

THE PARAGUAYAN ROSETTA STONE:  
New Insights into the Demographics of  
the Paraguayan War, 1864–1870\*

*Thomas L. Whigham, University of Georgia*  
*Barbara Potthast, University of Bielefeld*

*Abstract: The demographics of the Paraguayan War (1864–1870) have long fascinated historians and sociologists. If the oft-repeated tales of a 70 percent loss of life in Paraguay are accurate, then this war represents a singular case in modern history, one full of implications for students of militarism, gender, and culture. This study analyzes a newly discovered census from 1870 and reworks earlier censal materials. The authors conclude that the old stories of a steep loss of population during the war are basically correct.*

The debate over Paraguayan population losses during the War of the Triple Alliance continues to attract demographers, military historians, and analysts of national character. If the old stories that claimed losses of over 50 percent are correct, then the Paraguayan experience was indeed remarkable in the history of modern warfare. Rarely has a society tolerated such losses before forcing an end to hostilities. By way of comparison, the oft-cited sacrifice of life on the part of the Soviet Union during World War II amounted to twenty-seven million deaths, just over 10 percent of the Soviet population.

The historical implications of the Paraguayan case seem evident enough. Some historians of the U.S. Civil War, for instance, have suggested that the Confederacy might have won its independence had the Southern rebels fought—and died—like Paraguayans.<sup>1</sup> We could suggest other analogies, but this single example shows clearly why historians have maintained such interest in the relatively obscure topic of Paraguayan demographics.

\*We wish to thank Major Hugo Mendoza, who discovered the census in the first place, and also Marta Fernández W. and Jerry W. Cooney, who went to the archive of the Ministerio de Defensa Nacional on our behalf, viewed the documents, and arranged for us to receive complete copies.

1. This argument was made most forcefully in Richard E. Beringer, Herman Hattaway, Archer Jones, and William N. Still Jr., *Why the South Lost the Civil War* (Athens: University of Georgia Press, 1986), 440–42.

In 1990 the readership of the *Hispanic American Historical Review* was treated to a lively exchange of views on the subject. Vera Blinn Reber had speculated in an earlier piece that Paraguayan population losses could not have exceeded 18 percent.<sup>2</sup> Our critique argued that the traditional figure of a 50 percent loss was almost certainly too high, but given the available evidence, it seemed unwise to reduce the figure to less than 30 percent.<sup>3</sup> Now, however, a reworking of the old data and the discovery of new documents seem to indicate that all three of us have underestimated the loss. It now seems evident that the traditional estimate that more than half of the Paraguayan population died in this war is basically correct.

When we first made our comments on the Reber article in 1990, we assumed that little new information would come to light. Although tales abounded of "a lost postwar census," no proof existed that such a census had ever been conducted. No censal documents of any kind had come to light for the 1870s. Moreover, it was well known that Paraguay's best repository of documents, the Archivo Nacional de Asunción, contained almost no material for the years after 1869. That being the case, we remained pessimistic about the chances of ever finding any data that would decide the issue one way or the other.

If we were ever to make any headway with Paraguayan demographics, we therefore had to reexamine the materials already available and submit them to a more rigorous analysis. Our starting point was the 1846 census.

### *"The Case of the Missing Parishes"*

To determine how many Paraguayans died in the conflict, we first needed to establish a definite figure for the total national population at the outset in 1864. The 1846 census almost certainly provided the key in this task, for scholars generally have accepted this first national census as relatively dependable. We could also postulate rates of annual population growth by comparing the 1846 findings with censuses conducted during the late colonial era.

Much of the work on this topic had already been carried out by John Hoyt Williams, whose 1976 article in the *Hispanic American Historical Review* first brought the 1846 materials to the attention of historians in the United States, and by Annaliese Kegler de Galeano, who did much the

2. Vera Blinn Reber, "The Demographics of Paraguay: A Reinterpretation of the Great War, 1864–1870," *Hispanic American Historical Review* 68, no. 2 (May 1988):289–319.

3. Thomas Whigham and Barbara Potthast, "Some Strong Reservations: A Critique of Vera Blinn Reber's 'The Demographics of Paraguay: A Reinterpretation of the Great War,'" *Hispanic American Historical Review* 70, no. 4 (Nov. 1990):667–76.

same for historians in Paraguay.<sup>4</sup> These scholars offered the first serious analyses of nineteenth-century Paraguayan demographics. Their findings were crucial at the earliest stage of our research.

The problem with the research of Williams and Kegler, we soon discovered, was that they were working with information much more incomplete than they realized. The Archivo Nacional contained no 1846 records for several important communities. Thus irrespective of any questions regarding growth rates, the initial population statistics provided by the two scholars necessarily fell short of the correct figure.<sup>5</sup>

The Paraguayan government had organized the 1846 census by parishes, but the exact number of parishes then in existence was unclear from the documentation. Four years earlier, First Consul Carlos Antonio López had mentioned eighty-three parishes in his address to the Congreso Nacional.<sup>6</sup> A comparison with censal returns from the 1790s likewise suggested that Paraguay contained just over eighty parishes in 1846. The Archivo Nacional listed no returns for that year from seven previously established parishes—Belén, San Pedro Ycuamandiyú, San Lorenzo del Campo Grande, Ypané, Itauguá, Carimbataí, and Yhu. At least four other parishes were also missing, although their identity is anyone's guess.<sup>7</sup> The absence of returns from all these communities meant that we had to extrapolate their population from earlier censuses and add their number to the total before an accurate figure could be deduced.

The eleven missing parishes were only part of the problem of undercounting. The documentation from Emboscada, a village inhabited mainly by *pardos* (blacks) listed only *blancos* and *naturales*, the latter a term

4. John Hoyt Williams, "Observations on the Paraguayan Census of 1846," *Hispanic American Historical Review* 56, no. 3 (Aug. 1976):424–37; and Annaliese Kegler de Galeano, "Alcance histórico-demográfico del censo de 1846," *Revista Paraguaya de Sociología* 13, no. 35 (1976):71–121.

5. Williams assumed that he had found seventy-three out of eighty-nine parishes and data for fifteen more parishes from other years. Of his seventy-three parishes, however, fifteen were in fact *subpartidos* of other parishes (despite the fact that the documents leave the impression that they were separate parishes). The censal materials from 1846 are poorly organized in the Archivo Nacional, with some of the returns from the *subpartidos* listed in different volumes from those of the main communities. The same holds true for the Indian villages of the Paraguayan Misiones, where the number of Indians was listed separately from the rest of the population.

6. See "1842 Mensaje del Gobierno Supremo al Congreso Nacional," in Archivo Nacional de Asunción, Sección Historia (hereafter ANA), vol. 285, no. 11.

7. Possible candidates for these missing parishes include Santísima Trinidad, Guarambaré, Areguá, Caaguazú, Tacuaras, Ygatymí, Isla Ombu, Pedro González, Curupayty, Desmochados, Unión, Aldana y Toledo, Remolinos, and Mbocayaty. See "Derroteros de las villas y partidos del territorio de la República del Paraguay," in *Almanaque del Paraguay, correspondiente al año de 1864* (Asunción: Imprenta del Estado, 1864). This source lists townships roughly equivalent to the earlier parishes.

normally reserved for Indians.<sup>8</sup> Factoring in the Emboscada blacks might add another thousand individuals to the census. In addition, a close look at the archival materials revealed that the former Jesuit missions of southern Paraguay recorded population data for *foráneos* (non-Indians) but left *naturales* (the distinct majority in these villages) to be counted in a separate list, one that has not survived.<sup>9</sup> Only the small community of Jesús recorded figures for both populations.<sup>10</sup>

Another problem leading to undercounting in the 1846 figures was that the government ordered the census only two years after a smallpox epidemic struck Paraguay. The ravages of this epidemic were particularly harsh in the former missions, although the impact was felt throughout the country.<sup>11</sup> Affected populations tend to adjust themselves after experiencing such outbreaks of disease, but two years were not enough time to recover fully. For this reason, we needed to adjust the total number upward.

Barbara Potthast's detailed analysis of several of the parishes listed in the 1846 documentation uncovered certain structural irregularities that also needed to be considered. One problem was that we did not know whether the census included men serving in the military or as itinerant laborers in the yerba forests. Similar categories were normally not covered in censal reports in analogous circumstances in pre-modern Europe.<sup>12</sup>

Another problem was a pronounced undercounting of infants. A population pyramid for Villarrica in 1825 (and 1846) reveals this fact clearly. Comparing the ratio of women between fifteen and forty-nine years of age and children up to four years old with women twenty to fifty-four and children five to nine revealed that Paraguayan census takers

8. Williams gave figures for the black population, but these must have been miscopied as the documents clearly speak of *naturales* (meaning Indians). See "Censal Report for Emboscada (1846)," in ANA, Sección Nueva Encuadración (hereafter NE), vol. 3310.

9. The separate civil status of village Indians was still in force in Paraguay until 1848, when Carlos Antonio López ended the system of segregation and made the Indians overnight "*individuos de la república*" (citizens of the republic), a dubious honor given that the government seized much of their property at the same time. See Thomas Whigham, "Paraguay's *Pueblos de Indios*: Echoes of a Missionary Past," in *The New Latin American Mission History*, edited by Erick Langer and Robert H. Jackson (Lincoln: University of Nebraska Press, 1995), 157–88.

10. See "Matrícula de la feligresía foránea del pueblo de Jesús," and "Matrícula de los naturales del pueblo de Jesús" (1846) in ANA-NE, vols. 3305 and 3295.

11. Barbara Potthast-Jutkeit, "Epidemia, demografía y muerte en el Paraguay, Siglo XIX," forthcoming in *Epidemia y muerte en Andalucía y América*, edited by José Hernández Palomo and Manuel Sobrino Toro.

12. This tendency would explain why the census lists far more women than men. Barbara Potthast found in her sample an average of 86 men to 100 women (46 percent to 54 percent). The urban districts, where the imbalance was pronounced, weighed heavily in her sample. Consequently, the average ratio in all partidos was probably around 90 men to 100 women. See Potthast-Jutkeit, "*¿Paraíso de Mahoma*" o "*País de las mujeres*"? *El rol de la familia en la sociedad paraguaya del Siglo XIX* (Asunción: Instituto Cultural Paraguayo-Alemán, 1996), 370, t. 8.

must have left out a large number of small children. Normally, the ratio should be approximately the same for both groups, but in the 1846 census, they differ considerably.<sup>13</sup>

### *Establishing Annual Growth Rates*

The ratio of women to children shows that the growth of the Paraguayan population must have been considerable, as much as 2 percent per annum. Ernesto Maeder's examination of eighteenth-century Paraguayan demographics came up with an average annual growth of 2.6 percent between 1761 and 1772, a rate that dropped to 2.3 percent and then to 1.1 percent before rising again to 1.64 in the intervals between 1772–1775, 1775–1782, and 1792–1799. Extrapolating from these figures, we posit an average growth rate between 1792 and 1846 of 1.7 percent.<sup>14</sup> This figure takes into consideration varying rates of annual growth of the former Jesuit missions of southern Paraguay (1.5 percent) and for the non-Indian communities in the rest of the country (2 percent).<sup>15</sup>

Corroboration for the growth rate we determined was found in documentation from 1817 and 1825. In these years, the Indian villages had the lowest rates (between 1.4 and 1.47 percent) and the "white" parishes the highest (between 2.25 and 2.5 percent).<sup>16</sup> These growth rates appear to have remained relatively steady between 1799 and 1846. They provide the basis for our final estimate for 1864.

Williams had calculated 238,862 inhabitants of Paraguay in 1846. As explained, however, both he and Kegler underestimated the total population as a result of flaws in the documentation. To correct for part of the omissions, we referred to Maeder's work on the 1799 census and found that the parishes of Belén, San Pedro Ycuamandiyú, Ypané, San Lorenzo, Carimbatai, Yhú, and Itauguá counted 9,332 inhabitants and those parishes in the Paraguayan Misiones another 18,473.<sup>17</sup> We used the

13. The difference in the ratios falls between 0.17 and 0.33. See the chapter analyzing Paraguayan household structure in Potthast-Jutkeit, "*Paraíso de Mahoma*," 167–202.

14. Ernesto J. A. Maeder, "La población del Paraguay en 1799: El censo del Gobernador Lázaro de Ribera," *Estudios Paraguayos* 3, no. 1 (1975):63–86.

15. The difference, which was already obvious in the 1799 census, can be explained in part by *mestizaje* and by the consequent decrease in the number of individuals officially recognized as Indians. It can also be attributed in part to the high incidence of Indian emigration southward to Buenos Aires and the lower provinces.

16. For 1817, see "Matrícula de la feligresía de Atyra, Caacupé, Emboscada, y San Juan Nepomuceno"; for 1825, see "Matrícula de la feligresía de Villarrica" for 1825, both in ANA-NE, vol. 3282. For Villarrica, the viability of the growth rate can be tested by comparing the age groups in 1825 with those in 1846. Such comparison confirms the relatively high growth rate of 2.5 percent.

17. Maeder, "La población del Paraguay," 67–69. We did not speculate about possible figures for the unnamed missing parishes.

growth rates we previously established at 1.5 percent for Indian populations and 1.75 to 2.5 percent for non-Indian populations and excluded the *foráneos* mentioned by Williams. We then calculated that between 45,443 and 54,137 inhabitants were missing from the 1846 census. Adding these to the other totals yielded a final estimate of 284,302 to 292,999 inhabitants for Paraguay for 1846.

Accordingly and without reference to losses incurred during the 1844 epidemic, we estimated between 388,511 and 456,979 inhabitants for the country in 1864.<sup>18</sup> Because it was impossible to correct for the undercounting of children in the earlier censuses (which would add still more to our totals), we feel safe in arguing that Paraguay had a population somewhere between 420,000 and 450,000 at the beginning of the war.

### *The 1870 Census*

We thought that no new original documentation would become available, doubting that any such documentation even existed. We were wrong. The fall of the dictatorship of Alfredo Stroessner in 1989 made possible new research in areas that we had not foreseen. Completely unknown archives and obscure collections of documents began to surface for the first time.<sup>19</sup> One such archive, now just barely opening its door to the scrutiny of historians, was that of the Ministerio de Defensa Nacional. We had heard of this repository of documents but had assumed that its holdings would consist primarily of materials from the era of the Chaco War (1932–1935), a time frame beyond our area of interest.

We were thus doubly surprised when Thomas Whigham received a Christmas postcard from Major Hugo Mendoza in which he noted the presence in the archive of a nearly complete national census for 1870. The major, who had formerly worked at the Museo Histórico Militar, had recently been transferred to the Ministerio de Defensa and had stumbled onto the bound censal documents purely by accident.

Were we interested? At first, we hardly believed our good fortune and were also deeply skeptical that such a census could have been conducted in the chaotic environment of 1870. Surely Mendoza was exaggerating.

It took nearly ten months for complete copies of the documentation to be made. But when they arrived, it was instantly clear that Major Men-

18. These figures are again based on growth rates between 1.75 and 2.5 percent. For more details, see Potthast, *Epidemia y muerte*, t. 6.

19. Perhaps the best known of these collections is the so-called Archivo del Terror, a vast repository of material kept by Stroessner's security forces in the basement of the Sección Investigaciones of the Asunción police. See R. Andrew Nickson, "Paraguay's *Archivo del Terror*," *LARR* 30, no. 1 (Winter 1995):125–30.

doza was right: the census was nearly complete. What we held in our hands was for Paraguayanists the equivalent of the Rosetta Stone.

The documents did not include a copy of the decree by which the Gobierno Provisorio ordered that a census be taken. But reference to the date of that decree, 29 September 1870, was made in one of the subsequent reports from the interior. Perusal of the *Registro Oficial* for 1869–1870 failed to reveal further details on the September decree; however, the *Registro* recorded that the Treasury Minister issued such an order the previous year, on 24 December 1869.<sup>20</sup> We believe that while the war was still being fought in the northeast of the country, the new authorities decided that December was simply too early to conduct a census and delayed the effort until after the Brazilians had defeated the remnants of Marshal Francisco Solano López's army. In any case, the organization of the census reports produced in 1870 suggests that the information gathered at that time conformed broadly with what state officials wished to know on the occasion of the earlier decree.

The Gobierno Provisorio fully recognized the desperate circumstances of postwar Paraguay and wanted an accurate idea of how many resources—human and otherwise—the country still had at its disposal. The government therefore ordered the *jefes políticos* and *jueces de paz* of all towns and villages in the interior to report the number of inhabitants in the *partidos* under their jurisdiction.<sup>21</sup> Their findings were grouped by gender and by a division into age groups consisting of *ancianos*, *jóvenes*, and *niños*. The precise definition of these three categories seems to have varied from place to place, but most *jefes* interpreted an *anciano* to be an individual over fifty years of age, a *niño* to be under twelve, and a *joven* anywhere in between. In addition to the census of inhabitants, the government required officials to report the acreage then under cultivation in their respective districts in terms of the number of *liños* of specific crops sown.<sup>22</sup>

We have organized the results of the 1870 census in Table 1. The capital city of Asunción was evidently not covered by the September decree. Pilar, an important town on the Río Paraguay, almost certainly was, but its returns were missing from the collection of the Ministerio de De-

20. *Registro oficial de la República del Paraguay correspondiente a los años 1869 a 1875* (Asunción: Imprenta del Estado, 1887), 45–46.

21. The term *partido* had come to replace *feligresía* (parish) as the official designation for an administrative district during the López years. The change in terminology did not alter boundaries or populations in any way.

22. This type of agricultural census had been conducted earlier in the war, when the López regime wished to obtain a clear idea of how much food might be available for distribution to the army. See the decree by Solano López on “el número de liños de las diferentes especies de sembrados,” Asunción, 28 Feb. 1863, cited in Olinda Massare de Kostianovsky, *El vicepresidente Domingo Francisco Sánchez* (Asunción: Escuela Técnica Salesiana, 1972), 86–87. See also “Informes sobre agricultura,” 1865–1867, in ANA-NE, vols. 2405, 2407, 2410, and 3210.

fensa Nacional. In both cases, however, we found trustworthy information that nearly fits and have therefore decided to include it in the table as well (see table 1).

The implications of the table are striking. First of all, between 72 and 74 percent of the prewar Paraguayan population was gone, a figure far higher than historians had hitherto imagined. Several thousand of the missing individuals might have been alive in 1870 as prisoners in far-off Brazil or Uruguay. A few Paraguayans might even have been hiding in the hills or swamps of their own country. But the great majority almost certainly had met their death on the battlefield or fallen victim to the epidemic diseases and malnutrition that accompanied the war.<sup>23</sup> Proof of the overall demographic catastrophe can be seen in the numerical breakdown by gender, with women in the joven category regularly outnumbering men of military age by four or five to one.

Analysis of specific cases also tends to confirm the enormity of the demographic disaster. The village of Luque, for example, recorded a ratio of women to men of twenty to one. This figure seems extraordinarily high even for 1870 until it is recalled that Luque became a major center for displaced persons when Solano López designated it the capital of Paraguay after the Brazilian Navy raided Asunción.

The lack of returns from the villages of the Paraguayan Misiones can also be explained by referring to an emergency measure taken by Solano López. After the allied armies of Brazil, Argentina, and Uruguay had crossed into Paraguay from Corrientes, the marshal ordered the evacuation of civilians from all communities south of the Río Tebicuary.<sup>24</sup> It seems altogether likely that the inhabitants of most of the villages had not yet returned from Luque, Asunción, or some other place of temporary refuge.

It is difficult to determine what happened in such communities as Hiaty and Acahay, which returned information on a tiny number of liños sown but omitted population statistics. These partidos were all small places that were only lightly populated even before the war. Perhaps in these cases, the local officials were only marginally literate or had no paper on which to record their findings. The case of Ybytymi, which returned no statistics on crops or population suggests a more ominous explanation. When M. L. Forgues, a French traveler and correspondent, visited the village in 1872, he observed that the jefe político was the only man in town.<sup>25</sup> We suspect that Emboscada, whose black troops enjoyed a rep-

23. We have discussed the effects wrought by smallpox and cholera morbus on war-weary Paraguay and the slow starvation that followed in our earlier critique. See Whigham and Potthast, "Some Strong Reservations," 670–72.

24. See "Decreto de Vice-Presidente Francisco Sánchez" (for Marshal López), Asunción, 23 Nov. 1865, in ANA-SH, vol. 344, no. 1. See also Efraím Cardozo, *Hace cien años*, 13 vols. (Asunción: La Tribuna, 1970–1983), 3:164.

25. M. L. Forgues, "Le Paraguay: Fragments de journal et de correspondences," *Le Tour du Monde* 27 (1874):369–416, 404.



TABLE 1 *Paraguayan Population, 1870–1872*

<i>Partido</i>	<i>Ancianos</i>	<i>Jovenes Varones</i>	<i>Niños</i>	<i>All Males</i>
Acahay <sup>a</sup>				
Ajos	11	171	294	476
Altos	57	264	815	1,136
Areguá	48	209	538	795
Arroyos y Esteros	40	120	366	526
Asunción <sup>b</sup>	2,516	1,808	2,500	6,824
Atyra				
Bareiro Grande	53	603	190	846
Belén				
Boby <sup>a</sup>				
Caapucú	28	154 <sup>c</sup>	102	284
Caazapa	38	121	207	366
Capiatá	299	478	2,056	2,833
Caraguatay	88	306	632	1,026
Carapegua	123	309	1,009	1,441
Carmen	4	8	3	15
Cerro León <sup>d</sup>	15	143	234	392
Concepción				
Encarnación	33	127 <sup>e</sup>	22	182
Guarambaré	26	116	152	294
Hiaty <sup>a</sup>				
Horqueta				
Itacurubí	6	52	257 <sup>f</sup>	315
Itapé <sup>a</sup>				
Itúguá				
Jesús	14	22 <sup>g</sup>	12	48
Limpio	63	301	605	969
Loreto				
Luque	106	207	705	1,018
Mbocayaty	24	217	395	636
Mbuyapey <sup>a</sup>				
Paraguarí				
Pilar <sup>b</sup>	124	757	847	1,728
Pirayú	42	174	237	453
Piribebui	98	150	1,035	1,283
Quiindy	72	300	553	925
San Antonio				
San Joaquín <sup>h</sup>	4	4	8	15
San Lorenzo	75	296	636	1,007
Santiago <sup>a</sup>				
Tabapy <sup>d</sup>	62	140	446	648
Tobatí <sup>a</sup>				
Trinidad	14	23	18	55

DEMOGRAPHICS OF THE PARAGUAYAN WAR

TABLE 1 (continued)

<i>Ancianas</i>	<i>Jovenes Mujeres</i>	<i>Niñas</i>	<i>All Females</i>	<i>Totals</i>
27	1,029	371	1,427	1,892
234	1,389	854	2,477	3,613
252	1,042	428	1,722	2,517
154	423	355	932	1,458
5,453	2,860	2,753	11,066	17,890
				1,043
103	1,705	190	1,998	2,844
				921
			678	962
102	544	287	933	1,299
564	1,624	1,103	3,291	6,124
96	1,431	617	2,144	3,170
411	1,359	941	2,711	4,150
2	4	8	14	29
138	586	182	906	1,298
				86
56	231	70	357	539
83	312	120	515	809
				2,564
44	305	343 <sup>d</sup>	692	1,007
				1,018
5	37	12	54	102
161	1,198	720	2,079	3,048
				287
352	4,000	693	5,045	6,063
89	1,051	389	1,529	2,165
				416
316	2,341	1,887	4,544	8,000
239	659	245	1,143	1,596
396	1,067	622	2,085	3,368
	2,008	573	2,581	3,506
				2,593
6	21	30		
271	910	303	1,484	2,491
73	1,036	550	1,659	2,307
15	11	12	38	93

TABLE 1 Paraguayan Population, 1870–1872 (continued)

<i>Partido</i>	<i>Ancianos</i>	<i>Jovenes Varones</i>	<i>Niños</i>	<i>All Males</i>
Valenzuela <sup>a</sup>				
Villa Franca	3	65	1	69
Villarrica	53	476	1,366	1,895
Villeta	141	506	1,150	1,797
Yaguarón	21	100	394 <sup>i</sup>	515
Ybycui	48	262	425	735
Ypané	23	71	215	309
Yuty	113	562	787	1,462
Unidentified <sup>j</sup>				
Unidentified <sup>j</sup>	24	139	577	740
Totals	4,505	9,761	19,785	34,051

Sources: “Censo General de la República del Paraguay según el decreto circular del Gobierno Provisorio de 29 septiembre de 1870,” in Archivo del Ministerio de Defensa Nacional (Asunción); census data for Asunción taken from Hugh G. MacDonnel to the Earl of Grenville, Buenos Aires, 2 Aug. 1872, in Public Records Office, Foreign Office Papers, 59/35; and census data for Pilar from *El Pueblo* (Asunción), 18 June 1871.

<sup>a</sup> Returned report but did not include population statistics

<sup>b</sup> Not covered in census

utation for ferocity on the battlefield (and consequently experienced high mortality at the front), might have been in a similar position.

As was done for the communities missing from the 1846 documents, we have corrected for the villages that failed to report to the Asunción authorities in 1870.<sup>26</sup> If it is assumed that some 25,000 to 50,000 Paraguayans were left in these areas, the total population would amount to somewhere between 141,351 and 166,351 inhabitants. Even with this addition, however, the loss still seems to have been between 60 to 69 percent of the prewar population.

As for Asunción and Pilar, we felt comfortable in including the statistics we had on hand. Those for Pilar were published in the Asunción newspaper *El Pueblo* in June 1871 and followed exactly the pattern of the 1870 census. We think it likely that these returns came directly from the official reports now missing from the archive of the Ministerio de Defensa Nacional. The Asunción figures are estimates sent to the Earl of Grenville by British Consul McDonnell in 1872, and they too conform broadly with what we expected to find.

26. Besides Emboscada, Ybytymi, and the seven towns of the Paraguayan Misiones, the communities absent from the 1870 census were all tiny isolated villages: Caaguazú, Curuguaty, Itá, Quyuquyó, Rosario, Divino Salvador, San Estanislao, Unión, Valenzuela, Ygatymi, and Yhú. Readers should note that we have not been able to identify two communities that recorded censal data, one of which was sizable.

TABLE 1 (continued)

<i>Ancianas</i>	<i>Jóvenes Mujeres</i>	<i>Niñas</i>	<i>All Females</i>	<i>Totals</i>
6	126		132	201
502	2,275	1,315	4,092	5,978
394	2,353	1,131	3,878	5,762
309	893	288	1,490	2,005
249	1,682	421	2,352	3,079
141	513	266	920	1,229
229	1,378	783	2,390	Yuty 365
119	1,015	711	1,845	2,582
11,585	39,412	19,549	71,224	116,351

<sup>c</sup> Include 87 jóvenes and 67 útiles (men of draft age)

<sup>d</sup> Originally part of the partido of Paraguari, but administered separately during the war

<sup>e</sup> Includes 6 officers and 42 soldiers

<sup>f</sup> Includes ages 1 through 20 years

<sup>g</sup> Includes 8 soldiers

<sup>h</sup> Refugees resident in Ajos

<sup>i</sup> Includes 27 inútiles de enfermedades (non-able-bodied)

<sup>j</sup> Community not identified by name in report

### Conclusion

How many Paraguayans died or were displaced by the War of the Triple Alliance? All our findings indicate that the number must have been tremendous. Previous references to an 18 percent loss, a 30 percent loss, or even a 50 percent loss must now be set aside. The true figure appears to have reached 60 to 69 percent.

Having determined these numbers, we are still faced with the task of comprehending their significance. Many questions come to mind. Marshal López seems to have spoken in all seriousness when he jeered at the pursuing Brazilians at Cerro Corá: "¡Muero con mi patria!" He indeed came close to taking his country with him.

What kind of Paraguay did Solano López leave behind? With four or five women for every man, Paraguayan society was hardly normal. But so far, we have grasped its character only broadly. Did a female-oriented social order develop to replace the old social framework for a time? How did Paraguayan men behave in this not-so-brave new world?<sup>27</sup>

And what can be said about long-term demographic effects? How did the population ratio of men to women right itself? Did the process occur through immigration, the intermingling of Paraguayan women and

27. Some of these issues are addressed in a tentative fashion in Potthast-Jutkeit, "¿Paraiso de Mahoma?" 330–38 and passim.

Brazilian occupation troops, or some wild multiplicity of sexual partners among the Paraguayans themselves—or perhaps through some combination of all three?

And what about the political effects? The Colorado governments of the 1880s have often been criticized for their land policies, which turned thousands of square leagues over to wealthy speculators (such as the Industrial Paraguaya) for a pittance and robbed the Paraguayan people of their birthright. Given what we now know of the demographic situation, we might ask what choices the government had in trying to raise revenues. There were too few surviving Paraguayans to work private holdings, let alone develop the huge reserves of land held by the state. The government had to manage the country in some fashion.

We believe that our findings make possible some new and tantalizing questions about Paraguayan history. Discovery of the 1870 census has resulted in a better understanding of a fundamental issue of demography, but its implications leave us clamoring for more, anxiously awaiting the findings of other scholars whose work will cast light on the still murky history of Paraguay in the 1870s.

## REFERENCES

- BERINGER, RICHARD E., HERMAN HATTAWAY, ARCHER JONES, AND WILLIAM N. STILL JR.  
1986 *Why the South Lost the Civil War*. Athens: University of Georgia Press.
- KEGLER DE GALEANO, ANNALIESE  
1976 "Alcance histórico-demográfico del censo de 1846." *Revista Paraguaya de Sociología* 13, no. 35:71–121.
- MAEDER, ERNESTO J. A.  
1975 "La población del Paraguay en 1799: El censo del Gobernador Lázaro de Ribera." *Estudios Paraguayos* 3, no. 1:63–86.
- NICKSON, R. ANDREW  
1995 "Paraguay's *Archivo del Terror*." *LARR* 30, no. 1 (Winter):125–29.
- POTTHAST-JUTKEIT, BARBARA  
1996 "¿Paraiso de Mahoma" o "País de las mujeres"? *El rol de la familia en la sociedad paraguaya del Siglo XIX*. Asunción: Instituto Cultural Paraguayo-Alemán.  
n.d. "Epidemia, demografía y muerte en el Paraguay, siglo XIX." In *Epidemia y muerte en Andalucía y América*, edited by José Hernández Palomo and Manuel Sobrino Toro. Forthcoming.
- REBER, VERA BLINN  
1988 "The Demographics of Paraguay: A Reinterpretation of the Great War, 1864–1870." *Hispanic American Historical Review* 68, no. 2 (May):289–319.
- WHIGHAM, THOMAS  
1995 "Paraguay's *Pueblos de Indios*: Echoes of a Missionary Past." In *The New Latin American Mission History*, edited by Erick Langer and Robert H. Jackson, 157–88. Lincoln: University of Nebraska Press.
- WHIGHAM, THOMAS, AND BARBARA POTTHAST  
1990 "Some Strong Reservations: A Critique of Vera Blinn Reber's 'The Demographics of Paraguay: A Reinterpretation of the Great War.'" *Hispanic American Historical Review* 70, no. 4 (Nov.):667–76.
- WILLIAMS, JOHN HOYT  
1976 "Observations on the Paraguayan Census of 1846." *Hispanic American Historical Review* 56, no. 3 (Aug.):424–37.