

# Slave mortality during the cholera epidemic in Rio de Janeiro (1855-1856): a preliminary analysis

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## Abstract

The article offers a preliminary analysis of the sociodemographic profile of deaths recorded during the first cholera epidemic in Rio de Janeiro, based on data gathered from death records at Santa Casa de Misericórdia Hospital. After cholera appeared in the country in 1855, Brazilian medical reports indicated a social bias, with slaves and the free poor suffering high mortality. From a historical perspective, however, little research has been done on the epidemic and its dynamics. The recovery of original data on cholera and the analysis of cholera mortality rates help us to better understand aspects of the slave universe in the urban zone of Rio de Janeiro in the period following the end of the slave trade.

Keywords: cholera; slave health; mortality; epidemic; Brazil.

This frightful rumor has struck fear in all the inhabitants of this village. As we have read in every newspaper and gazette in this capital, cases have appeared that are suspected of being cholera morbus; some inhabitants are terrified, fearing, and rightfully so, that it shall not be long before it pays us a visit here... One recent day, a fellow came into my home, and hearing that cholera would not be long in coming, he went out the door in anger, cursing the news. ... I am certain that if cholera appears here, this village shall be deserted, as many families are already saying that they shall flee to Minas, perhaps believing that it shall not go to Minas; myself, I am not afraid, though cholera is to be feared! It is true that its name alone makes one's hair stand on end; but ... it shall be as God wishes. Barra Mansa, August 14, 1855. *I am, Mr. Editor of Marmota, your subscriber. An observer.*

(A Marmota..., 21 ago. 1855, p.2)<sup>1</sup>

Although he would not admit it, the anonymous observer who wrote the newspaper *A Marmota* made it apparent that the rumors of cholera frightened him horribly. No wonder, since it was considered one of the most dreadful diseases ever heard of, and the havoc it wreaked around the world was well known. Not long after, his fears proved founded. Some months after this letter was published, in May 1856, the president of the province of Rio de Janeiro publicly announced the devastation wrought in Barra Mansa, a village in the country's largest coffee producing region, located in Paraíba valley, where 328 people died, including 54 free and 266 slaves (Barbosa, 1856).

The letter bears witness to a time of change in how epidemics were perceived in Brazil and in the country's political scenario and public health organization. Events like the end of the African slave traffic, increased commerce and hence busier ports, and the pacification of the political rebellions that had jeopardized the unity of the Brazilian Empire laid the ground for stability, in the company of a conservative political hegemony (Mattos, 1987). At this conjuncture of imperial political consolidation, fresh epidemics of yellow fever and cholera formed other milestones in the history of public health in nineteenth-century Brazil.

Until the first half of that century, Brazilian physicians believed that the great epidemics that ravaged the European world and part of the Americas were still infrequent if not non-existent in Brazil. While they did admit that other 'fevers', like malaria, existed, it was quite common to think that the more virulent 'plagues' one heard tell of in regions of the Caribbean or of Europe would never touch the American homeland below the equator, so diseases like yellow fever, for instance, did not alarm the medical community prior to its emergence in epidemic form in Brazil, between 1849 and 1850.<sup>2</sup>

In a letter to Counselor Cruz Jobim, Minister Vasconcellos Drummond pointed out that while Brazil might not be used to this type of epidemic, the disease would contribute to "improving public health" by instigating the end of burials inside of churches (Ribeiro, 1992, p.87). Shortly after the beginning of the yellow fever epidemic in the summer of 1849-1850, cholera was to break out, in 1855, leaving thousands dead in the Empire's key ports, like Belém, Salvador, and Rio de Janeiro.

From then on, epidemics were seen as a problem demanding ever greater public attention. If, for the historiography of health, yellow fever can be considered exemplary in the construction of public health in Brazil, historians appear to have paid little heed to the case of cholera. Worthy of mention are the studies by Cooper (1986) on the epidemic in Brazil and research by some investigators focused on specific regions (David, 1996; Beltrão, 2004; Diniz, 2009; Pimenta, 2004; Santos Neto, 2001). But the paucity of research stands out even more when we take into account that slaves were hardest hit by the epidemic, in contrast with the pattern for yellow fever, which, according to physicians of that day, mainly struck non-acclimated European foreigners. In this article, we explore aspects of mortality, which virtually doubled in the context of these mid-nineteenth-century epidemic waves. We present preliminary research results using data drawn from death records from the two public cemeteries in Rio de Janeiro, São Francisco Xavier and São João Batista, held at the Santa Casa de Misericórdia Hospital archives.

### **Historiography of cholera in nineteenth-century Brazil**

In relation to health care, we hold that the cholera epidemic must be understood in conjunction with the previous epidemic, that is, yellow fever, which had erupted a few years before. In the light of these episodes we can appreciate the changes in how the State dealt with public health in the nineteenth century. Prior to this, health care had been provided through charity, primarily by the Santa Casa de Misericórdia Hospital and other religious orders, while also including some State subsidies and donations by people holding political office. Confronted by the yellow fever epidemic, the government authorities tried to organize health services and restructure the healthcare services offered to the population, and the effects of this were perceived primarily in Rio de Janeiro (Pimenta, 2011). Notable among such measures were the creation of the Public Hygiene Board (Junta de Higiene Pública) and the new role assigned to Santa Casa – specific groups were sent there for treatment (like European immigrants or free Africans, for example) and the institution was required to maintain infirmaries in locations defined by the government.

The moment the government recognized the cholera epidemic as a serious threat, health care was organized along the same lines as during the yellow fever epidemic. Medical committees were set up in some districts (*freguesias*), which were supposed to have at least one medical post, identified by a white flag with an 'S' in the middle; physicians' addresses were to be reference points for the population. This and much other information was constantly published in major city newspapers. In addition to the official Health Commissions, some doctors organized private infirmaries where they cared for the needy free of charge. All told, we counted 17 infirmaries and medical posts in various areas of the city that announced their services in the *Jornal do Commercio* at the time of the epidemic.<sup>3</sup>

During the cholera epidemic, Santa Casa Hospital was ordered by decree to set up three special infirmaries in different districts of the city to receive cholera sufferers.<sup>4</sup> As the epidemic advanced, however, other infirmaries were opened one after the other, on a temporary basis.<sup>5</sup> It should be noted that Santa Casa sent clearly itemized statements of account at the end, showing its expenditures on medical services, the hiring of physicians,

nurses, and aides, rental costs, and the purchase of medicine, food, and office material, for the purpose of reimbursement by the national treasury. These infirmaries served mainly the indigent and slaves, who were cared for by sisters of charity and by Santa Casa nurses, in addition to physicians (Santa Casa..., 1854-1856).

The epidemic was announced in Brazil in May 1855 shortly after *O Defensor*, a vessel from Portugal, made harbor in Belém do Pará; it carried settlers from Porto, where the epidemic was already raging. Official records indicate that the infection spread from the galley and that 36 passengers died during the voyage. However, the first warning about the epidemic was refuted by the physician who served as the local inspector, and the ship was cleared. Cases propagated through Belém shortly thereafter, tallying 1,009 deaths in the city and another 5,000 in the province of Pará (Ribeiro, 1992). The epidemic then headed to other provinces in the northern Empire, including Amazonas and Maranhão. From Bahia, where it was devastating, it struck out into Alagoas, Sergipe, Rio Grande do Norte, and Pernambuco (Rego, 1873). Four months after the presence of cholera had been announced in the Empire's northern provinces, it had spread to a number of municipalities in the province of Rio de Janeiro, Barra Mansa in particular, from where the *A Marmota* subscriber had written his letter.

While mortality rates varied from region to region, a high mortality among slaves and 'people of color' was observed throughout the Empire, by both physicians and the public at large. There was a consensus among the former, which was based on statistics compiled at the infirmaries and hospitals where care was organized more systematically. As in other countries, the relation between living conditions and the epidemic is blatant in doctors' reports, such as those by José Pereira do Rego (1872, p.87), member of Rio de Janeiro's Public Hygiene Board. In his history of epidemics in Rio de Janeiro, Rego states that in 1855 cholera had generally been limited to attacking:

blacks, men of color, and some islanders employed at hard labor out of disregard for hygienic precepts; there were few victims in other classes, or among the crews of ships anchored at port, except when these comprised blacks and men of color. The beggars, large numbers of whom infest this city, and who slept in churchyards and public squares, were among the first victims of the epidemic, and nearly all of them vanished.

Prevailing medical thought in Brazil blamed higher mortality among the slave population and the poor in general on customs, diet, and the environment, consonant with the hygienist model then in vogue. Linking the epidemic with living conditions was thus consistent with the medical thought that had gained firm footing with the creation of the Rio de Janeiro Society of Medicine (Sociedade de Medicina do Rio de Janeiro) (1829-1835) and that underscored the environmental etiology and paludal nature of disease (Edler, 2002; Ferreira, 2009). These ideas, together with an emphasis on depraved customs, were part of the common medical discourse in various places where cholera occurred in the nineteenth century, illustrating what Rosenberg (1987) called an alliance between the predisposing causes of disease and morality. It is no wonder we find interpretations of medical statistics like those of the Viscount of Sapucaí: the higher mortality observed on Mondays and Tuesdays must have been due to "abuses and excesses indulged in on Sunday, especially by slaves" (Viana, 30 nov. 1855, p.3).

Medical candidate João José da Silva, a follower of the hygienist model, presented the main causes of slaves' greater susceptibility to cholera in his thesis. Central among these were a hot, humid climate, atmospheric variations, and housing located in low-lying areas, with poor ventilation, little space, and crowded living conditions. The candidate to physician also cited untidiness, poverty, "all type of hardships" (Silva, 1857, p.19), alcohol abuse, poor-quality food, and harsh labor. This list inarguably matched the living conditions of slaves and most of the poor observed by this physician in urban spaces. The propensity for slaves to catch cholera was also visible in the countryside, where abuse was patent. According to Silva (1857, p.19), "the scourge prefers the classes less favored by fortune; thus in our country we see it preferentially attack the unfortunate slaves, and principally those who, owing to the barbaric ambition of their masters (most of whom wealthy 'fazendeiros'), were forced to go about poorly dressed, poorly fed, and to submit to the arduous labor of the fields, exposed to a blazing sun and to all the inclement weather of the season."

Criticisms of the treatment meted out to slaves, often voiced by physicians and the press at that time, had immediate implications because the doors of the African slave trade had been closed, pushing up the price of these 'human parts'. Christian morality recommended that slaves be given better treatment but so too did the desire to ensure that the captive lived longer. Accordingly, denouncements about abuse rarely entailed a more trenchant questioning of the slave system but rather drove home the master's need to strive to keep his slaves alive. A large number of instructions and announcements of specific medicines were printed and sold during the epidemic, aimed at helping owners treat their slaves for cholera. At the height of the outbreak, *Jornal do Commercio* advertised remedies made by pharmacists like Francisco Lourenço de Freitas, established on Imperatriz street, where he sold 'fazendeiros' medicine "well packaged in a portable manner" and at special prices (*Jornal...*, 30 set. 1855, p.2).

Coordinating actions against the scourge in the city, the Central Commission for Public Health (Comissão Central de Saúde Pública), which comprised members of the Board and other eminent doctors, also published instructions on the hygienic precepts to be followed to fight cholera morbus. Among the various circumstances that contributed to "increasing and spreading epidemics," the Commission stressed the "crowding of individuals in spaces not adequate for their lodgings," aggravated if "the inhabitants were not very cleanly [and were] filthy and untidy, as are most slaves" (Comissão..., 10 set. 1855, p.1).

The then-president of the Board, Francisco de Paula Cândido, felt it important to address the 'fazendeiros' and other inhabitants of the interior, who lived far from the resources available in the Empire's capital. He recommended that slaves on fazendas be given adequate food, warm clothing, not work very long in rivers or marshes, and that slave quarters not be located "in low-lying, dark, humid places, as some [quarters] that are now found in such poor conditions" (Paula Cândido, 1855, p.12). Their lodgings should be swept and aired out, letting the sun in, and waste should be discarded some distance away. Paula Cândido also advised masters that they should allow, or even force, their slaves to sleep near an open fire.

Many slaves on fazendas were taken to be treated at infirmaries and hospitals in Rio de Janeiro, which worried physicians. From their point of view, this initiative on the part of slave owners would worsen the public health problem in the city. Paula Cândido (28 set. 1855, p.2), for example, asked owners not to bring slaves to Rio and gave them guidance about treatments that could be used on their own rural properties.

It has, however, been observed that the general population had a preference for other therapeutic strategies, as more recent historiography on the healing arts has shown. In the city of Recife, for example, a slave healer of African origin was known to have garnered many followers during the crisis. Pai Manoel, as he was known, treated the African population who believed in his healing, with the actual authorization of the Hygiene Commission of Recife. He was later accused of causing the death of many cholera sufferers, and his arrest sparked angry popular protests against the authorities. The rioters claimed that doctors and the government wanted to get rid of 'folks of color' (Diniz, 2009).

In Rio de Janeiro, despite the accusations of charlatanism that allopaths hurled at homeopaths, homeopathic infirmaries opened up and were patronized by a large clientele of slaves and the wretched. These people rightfully believed that homeopathic treatment was a less aggressive and perhaps less expensive option than allopathy, which was already becoming entrenched as the dominant type of medicine. As to the cost of allopathic treatment, however, we should remember that even though a number of doctors announced free medical consultations, a share of the ill still ignored them (Pôrto, 1988; Pimenta, 2004).

The fact that the poor, slaves, and their descendants opted for practitioners who had more in common with these groups' conception of disease and of healing displeased the physicians who espoused the dominant thinking, like Dr. Antonio José Peixoto, who blamed the sick themselves for the advance of the epidemic in the vicinity of his health clinic, in the district of Lagoa, and who asserted that cholera sufferers "only sought out a doctor at the last minute" (Peixoto, 23 out. 1855, p.2). This and other documental evidence indicates that many cholera sufferers were more hopeful about curing themselves through self-medication or advice received from neighbors and/or non-authorized practitioners than through reliance on academic ones, even if the care and medications were free and in any case, they most likely had a preference for other ways of healing. This situation also suggests that there were networks of solidarity or aid in place that often times reinforced the rejection of academic medicine.<sup>6</sup>

On the other hand, medical authorities were aware of the social conflict inherent to the measures they wanted to enforce; while more well-to-do groups could choose where and how to get treated, subaltern layers were more affected by measures to remove or quarantine the sick. This inequality could leave a "dangerous impression" on the "needy class," casting the illness as something that was socially threatening as well (Junta..., 21 set. 1852).

As we will see farther on, slaves and freedmen were more impacted by the scourge than were the free. Although the specific situations of individuals belonging to these categories could vary, the categories suggest possible differences in social conditions and ways of life (Graphs 2 and 4). Even though not all free persons might not find themselves in life circumstances dissimilar from those of slaves and freedmen, the mortality rate in the latter

two groups is widely known, whether the cause was greater exposure to excrement, no access to clean water, or their already feeble physical conditions. When contemporaries observed this mortality profile, it exacerbated social tensions.

The higher incidence of cholera among the slave population was later highlighted both by traditional historians of medicine and by social historians concerned with placing the epidemic within the political and sociocultural context of nineteenth-century Brazil (Cooper, 1986; David, 1996; Beltrão, 2004; Diniz, 2009; Pimenta, 2004). If we can state that cholera – then seen by many as a new ‘plague’ or ‘febre reinante’ (reigning fever) – hit all classes, it unarguably made the contrasts between the groups’ living conditions more evident.

When the epidemic is studied as it related to society, we are able to grasp little-explored aspects of slavery relations and of the African presence in the city of Rio de Janeiro shortly after the transatlantic slave trade was shut down. Like Lilia Oliver (1996), who studied cholera in Guadalajara in 1833 and 1855, subsequent to publication of the classic article by Kiple (1985), we believe that the distribution of mortality can and should be analyzed from the perspective not only of biological factors but also of the historical and social conditions prevalent during the days when the epidemic caused suffering. The epidemic phenomenon can itself be deemed ‘historical’, as it is recreated within different frames that view it as either biological or social (Rosenberg, 1992).

We therefore believe that aspects of Brazil’s nineteenth-century social and cultural history can be investigated in part by surveying deaths that occurred during the epidemic, as these reveal contrasts and valuable comparative data that can be used in exploring the epidemic reality as a complex social and biological phenomenon.

Although the issues discussed above are relatively well known, a closer look at mortality statistics during the first great cholera epidemic in Brazil allows us to discover more about slave health. Considering the social cross-section presented by cholera in 1855, the challenge of this research is to adequately address the interfaces between mortality, social tensions, scientific knowledge, the organization of public health, and discourses on slavery.

In recent decades, the historiography on urban slavery has called attention to the varied situations in which slave relations transpired and has taken an especially hard look at narratives that were previously ignored or explored solely from the single explanatory lens of the system of domination (Schwartz, 2001; Reis, Klein, 2011). In addition to opening new pathways to understanding the enslaved as historical agents, this perspective has made it possible to rethink relations between the free poor and slaves in the urban environment, with special notice paid to the African presence there (Karasch, 2000; Soares, Gomes, Farias, 2005). The present analysis adopts this perspective, focusing on potential differences or similarities between the living conditions of the free and of slaves. We have employed the categories used in the now classic study of Brazil by Mary Karasch (2000), whose research on the lives of slaves in Rio de Janeiro from 1808 through 1850 comes from late 1970s historiographic production. Although she basically engaged in dialogue with historiography that predates today’s – questioning the alleged leniency of Brazilian slavery – Karasch’s work laid fertile ground for understanding slave health; for us, her work is especially valuable because it used the same documental source as ours, although for the

period immediately prior to our research. We thus employed the author's categories both for the diseases found and for the regions of origin for Africans.

### **Cholera and mortality in Rio de Janeiro**

The arrival of cholera was announced in late July 1855, after it was carried to Rio de Janeiro by a slave named Maximiano, who came from Pará aboard the *São Salvador* and who was already showing symptoms of the disease when he got to the house of his owner, Leon Cohn. Maximiano escaped death but the same was not true for another slave, Custódio, who had shared a cot with the sick man at Cohn's house and who passed away on July 18. Other cases cropped up: a young man on Lavradio street, and a young girl who was a pupil at the orphanage run by Santa Casa de Misericórdia, the hospital where Maximiano and Custódio had been. In August, an epidemic was officially declared in this port city practically surrounded by water, and it quickly spread along the streets near the coast and through mangrove swamps, places where, according to Rego (1873), the highest mortality rates were recorded. Also according to this physician, mortality peaked in the months of September through November, when 70 to 80 deaths a day were recorded, bringing the November total to around 2,300, a number without precedent in any other epidemics in Rio. It was only in December that cholera waned, with the last cases falling in June 1856.

While medical reports from the period, like those of José Pereira Rego, indicated a high mortality profile, historians had previously not devoted much analysis to raw data from death records. Jorge Prata de Souza (2003) scrutinized these documents from Santa Casa, which provide data on slave mortality for 1835-1863, and found that the majority of slaves who died in Rio de Janeiro were buried by Santa Casa de Misericórdia.

In the preliminary analysis published in these pages, we try to sketch a quantitative profile of cholera mortality in Rio de Janeiro from July 1855, when the first cases of the epidemic appeared in the city, to June 1856, when 'reigning fever' was declared to be over. Data were gathered from documents belonging to the Santa Casa de Misericórdia archives, which hold the records for São Francisco Xavier and São João Batista cemeteries. A total of 10,315 records were analyzed from São Francisco Xavier from July 1855 through June 1856, while 1,128 were gathered from São João Batista for July 1855 through February 1856.

As of the first yellow fever epidemic, in 1849-1850, Santa Casa de Misericórdia in Rio de Janeiro became the main institution responsible for interments and for burial records in the city after it was made mandatory that the dead be interred at one of the two public cemeteries under the hospital's control: São Francisco Xavier and São João Batista. The period of rampaging yellow fever was marked by greater intervention by public authorities in the practices of funeral services and interments (Rodrigues, 1999). From then on, the Central Board of Public Health (Junta Central de Saúde Pública) played a big role in propagating discourses on the evil effects of gases emanating from corpses and in banning burials inside and around churches or where there were large agglomerations of houses. From at least the 1830s on, the banning of burials in sacred spaces in Brazil was a process



that pitted the medical community against popular traditions. Studied by the historian João José Reis (1991), an exemplary case was the rebellion known as the Cemiterada, which transpired in Bahia in 1832.

The death records from Santa Casa are consonant both with the mortality statistics found in official records for the period and with later historical work. According to José Pereira do Rego (1873), cholera killed 4,828 people in the capital of the Empire. If we add up the cholera deaths signaled in the records from these two cemeteries, we arrive at about 93% of the mortality figure estimated by Rego (4,497 cases), which supports the representivity of these data. Still, these figures do not include other interments that undoubtedly took place on urban and rural properties or on lots belonging to brotherhoods, to judge by the repeated prohibitions issued by the commission of Court physicians following the appearance of cholera.<sup>7</sup>

All indications are that most of the deceased slaves, poor immigrants, and indigents were sent to São Francisco Xavier cemetery, still located today in the neighborhood of Caju, north of the central part of Rio, where most of the population then resided.

One of the more striking findings is the statistical difference in deaths when divided into the categories 'free' and 'slaves and freedmen'. According to 1849 census data, the slave population represented about 48.8% of city residents (Lobo, 1978). At São Francisco Xavier cemetery, for the entire period mentioned earlier, we found a percentage similar to these census data: the free and slaves accounted for 50.4% and 44.8% of the burial population, including freedmen (4.5%) among the free. The percentage falling into the category of unknown cases is 4.9% (see Table 1). Furthermore, these data are comparable to the findings of Jorge Prata de Souza (2003), who recovered mortality statistics from Santa Casa records, although focusing on a different timeframe than ours. His study shows that a large share of those buried at São Francisco Xavier cemetery were slaves. The slave presence appears to be larger at this cemetery than at São João Batista, which allows us to consider cholera mortality at the former as, roughly speaking, representative of what happened with slaves throughout the city.

Although the 1849 census is generally considered quite flawed (Lobo, 1978, p.223-229), it is interesting to note that the population profile of the free and slaves in Rio de Janeiro seems to correspond to the profile of mortality recorded at São Francisco Xavier for the months immediately prior and subsequent to the peak of the epidemic, reconstructed

**Table 1: Frequency of deaths by category (free, slave, and freedman) recorded at São Francisco Xavier cemetery, Jul. 1, 1855 to Jun. 30, 1856**

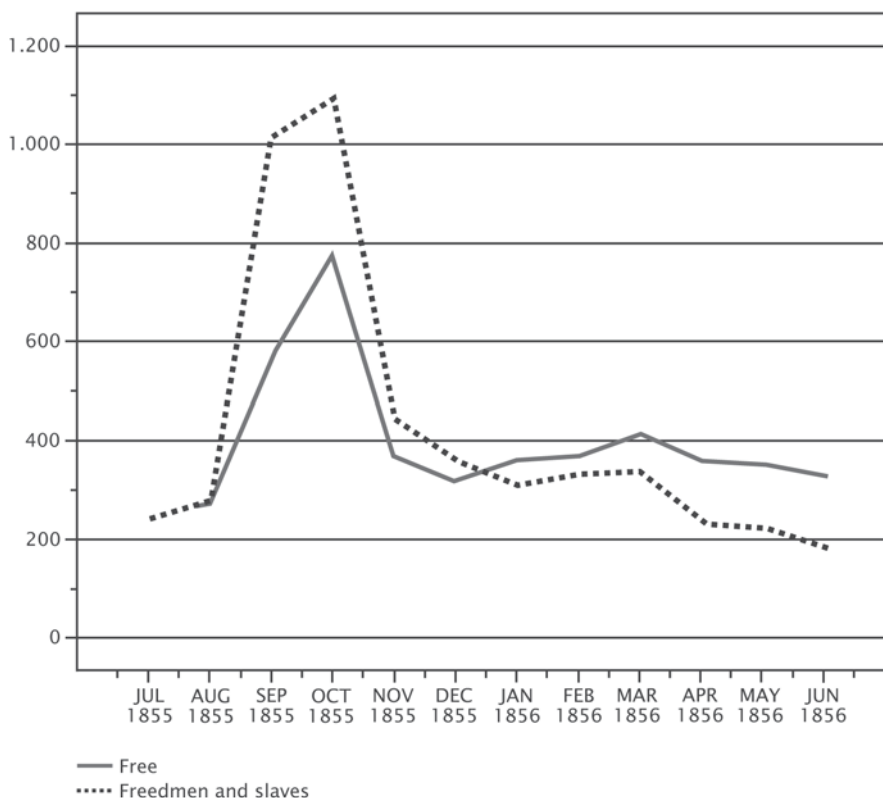
Category	Frequency	%
Free	4.730	45,9
Slave	4.616	44,8
Freedman	461	4,5
Unknown	508	4,9
<b>Total</b>	<b>10.315</b>	<b>100</b>

Source: Livro de registros de óbitos do cemitério São Francisco Xavier (Santa Casa..., jul.-dez. 1855a, jan.-jul. 1856a)

from mortality data and occurring in the months of September through November (Graph 1). In absolute terms, however, from July 1855 through June 1856 slave mortality at São Francisco Xavier cemetery surpassed mortality among the free by a large margin during the peak months of the epidemic, even though the free population was slightly larger than the slave population within general burial statistics. For our analysis of general mortality and cholera mortality, we placed freedmen and the captive population in a single group, which is justifiable given the likely similarities in their living conditions. Many freedmen continued to engage in the same activities as when they were slaves (Soares, 2007, p.302), and even though the way of life for a portion of those who were considered free poor might not differ from the captives', the results of this simple division of deaths into two groups, one including freedmen and slaves and the other only the free, suggest that a slave or ex-slave had much greater chances of dying during the epidemic period.

An analysis of the graph of general mortality shows a sharp peak in deaths of the enslaved during September and October, height of the epidemic. General mortality only resumes patterns roughly comparable to the population make-up after December, when cholera showed signs of waning.

**Graph 1: Deaths recorded at São Francisco Xavier cemetery, July 1, 1855 to June 30, 1856**



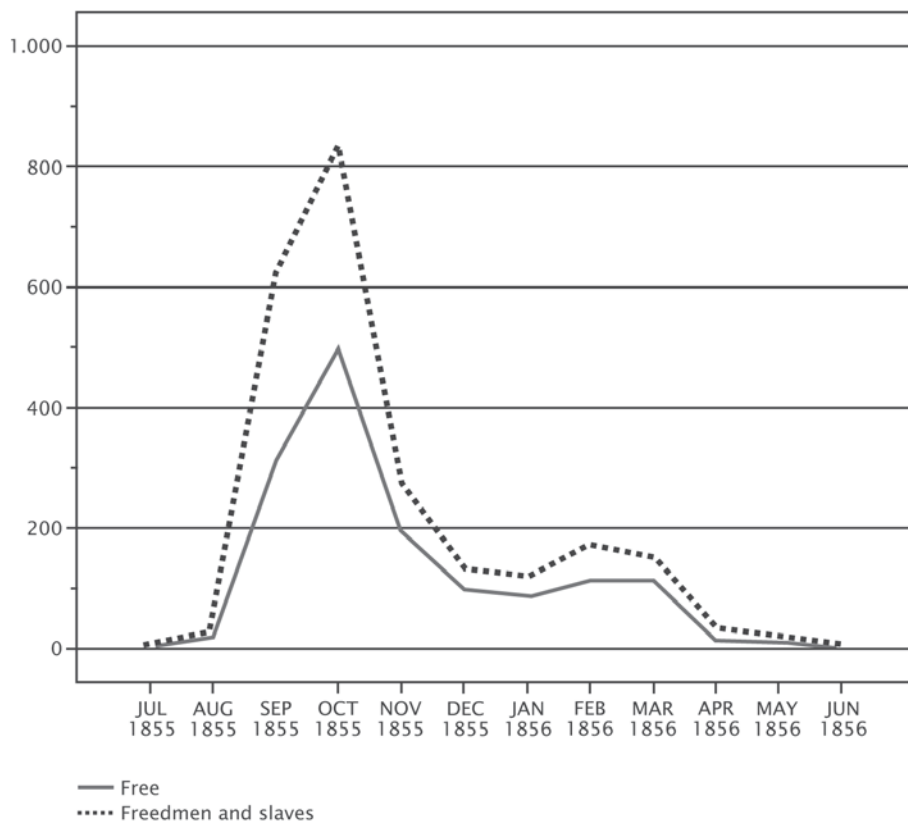
Source: Livro de registros de óbitos do cemitério São Francisco Xavier (Santa Casa..., jul.-dez. 1855a, jan.-jul. 1856a)

Caution is demanded when examining the data we obtained on interments, given the very nature of the records and the different medical categories found; yet these data allow us to infer a pattern of cholera mortality, represented in the curves in Graph 2. In epidemiological terms, we can say that the cholera death curves largely resemble those for cholera morbidity for the period. Curves with this shape – displaying a pronounced rise followed by a gradual decline – generally correspond to epidemics with a shared/discrete origin, in which cholera cases occur during the same incubation period in a given locale (Torok, 2004).

Graph 2 shows a strong, abrupt rise to peak mortality for both the free and slaves in October 1855. At this point, however, slaves and freedmen accounted for 62.5% of cholera deaths. Not long after, mortality for both the free and for slaves dropped, until climbing slightly again in February 1856. If Graph 1 shows the mortality rate for the free surpassing that of slaves from December 1855 to January 1856, Graph 2 shows that the difference in the epidemic’s mortality pattern is invariably to the detriment of slaves.

Although we are dealing with a smaller universe, the death records from São João Batista cemetery portray a similar picture, with more cholera deaths among slaves than

**Graph 2: Cholera deaths recorded at São Francisco Xavier cemetery, Jul. 1, 1855 to Jun. 30, 1856**



Source: Livro de registros de óbitos do cemitério São Francisco Xavier (Santa Casa..., jul.-dez. 1855a, jan.-jul. 1856a)

among the free. Although this cemetery's data for the months of March through June 1856 are incomplete, it is quite unlikely that any deaths that occurred during those months interfered much with the general picture, given the lower incidence of cholera in this period and the scant number of interments at São João Batista cemetery compared with São Francisco Xavier.

São João Batista cemetery was much smaller than São Francisco Xavier, and mainly served those residing in its vicinity, where population density was lower than in the downtown region. Located in the neighborhood of Botafogo, where country houses and mansions were built in the mid-nineteenth century, São João Batista was named after the large parish where it was located, São João Batista da Lagoa, founded by Dom João VI in 1809 (Gerson, 2000, p.283). Starting then, the neighborhood became home to major families and public figures in imperial Rio de Janeiro.

Most of those buried there were free. Of the total of 1,127 interred during this period, 414 were free, or 36.8% of the population taken to the cemetery. We found 355 slaves and 52 freedmen, representing 31.5% and 4.7% of general burials. In a large number of cases, the legal status was not indicated on the records; this figure came to 305, or 27% of the total buried there in the period (Table 2).

**Table 2: Frequency of deaths by category (free, slave, and freedman) recorded at São João Batista cemetery, Jul. 1, 1855 to Mar. 4, 1856**

Category	Frequency	%
Free	414	36,8
Slave	355	31,5
Freedman	52	4,6
Unknown	305	27,1
<b>Total</b>	<b>1.126</b>	<b>100</b>

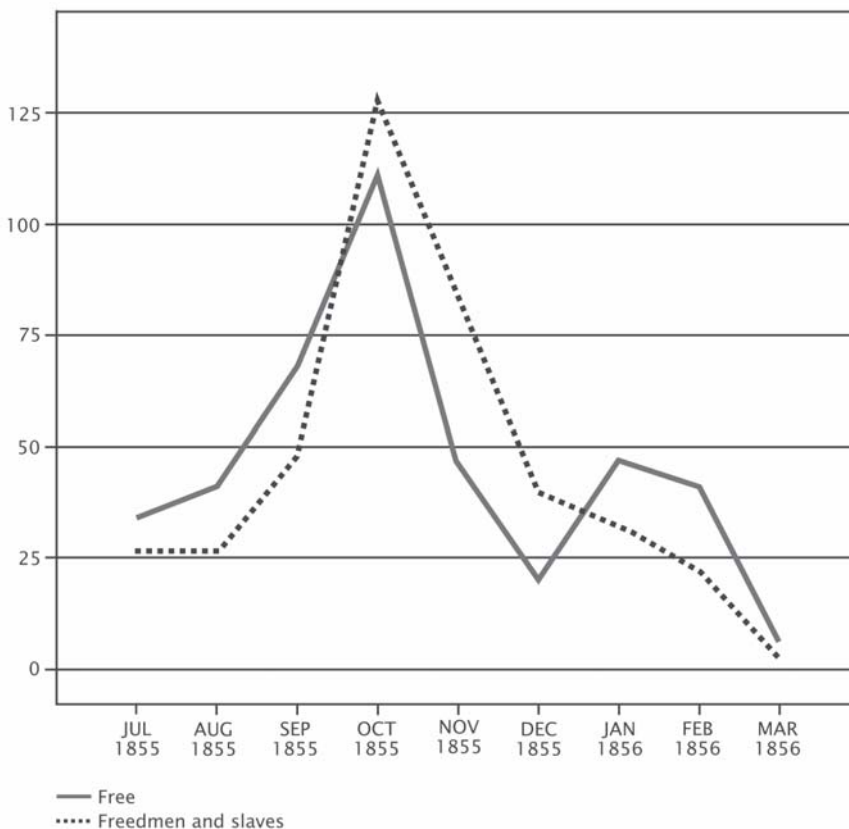
Source: Livro de registros de óbitos do cemitério São João Batista (Santa Casa..., jul.-dez. 1855b, jan.-jul. 1856b)

The fact that we observed a larger number of people with an undefined legal status in São João Batista death records suggests that an even larger number of free were buried in this cemetery. This is because it was more common to indicate 'slave' than 'free' on burial records, since the papers related to the costs of interment, which were the owner's responsibility, generally required that the status of the corpse be defined. In these sources, the status of freedom often times appears to be assumed. In some cases, we were able to infer that the deceased had been free, based on data like nationality (when Portuguese, British, or Spanish, for example), honorific ('dona', 'senhor', etc.), profession, or place of burial, when the latter occurred in an area exclusive to the free.

In mid-nineteenth-century Rio de Janeiro society, not even at the hour of burial did the free and the enslaved enjoy equality. Places of interment themselves were separate, with common graves for each category. While this separation was almost always the rule during interments, there were a number of exceptions – for example, when the slave was buried in a nicer cemetery block, alongside many free, because of the deceased's relations with his or her master.

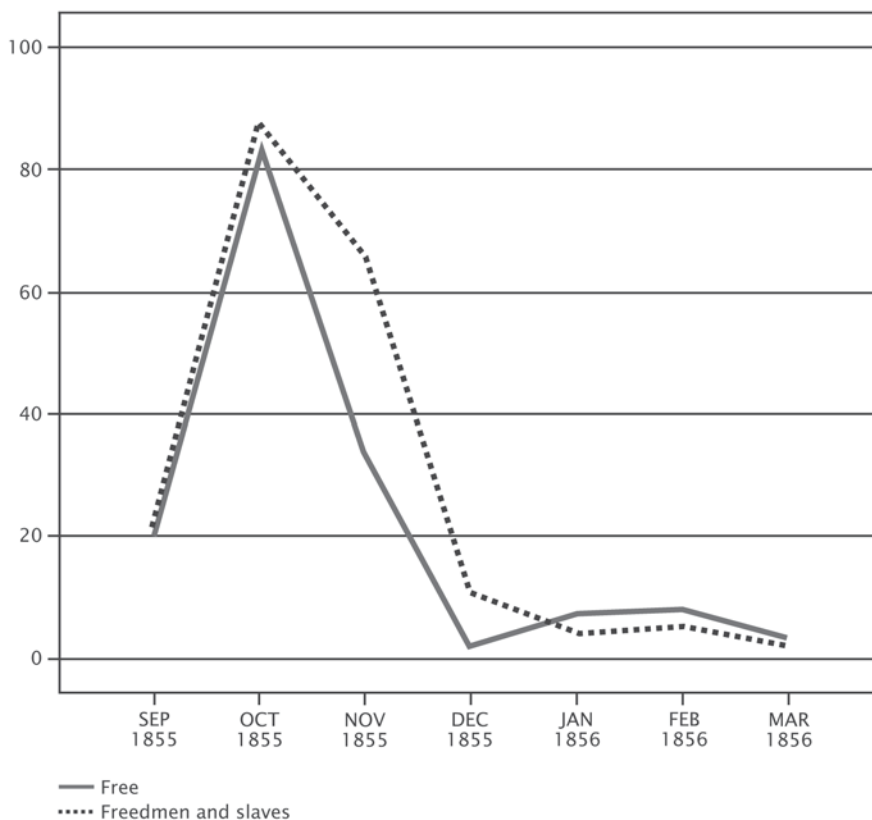
The fact that fewer slave records were recorded at São João Batista cemetery than at São Francisco Xavier appeared to be linked to the smaller statistical difference between general mortality for the free and for slaves (Graph 3). In studying general mortality at São João Batista, combining slaves and freedmen into one group, with the free in another, we could see that at the height of the epidemic there were more deaths among slaves and freedmen than among the free. On the other hand, as shown in Graph 4, it was only in the months following the height of the epidemic, that is, November and December, that mortality caused specifically by cholera was more pronounced among freedmen and slaves. Furthermore, at São João Batista cemetery, death records for cholera only appeared starting in September, possibly reflecting the relative distance between this location and the epidemic focus. In the case of cholera deaths, the mortality difference between the free, on the one hand, and slaves and freedmen, on the other, was much smaller than was observed at São Francisco Xavier cemetery, which may indicate that the slaves sent to each cemetery had different lifestyles (Graph 4).

**Graph 3: Deaths recorded at São João Batista cemetery, Jul. 1, 1855 to Mar. 4, 1856**



Source: Livro de registros de óbitos do cemitério São João Batista (Santa Casa..., jul.-dez. 1855b, jan.-jul. 1856b)

**Graph 4: Cholera deaths recorded at São João Batista cemetery, Jul. 1, 1855 to Mar. 4, 1856**



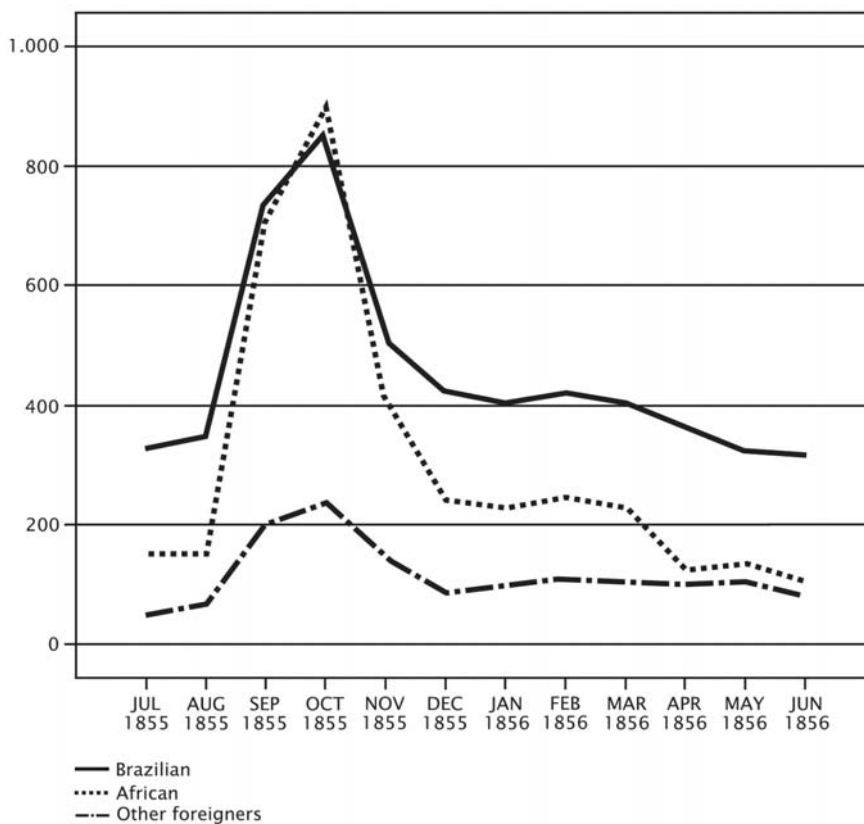
Source: Livro de registros de óbitos do cemitério São João Batista (Santa Casa..., jul.-dez. 1855b, jan.-jul. 1856b)

### Atlantic slave trade

One of the questions that the study of the cholera epidemic raises is the high mortality among Africans in the city, in a context where virtually no more Africans were entering the country, given that the transatlantic slave trade had been abolished, bringing an end to the ongoing renewal of the African population in Rio de Janeiro. In 1850, the year slave traffic was halted, only a few dozen entries into the country were recorded, only four of which took place in the capital of the Empire (cf. Rodrigues, 2000).

Although in general demographic terms, mortality among Africans during the epidemic may not have significantly influenced Rio's population profile (mortality ranged from 18 to 25 per 1,000 inhabitants), it is important to note the differences between the rates for the Brazilian, foreign, and African populations found in the two cemeteries combined (Graph 5). In Graphs 5 and 6, we separated data on the interred into 'origin' or 'place of birth': Brazilian (slaves and freedmen born in Brazil), African (slaves and freedmen born in the African continent), and free foreigners (from all other places of birth). In comparison

**Graph 5: Deaths by place of birth recorded at both cemeteries, Jul. 1, 1855 to Jun. 30, 1856 (\*)(\*\*)**



Source: Livro de registros de óbitos do cemitério São Francisco Xavier e Livro de registros de óbitos do cemitério São João Batista (Santa Casa..., jul.-dez. 1855a, jul.-dez. 1855b, jan.-jul. 1856a, jan.-jul. 1856b)

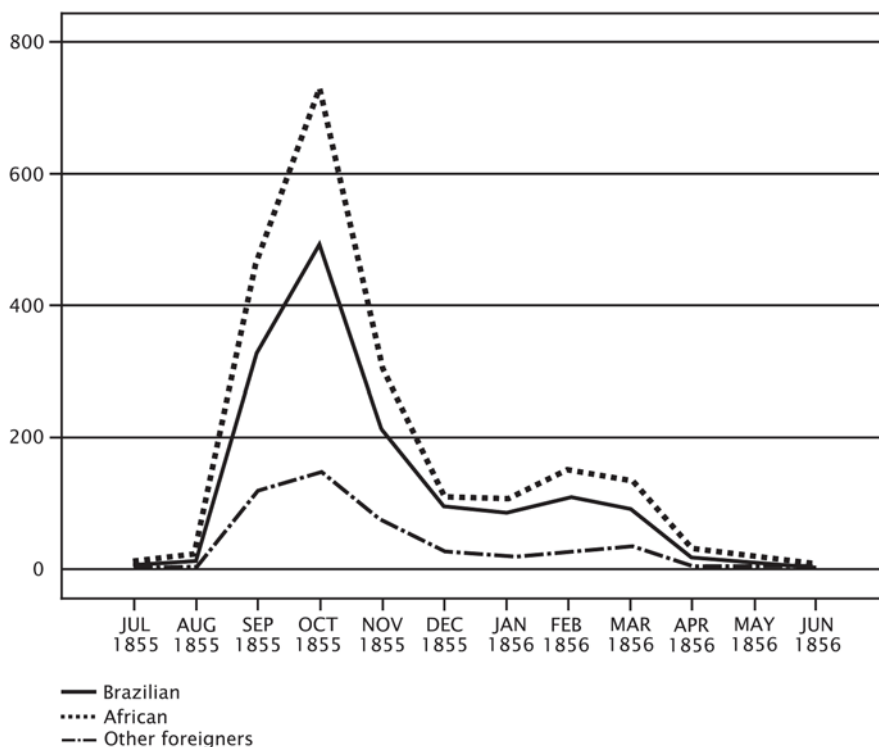
(\*) Data for São João Batista cemetery refer to the period of Jul. 1, 1855 to Mar. 4, 1856.

(\*\*) 9% of the records indicate place of birth as unknown or leave it blank.

with the rest of the population, Africans seem to have suffered more of an impact from the cholera epidemic (Graph 6). Looking at cholera mortality data separated out by the categories of Brazilian, foreign (all non-Africans), and African (from all regions of the continent), mortality was higher for individuals originally from the African continent than for all other places of birth.

We must ask why and how Africans died more often from cholera. One hypothesis that should be taken into account is that Africans and their descendents were more susceptible to the disease because of low levels of stomach acid (Kiple, 1985). Another possible explanation has to do with the social relations established between slaves and freedmen. Those who had the benefit of solidarity ties, and who therefore engaged in mutual caregiving, would have better chances of protecting their health or recovering it (Engemann, 2006, p.437). Higher mortality among Africans than Brazilians during the epidemic may perhaps suggest that the latter had better social connections and were thus

**Graph 6: Cholera deaths by place of birth recorded at both cemeteries, Jul. 1, 1855 to Jun. 30, 1856 (\*)**



Source: Livro de registros de óbitos do cemitério São Francisco Xavier e Livro de registros de óbitos do cemitério São João Batista (Santa Casa..., jul.-dez. 1855a, jul.-dez. 1855b, jan.-jul. 1856a, jan.-jul. 1856b)

(\*) Data for São João Batista cemetery refer to the period of Jul. 1, 1855 to Mar. 4, 1856.

better able to avail themselves of support networks and to receive basic care when they were ill. Be that as it may, the medical discourse of the day apparently paid little attention to this excessive mortality rate among Africans.

### Final considerations

We believe that research on the cholera epidemic helps formulate enlightening questions about slave health and the history of medicine during this period. In our comparison, we have chosen a perspective distinct from the one that predominated until the 1970s and that left slavery invisible within the process of the ‘medicalization’ of Brazilian society.

We have approached the cholera epidemic as a historical phenomenon that entails a gamut of spheres, ranging from beliefs, treatments, and living conditions to scientific discourse and public policy. An investigation of this epidemic event should not lose sight of the interfaces that help clarify the dynamics of a society during a given period.

The first data presented in these pages engage in a dialogue with the history of urban slavery and establish possible comparisons with studies conducted in the field of the



history of health on cholera. If nineteenth-century cholera epidemics, particularly in Europe and the United States, were major moments in the emergence of public health (Rosenberg, 1987; Hardy, 1993), in Brazil the cholera epidemic did not receive a similar amount of attention, especially as far as its relation with slavery. This is partially due to the very dynamics of the cholera epidemics, with outbreaks on a smaller scale than those of yellow fever. Cholera appeared on at least three occasions – in the 1850s, the late 1860s and following decade, and, lastly, in 1894 – and was most aggressive in 1855, gradually abating during its later ‘invasions’. Comparing findings from more recent research on some regions of the country, like Pernambuco, Pará, and Rio de Janeiro, the epidemic of 1855 was apparently deadlier in Bahia, especially Salvador, where some 10,000 people passed away (David, 1996, p.131).

Contrasted with yellow fever, however, the public health impact of cholera seems to have been less marked in Brazil, as yellow fever grew endemic in nature over time (Benchimol, 1999). We can also look at the medical considerations advanced by historians of medicine, regarding both this period and later as well, which argue that yellow fever preyed more on the non-acclimated, that is, the European immigrants so coveted by the imperial State after the end of the slave trade (Chalhoub, 1996). Far from wishing to defend the debate on racial immunities vis-à-vis yellow fever,<sup>8</sup> we would only like to point out that the higher slave mortality rate from cholera failed to generate any subsequent debates among physicians or public authorities. If, for reasons both varied and complex, yellow fever became a concern of the State in later years, the same cannot be said for cholera, since it appeared in its most lethal form during the initial years of the organization of public health, when the bulk of the labor force consisted of slaves.

Lastly, perhaps the cholera epidemic and its devastating mortality – striking all classes, albeit in distinctly heterogeneous fashion – can also be seen as a historical phenomenon that weaves medical knowledge together with the discourses of different social segments in ambiguous ways at times. The discourses produced during the epidemic include a harsh irony that reflects both a lack of belief in doctors as well as the cynical sadism that some social segments expressed towards the slave’s condition:

Some days back, a wag said that this is all a ‘joke’ in a way. It used to be said that slavery is an evil thing, and it must be done away with. Then came the ‘reigning disease’, and it commenced carrying slaves off to a better life. Now the Masters want to ‘guarantee’ the blacks so they do not die! Well, this being the case, God cannot know how to rule his world!...

So: do they, or do they not, want to put an end to slavery?

(A Marmota..., 5 out. 1855; emphasis in the original).

## NOTES

<sup>1</sup> In this and other citations of texts from non-English languages, a free translation has been provided.

<sup>2</sup> The *Tratado único da constituição pestilencial de Pernambuco*, by João Ferreira Rosa, published in 1694, is believed to be the first record of yellow fever from the colonial period. Until 1849, that particular epidemic had been considered an isolated case in Brazil, and then the new yellow fever epidemic came along. Upon this occasion, Minister Antônio de Menezes Vasconcellos Drummond had a new compilation brought from Portugal, since the only copy then in existence belonged to the public library in Rio de Janeiro. See Ribeiro, 1992.

<sup>3</sup> Other establishments most likely existed, but they were not announced in the *Jornal do Commercio*.

<sup>4</sup> In 1851, Santa Casa was granted a concession to establish and maintain public cemeteries in outlying neighborhoods of Rio de Janeiro for fifty years, in exchange for the mandated maintenance of three permanent infirmaries to serve the poor (Brasil, 5 set. 1850, 18 out. 1851, 2 set. 1854; Santa Casa..., 1854-1856).

<sup>5</sup> See *Jornal do Commercio* during the month of September 1855.

<sup>6</sup> This is according to some studies from the historiography of slavery. See Engemann, 2006, p.437; Moreira, 2003.

<sup>7</sup> According to a confidential letter, written from the palace of the Presidency of the province of Rio de Janeiro on July 30, 1855, and addressed to the chief of police, brotherhoods in Rio de Janeiro should also be ordered to cease “burials in the current catacombs and cemeteries belonging to these Brotherhoods” (Carta..., 30 jul. 1855).

<sup>8</sup> Historians’ debates over the observation by medical doctors that Africans displayed greater resistance to yellow fever are inconclusive in terms of current biomedical knowledge and lie well outside the bounds of our proposal. McNeill (2010) recently revived this debate, developed mainly by Kiple (2001) and Watts (2001), arguing that although there is no medical evidence to support this difference in immunity, ecology might be an important factor to take into account were such a difference ever proven.

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