de la clinique: une archéologie du regard médical. Paris: PUF. 1963.

FOUCAULT, Michel.

Folie et déraison: histoire de la folie a l'àge classique. Paris: Plon. 1961.

GAJANIGO, Paulo Rodrigues.

O sul de Moçambique e a história da antropologia: os usos e costumes dos bantos, de Henri Junod. Dissertação (Mestrado) – Instituto de Filosofia e Ciências Humanas, Universidade Estadual de Campinas, Campinas. 2006.

GINZBURG, Carlo.

Leprosos, judeus, muçulmanos. In: Ginzburg, Carlo. *História noturna*. São Paulo: Companhia das Letras. p.43-67. 2007.

GOFFMAN, Erving.

Estigma: notas sobre a manipulação da identidade deteriorada. Rio de Janeiro: LTC. 2008.

GOMES, Bernardino Antonio.

Memória sobre as boubas: memórias da Academia Real das Ciências de Lisboa. Lisboa: Academia Real das Ciências. 1815.

GUSSOV, Zachary.

Leprosy, racism and public health: social policy in chronic disease control. Boulder: Westview Press. 1989.

HARRIES, Patrick.

Butterflies and barbarians: Swiss missionaries and systems of knowledge in South-East Africa. Athens: Ohio University Press. 2007.

HENRIQUE, Márcio Couto.

Escravos no purgatório: o leprosário do Tucunduba (Pará, século XIX). *História, Ciências, Saúde – Manguinhos*, v.19, supl., p.153-177. 2012.

HONWANA, Alcinda Manuel.

Espíritos vivos, tradições modernas. Maputo: Promédia. 2002.

HORTON, Robin,

African traditional thought and Western science. In: Grinker, Roy Richard; Steiner, Christopher B. (Ed.). *Perspectives on Africa*. Oxford: Blackwell. p.327-339. 1997.

HOUAISS, Antônio.

Dicionário eletrônico da língua portuguesa. Rio de Janeiro: Objetiva. 1 CD-ROM. 2001.

HUNT, Nancy Rose.

A colonial lexikon of birth ritual, medicalization and mobility in the Congo. Durham: Duke University Press. 1999.

JAIME, Simão.

Igreja Metodista Episcopal (IME) e os serviços médicos nas circunscrições de Morrumbene e Homoine, no distrito de Inhambane,1890 a 1968. Tese (Doutorado em Estudos Africanos) – Universidade Federal da Bahia, Salvador. 2015.

JUNOD, Henri A.

Usos e costumes dos bantu. Maputo: Arquivo Histórico de Moçambique. 1996.

LAPOUGE, G. Vacher de.

Les selections sociales. Paris : Librairie Thorin & Fils. 1896.

LE BON, Gustave.

Estudio de las civilizaciones y de las razas. Madrid: Aguilar. 1927.

LE BON, Gustave.

Leis psychologicas da evolução dos povos. Lisboa: Typ. de Francisco Luiz Gonçalves. 1910.

LEÃO, Duarte Nunes de.

Origem da língua portuguesa. Lisboa: Pedro Crasbeeck. 1606.

MACHADO, José Pedro.

Dicionário etimológico da língua portuguesa. Lisboa: Confluência. 1953.

MACIEL, Laurinda Rosa.

"Em proveito dos sãos, perde o lázaro a liberdade": uma história das políticas públicas de combate à lepra no Brasil (1941-1962). Tese (Doutorado em História) – Universidade Federal Fluminense, Niterói. 2007.

MADEIRA, Armando.

A lepra e seu tratamento. Tese (Doutoramento) – Faculdade de Medicina do Porto, Porto. 1924.

MARTINS, Joaquim Pedro de Oliveira. *O Brazil e as colónias portuguesas*. Lisboa: Parceria Antonio Maria Pereira Livraria Editora. 1920.

MARTINS, Joaquim Pedro de Oliveira.

As raças humanas e a civilização primitiva. Lisboa: Parceria Antonio Maria Pereira Livraria Editora. 1893.

MENDES, Luís António de Oliveira.

Discurso académico para determinar com todos os seus sintomas as doenças agudas, e crônicas, que mais frequentemente accometem os pretos recémtirados da África ... 12 de maio de 1793. *Memórias económicas da Academia Real das Ciências de Lisboa*. t.4. Lisboa: Tipografia da Academia. p.1-82. 1812.

METHODIST...

Methodist Episcopal Church. *Annual Report of the Board of Foreign Missions of the Methodist Episcopal Church*: for the year 1913. New York: Board of Foreign Missions of the Methodist Episcopal Church. 1913.

MONTEIRO, Manuel.

Inquérito sobre a lepra: Subdelegação de Saúde de Pebane, em Moebaze – Relatório referente ao ano de 1927. In: Colônia de Moçambique/Direção dos Serviços de Saúde e Higiene. Relatório e Estatística dos Serviços de Saúde, ano de 1927. Lourenço Marques: Imprensa Nacional. p.CLXXIII-CLXXIV. 1930.

MONTEIRO, Yara Nogueira.

Violência e profilaxia: os preventórios paulistas para filhos de portadores de hanseníase. *Saúde e Sociedade*, v.7, n.1. Disponível em: http://dx.doi. org/10.1590/S0104-12901998000100002. Acesso em: 17 jul. 2013. 1998.

MOORE, Robert Ian.

The formation of a persecuting society: power and deviance in Western Europe, 950-1250. Oxford: Blackwell. 1987.

MORTON, Samuel George.

Crania Aegyptiaca; or, Observations on Egyptian ethnography, derived from anatomy, history, and the monuments. Philadelphia: J. Penington. 1844.

MORTON, Samuel George.

Crania Americana; or, a Comparative view of the skulls of various Aboriginal nations of North and South America: to which is prefixed an Essay on the Varieties of the Human Species. Philadelphia: J. Dobson. 1839.

MOUTINHO, Mário C.

O indígena no pensamento colonial português: 1895-1961. Lisboa: Universitárias Lusófonas. 2000.

NGUBANE, Harriet.

Clinical practice and organization of indigenous

healers in South Africa. In: Feierman, Steven; Janzen, John M. (Ed.). *The social basis of health and healing in Africa*. Berkeley: University of California Press. p.366-375. 1992.

OBREGÓN TORRES, Diana.

Batallas contra la lepra: Estado, medicina y ciencia en Colombia. Medellín: Banco de la República; Fondo Editorial Universidad Eafit. 2002.

PALHOTA, Maria Alzira.

Lepra em Namaíta, província de Nampula: uma reflexão sobre representações socioculturais. Trabalho de fim do curso – Faculdade de Letras e Ciências Sociais, Universidade Eduardo Mondlane, Maputo. 2012.

PANDYA, Shubhada S.

The first international leprosy conference, Berlim, 1897: the politics of segregation. *História, Ciências, Saúde – Manguinhos*, v.10, supl.1, p.161-177. 2003.

PENVENNE, Jeanne Marie.

African workers and colonial racism: Mozambican strategies and struggles in Lourenço Marques, 1877-1962. Portsmouth: Heinemann. 1995.

PENVENNE, Jeanne Marie.

History of African Labor in Lourenço Marques, Mozambique: 1877 to 1950. Tese (Doutorado) – Boston University, Boston. 1982.

PINTO, Paulo Gabriel Hilu da Rocha. O estigma do pecado: a lepra durante a Idade Média. *Physis*, v.5, n.1, p.132-144. 1995.

RANGER, Terence.

Protestant missions in Africa: the dialectic of conversion in the American Methodist Episcopal Church in Eastern Zimbabwe, 1900-1950. In: Blakely, Thomas D.; Beek, Walter E.A. van; Thomson, Dennis L. *Religion in Africa*: experience & expression. London: James Currey. p.275-313. 1996.

RANGER, Terence; SLACK, Paul (Ed.). *Epidemics and ideas*: essays on the historical perception of pestilence. Cambridge: CUP. 1995.

REBELLO, Porfirio Teixeira.

Relatório médico militar da cidade de Benguela, referido ao ano de 1886. In: Ministério da Marinha e Ultramar. *Archivos Médico-Coloniaes*. Lisboa: Tipografia D'As Colônias Portuguesas. p.9-31. 1890.

RIBEIRO, Manuel Ferreira.

Princípios elementares de higiene colonial ou máximas, sentenças, ditados e indicações práticas sobre o que mais convém fazer para se conservar a saúde para melhor se resistir em qualquer das colónias portuguesas. Lisboa: Minerva Avenida. 1890a.

RIBEIRO, Manuel Ferreira.

Principais questões a estudar sobre a aclimação nas nossas colónias como auxiliares mais indispensáveis da emigração e da colonização. Lisboa: Tipografia das Colónias Portuguesas. 1890b.

RIBEIRO, Manuel Ferreira.

A província de São Tomé e Príncipe e suas dependências, ou a salubridade e insalubridade relativa das províncias do Brasil, das colónias de Portugal e de outras nações da Europa. Lisboa: Imprensa Nacional. 1887.

RIBEIRO, Manuel Ferreira.

Relatório acerca do Serviço de Saúde Pública na província de S. Tomé e Príncipe no ano de 1869: contendo as informações necessárias para o exato conhecimento do estado de salubridade atual e as providências mais urgentes e mais altamente reclamadas. Lisboa: Imprensa Nacional. 1871.

ROCHA, Ana Rita.

A assistência aos leprosos na Idade Média: a gafaria de Coimbra (sécs. XIII-XV). In: Miranda, Flávio; Sequeira, Joana; Faria, Diogo (Coord.). *Incipit 2*: Workshop de Estudos Medievais da Universidade do Porto, 2011-2012. Porto: Universidade do Porto. p.117-125. Disponível em: http://ler.letras.up.pt/uploads/ficheiros/12055.pdf. Acesso em: 12 mar. 2014. 2014.

RODRIGUES, Eugénia.

Moçambique e o Índico: a circulação de saberes e práticas de cura. *Métis: História & Cultura,* n.19, p.15-35. 2011.

RODRIGUES, Eugénia.

Alimentação, saude e império: o físico-mor Luís Vicente de Simoni e a nutrição dos moçambicanos. *Arquipélago – História*, 2ª Série, v.9-10, p.617-656. Disponível em: https://repositorio.uac.pt/bitstream/10400.3/436/1/Eugenia_Rodrigues_p621-660.pdf. Acesso em: 5 mar. 2013, 2005.

ROTBERG, Abrahão.

O pejorativo "lepra" e a grande vítima de grave erro médico-social-histórico: a indefesa América Latina. *Revista de História*, ano 26, v.51, n.101, p.295-304. 1975.

SANT'ANNA, J. Firmino.

O problema da assistência médico-sanitária ao indígena em África: Congresso (1º) de Medicina Tropical da África Ocidental, Luanda, agosto de 1923. *Revista Médica de Angola*, v.2, n.4, p.71-178. 1924.

SANTOS, Fernando Sergio Dumas dos; SOUZA, Letícia Pumar Alves de; SIANI, Antonio Carlos. O óleo de chaulmoogra como conhecimento científico: a construção de uma terapêutica antileprótica. *História, Ciências, Saúde* – *Manguinhos*, v.15, n.1, p.29-47. 2008.

SANTOS, Francisco Ferreira dos.

Relatório e estatística dos serviços de saúde, ano de 1927: Colônia de Moçambique, Direção dos Serviços de Saúde e Higiene. Lourenço Marques: Imprensa Nacional. 1930.

SANTOS, Francisco Ferreira dos.

Assistência médica aos indígenas e processos práticos da sua hospitalização. Congresso (1º) de Medicina Tropical da África Ocidental, Luanda, agosto de 1923. *Revista Médica de Angola*, v.2, n.4, p.49-71. 1923.

SECRETARIA...

Secretaria dos Negócios Indígenas. Documento sem número. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 30 maio 1918.

SECRETARIA...

Secretaria dos Negócios Indígenas para Administrador da Circunscrição do Maputo. Of.382/37. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 13 maio 1918.

SECRETARIA...

Secretaria dos Negócios Indígenas. Mapa estatístico do número de leprosos, tuberculosos e aleijados existentes nas circunscrições do distrito de Inhambane referente ao ano de 1914. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 1914a.

SECRETARIA...

Secretaria dos Negócios Indígenas. Minuta de Portaria 76. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 1914b.

SECRETARIA...

Secretaria dos Negócios Indígenas ao Juízo Criminal. Nota 31/480. Fundo da Secretaria dos Negócios Indígenas, cx.158, pasta A/47/3 (Arquivo Histórico de Moçambique, Lourenço Marques). 26 out. 1909.

SEIXAS, Henrique.

Relatórios dos Serviços de Saúde, 1928 e 1929: Colónia de Moçambique – Direção dos Serviços de Saúde e Higiene. Lourenço Marques: Imprensa Nacional. 1930.

SHAPIRO, Martin Frederick.

Medicine in the service of colonialism: medical care in Portuguese Africa, 1885-1974. Tese (Doutorado) – University of California, Los Angeles. 1983.

SILLA, Eric.

"After Fish, Milk Do not Wish". Recurring Ideas in a Global Culture. *Cahiers d'études Africaines*, v.36, n.144, p.613-624. 1996.

SILVA, Mário Andrade e.

Relatório de um inquérito epidemiológico sobre a lepra, n'algumas circunscrições da província do Sul do Save. *Africa Médica*, ano 9, n.1, p.1-19. 1943.

SIMONI, Luís Vicente de.

Tratado médico sobre clima e enfermidades de Moçambique. Secção de Manuscritos, cód. I-26-18-22, (Biblioteca Nacional, Rio de Janeiro). 1821.

SOROMENHO, Luís.

Relatório e estatística dos Serviços de Saúde, ano de 1927: Colônia de Moçambique, Direção dos Serviços de Saúde e Higiene. Lourenço Marques: Imprensa Nacional. 1930.

STAUFFACHER, Charles John.

Official Journal of the Inhambane Mission Conference of the Methodist Episcopal Church. Held at Kambini, Inhambane, East Africa. Second session. 14-20 jun. 1917.

TODOROV, Tzvetan.

Nous et les autres. Paris: Seuil. 1989.

TORGA, Miguel.

O leproso. In: Torga, Miguel. *Novos contos da montanha*. 5.ed. Revista e aumentada. Coimbra: s.n. 1967.

VAUGHAN, Megan.

Syphilis in colonial East and Central Africa: the social construction of an epidemic. In: Ranger, Terence; Slack, Paul (Ed.). *Epidemics and ideas*: essays on the historical perception of pestilence. Cambridge: CUP. p.269-302. 1995.

VAUGHAN, Megan.

Curing their Ills: colonial power and African illness. Stanford, California: Stanford University Press. 1991.

VITERBO, Frei Joaquim de Santa Rosa de. Elucidário das palavras, termos e frases que em Portugal antigamente se usaram e que hoje regularmente se ignoram. t.2. Lisboa: Tipografia Régia Silviana. 1799.

WAGNER, Ana Paula.

Um olhar sobre algumas práticas de cura moçambicanas do Oitocentos. *Revista Tempo, Espaço, Linguagem*, v.3, n.3, p.50-68. 2012.

ZAMPARONI. Valdemir.

Colonialism and the creation of racial identities in Lourenço Marques, Mozambique. In: Sansone, Lívio; Soumonni, Elisée; Barry, Boubacar (Org.). *Africa, Brazil and the construction of trans-atlantic*

black identities. Trenton, NJ; Asmara, Eritreia: Africa World Press. p.20-43. 2008.

ZAMPARONI, Valdemir. *De escravo a cozinheiro*: colonialismo e racismo em Moçambique. Salvador: Edufba. 2007.

ZAMPARONI, Valdemir. *Entre "narros" & "mulungos"*: colonialismo e paisagem social em Lourenço Marques, c. 1890-c.1940. Tese (Doutorado) – Universidade de São Paulo, São Paulo. 1998.

