



## **ANAIS DE HISTÓRIA DE ALÉM-MAR**

### **Vol. XII (2011)**

ISSN 0874-9671 (impresso/print)

ISSN 2795-4455 (electrónico/online)

Homepage: <https://revistas.rcaap.pt/aham>

---

### ***Guns in Paradise. German and Dutch Artillerymen in the Portuguese Empire (1415-1640)***

Gregor M. Metzиг

---

#### **Como Citar | How to Cite**

Metzig, Gregor M. 2011. «Guns in Paradise. German and Dutch Artillerymen in the Portuguese Empire (1415-1640)». *Anais de História de Além-Mar* XII: 61-87. <https://doi.org/10.57759/aham2011.37221>.

#### **Editor | Publisher**

CHAM – Centro de Humanidades | CHAM – Centre for the Humanities  
Faculdade de Ciências Sociais e Humanas  
Universidade NOVA de Lisboa | Universidade dos Açores  
Av.ª de Berna, 26-C | 1069-061 Lisboa, Portugal  
<http://www.cham.fcsh.unl.pt>

#### **Copyright**

© O(s) Autor(es), 2011. Esta é uma publicação de acesso aberto, distribuída nos termos da Licença Internacional Creative Commons Atribuição 4.0 (<https://creativecommons.org/licenses/by/4.0/deed.pt>), que permite o uso, distribuição e reprodução sem restrições em qualquer meio, desde que o trabalho original seja devidamente citado.

© The Author(s), 2011. This is a work distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.



As afirmações proferidas e os direitos de utilização das imagens são da inteira responsabilidade do(s) autor(es).  
The statements made and the rights to use the images are the sole responsibility of the author(s).

# GUNS IN PARADISE. GERMAN AND DUTCH ARTILLERYMEN IN THE PORTUGUESE EMPIRE (1415-1640)

by

GREGOR M. METZIG \*

In 1534, the Franconian merchant Hieronymus Koeler embarked for Lisbon by way of Antwerp on assignment from a Nuremberg silver supplier. His task was to supervise the wares coming in from overseas. Koeler, a civilian, was not planning on a long stay in the Portuguese capital. Three months later, as he was hoping to continue on to Andalusia, he was approached by the high-ranking Dutch-born officer of an artillery brigade: “the king’s constable<sup>1</sup> there wanted to make an artilleryman of me, but I let it alone, for I was not there for this purpose.”<sup>2</sup> Koeler declined the offer from the Portuguese crown. However his example illustrates not only the recruitment methods of the burgeoning Empire, which were at times arbitrary, but also its central demographic problem. During the first half of the 16<sup>th</sup> century, tiny Portugal had built up a network of trading posts (*feitorias*), fortified settlements, and forts on every known continent. Of course, the maintenance of this global system of naval bases was exceedingly laborious, expensive, and necessitated above all a great deal of skilled personnel.

---

\* Freie Universität Berlin, PhD candidate at the Friedrich-Meinecke-Institut.

<sup>1</sup> The *condestável* (constable) was the commander of a royal artillery unit, who was responsible for the action of loading and firing the guns. The supreme commander of the artillery forces held the title of the *condestável-mor*. The office is not to be confused with the *condestável do reino*. The commanders of the *bombardeiros da nómina*, many of whom originated in the Holy Roman Empire, were appointed by the king. At the time of Koeler’s stay in Lisbon, a certain Guillaume Ostrodomo (Nostradama) held the office. Cf. the appointment of several *condestáveis* in Francisco M. Sousa VITERBO, *A Armaria em Portugal. Notícia documentada dos fabricantes de armas brancas que exerceram a sua profissão em Portugal*, Lisboa, Academia Real das Sciencias, 1907, pp. 100-109, n.º 129; Paulus E. PIERIS, Hedwig FITZLER, *Ceylon and Portugal. Kings and Christians (1539-1552)*, Leipzig, Asia Major, 1927, p. 301 with Fn. 1.

<sup>2</sup> Hannah S. AMBURGER, “Die Familiengeschichte der Koeler. Ein Beitrag zur Autobiographie des 16. Jahrhunderts”, in *Mitteilungen des Vereins für Geschichte der Stadt Nürnberg*, 30, 1931, pp. 153-288 (here: p. 231).

In the year 1500, only an estimated 1 to 1.4 million people inhabited the area of the “*pequena casa Lusitana*” (Camões, *Os Lusíadas*, VII, 14).<sup>3</sup> Beginning in the middle of the 15<sup>th</sup> century, the crown’s response to this extreme lack of trained men was to attempt to enlist soldiers and sailors en masse from elsewhere in Europe. The historian Fernando G. Pedrosa observes: “At the time, Germans were the most important artillery manufacturers as well as the most adept cannoneers; their presence in our country from the end of the 15<sup>th</sup> century onward had a great impact on the high level of efficiency of Portuguese naval artillery.”<sup>4</sup>

During the history of European expansion, firearms took on a central role. The period around the year 1500 is generally considered the “Golden Age of Portuguese Artillery,” which at that time was among the best in the world.<sup>5</sup> However, the question of whether the global expansion of the western system was based on military-technological superiority in the period preceding the industrial revolution has not been satisfactorily answered. Even if today the conventional “ships and guns thesis”<sup>6</sup> of Carlo Cipolla or Roger C. Smith is seen as too simple and undifferentiated, it cannot be denied that armament, militancy, and the advanced seamanship of the Western world were basic to the success of overseas expansion: “[T]he real foundation of Portuguese military and naval power rested upon the use of artillery in conjunction with seapower.”<sup>7</sup>

---

<sup>3</sup> José SERRÃO, “Demografia portuguesa na época dos descobrimentos e da expansão”, in Luís de Albuquerque e Francisco C. Domingues (eds.), *Dicionário de História dos Descobrimientos Portugueses*, Vol. 1, Lisboa, Caminho, 1994, pp. 342-352; João Marinho dos SANTOS, *A Guerra e as Guerras na Expansão Portuguesa. Séculos XV e XVI*, Lisboa, GTMECDP, 1998, pp. 96-109.

<sup>4</sup> Fernando G. PEDROSA, *Os Homens dos Descobrimientos e da Expansão Marítima*, Cascais, Câmara Municipal, 2000, p. 116.

<sup>5</sup> On the history of Portuguese artillery in the first phase of European expansion, see: Nuno J. V. RUBIM, “Artilharia Naval”, in L. Albuquerque, e F. C. Domingues (eds.), op. cit., Vol. 1, pp. 89-93; Miguel Sanches de BAËNA, “A artilharia moderna”, in Rafael Moreira (ed.), *História das Fortificações Portuguesas no Mundo*, Lisboa, Alfa, 1989, pp. 73-90; João G. MONTEIRO, *A Guerra em Portugal nos Finais da Idade Média*, Lisboa, Notícias, 1998, pp. 354-358; Francisco C. DOMINGUES, “Bombardeiro”, in L. Albuquerque, e F. C. Domingues (eds.), op. cit., Vol. 1, p. 138; José J. Teixeira BOTELHO, *Novos Subsídios para a História da Artilharia Portuguesa*, 2 vols., Lisboa, Comissão da História Militar, 1944.

<sup>6</sup> Lawrence A. CLAYTON, “The Iberian Advantage”, in George Raudzens (ed.), *Technology, Disease and Colonial Conquests, Sixteenth to Eighteenth Centuries. Essays Reappraising the Guns and Germs Theories*, Leiden (Inter alia), Brill, 2001, pp. 211-235 (here: pp. 213-214); Roger C. SMITH, *Vanguard of the Empire: Ships of Exploration in the Age of Columbus*, New York, Oxford University Press, 1993; Geoffrey PARKER, *The Military Revolution: Military Innovation and the Rise of the West 1500-1800*, Cambridge, Cambridge University Press, 1988; Carlo M. CIPOLLA, *Guns, Sails and Empires. Technological Innovation and the Early Phases of the European Expansion 1400-1700*, New York, Pantheon Books, 1965.

<sup>7</sup> Malyn NEWITT, “The Portuguese Nobility and the Rise and the decline of Portuguese military power 1400-1600”, in David J. Trim (ed.), *The Chivalric ethos and the development of military professionalism*, Leiden (Inter alia), Brill, 2003, pp. 89-115 (here: p. 97).

During its expansion phase, Portugal needed more than 5200 tons of copper a year for shipbuilding as well as for weapons and ammunition. The revenues from overseas trade, which were substantial, allowed Portugal to meet this need with copper from northern and middle Europe.<sup>8</sup> Still, armaments were not the only import from this region; the Portuguese also had north alpine artillerymen come to the Iberian Peninsula. It was by way of Antwerp, the most important north Alpine hub, that numerous military engineers and mercenaries arrived at the Iberian Peninsula and, eventually, the Portuguese *conquistas* in Africa, Asia, and South America. It was they, and not the representatives of the Upper German trading houses to arrive soon thereafter, who were the first Germans overseas.<sup>9</sup> Besides money and the opportunity to build careers, they were also likely enticed by exoticism and the promise of adventure. Writers from antiquity such as Herodotus and Pliny the Elder had already told of the *mirabilia* of India, the fabled land of marvels and riches. Well into the modern era, Christian tales such as those of the apostle Thomas and of the legendary kingdom of Prester John continued to shape occidental fantasies of an earthly paradise far in the East.<sup>10</sup>

Despite the remarkably high proportion of middle Europeans manning the ships of Iberian expansion in the 15<sup>th</sup> and 16<sup>th</sup> centuries, their fates remain to this day almost entirely unknown and barely researched. Ana Maria Pereira Ferreira counts them among the anonymous foreigners in the

---

<sup>8</sup> The most important raw material for the production of firearms was copper. In the 16<sup>th</sup> century, the most significant centers of copper production were found in Central Europe, particularly the Fugger mines in Tyrol, in the Harz and in Upper and Lower Hungary (Slovakia). Portugal's great dependence on imports from these territories became later a crucial factor in its loss of maritime hegemony since the mother country could no longer provide its over-extended, globe-spanning system of stationed fleets and fortifications with sufficient supplies. Cf. Ekkehard WESTERMANN, *Silberrausch und Kanonendonner. Deutsches Silber und Kupfer an der Wiege der europäischen Weltherrschaft*, Lübeck, Schmidt-Römhild, 2001; Kuzhipalli S. MATHEW, *Indo-Portuguese trade and the Fuggers of Germany. Sixteenth Century*, New Delhi, Manohar, 1997, pp. 161-170. António dos Santos PEREIRA, "A metalurgia portuguesa em finais de Quatrocentos e primórdios de Quinhentos: alguns subsídios", in Comissão Nacional para as Comemorações dos Descobrimentos Portugueses (ed.), *Congresso Internacional Bartolomeu Dias e a sua época*. Actas, 5 vols., Porto, 1989 (here: Vol. 3, "Economia e comércio marítimo", pp. 231-239).

<sup>9</sup> The term "German" (ptg.: *alemão*) is by no means to be understood as a national category in this context, but instead is an umbrella term encompassing the territories that traditionally belonged to the German nation under the Holy Roman Empire, including the Netherlands, Bohemia, and the regions of the Swiss confederation. In the Portuguese source material, in some cases individuals even from the Baltic countries, Poland, and Hungary are indiscriminately referred to as "German."

<sup>10</sup> Europeans rarely distinguished West India (America) and East India (the Indian sub-continent) from one another systematically until modern times. Cf. Hans-Joachim BIEBER, "Deutsche Indienbilder. Phantasie-, Wunsch- und Gegenbilder vom Mittelalter bis zur Gegenwart", in Markus Bernhardt, Gerhard Henke-Bockschatz (eds.), *Bilder – Wahrnehmungen – Konstruktionen. Reflexionen über Geschichte und historisches Lernen. Festschrift für Ulrich Meier zum 65. Geburtstag*, Schwalbach, Wochenschau-Verlag, 2006, pp. 62-86. Gita DHARAMPAL-FRICK, *Indien im Spiegel deutscher Quellen der Frühen Neuzeit 1500-1750. Studien zu einer interkulturellen Konstellation*, Tübingen, Niemeyer, 1994, pp. 120-135.

voyages of exploration.<sup>11</sup> At the same time, the British historian Charles R. Boxer, specialist in maritime history, already observed a disproportionately high ratio of Germans, Flemings, and Italians working with ranged and fire weapons.<sup>12</sup> In the appendix to their 1927 “Ceylon and Portugal. Kings and Christians (1539-1552),” Paulus E. Pieris and Hedwig Fitzler compiled a number of useful sources on the subject.<sup>13</sup> Later, historians such as Paulo Drumond Braga, John Everaert and Pius Malekandathil referred to the significance of artillerists hailing from the Holy Roman Empire.<sup>14</sup> However there is still no solid military-historical study of the matter.

The following essay investigates the role of a national minority within the Portuguese sphere of influence. In addition to an analysis of their military contribution, questions are raised about integration, career trajectories, and the everyday lives of the players in Europe and in the overseas territories. However even if the proportion of Germans and Dutch among firearm specialists was particularly high during the period of Portuguese expansion, these were not the only nations with mercenaries in the service of Lisbon. Although the Germans and Dutch are the primary object of this study, “foreign legionnaires” of other origins should always be kept in mind.

---

<sup>11</sup> Ana M. Pereira FERREIRA, “Estrangeiros na Índia no tempo de Afonso de Albuquerque: Os Anónimos”, *Anais de História de Além-Mar* [hereinafter *AHAM*], 1, 2000, pp. 53-58 (here: p. 53).

<sup>12</sup> Charles R. BOXER, “Asian Potentates and European Artillery in the 16<sup>th</sup>-18<sup>th</sup> Centuries: A Footnote to Gibson-Hill”, *Journal of the Malaysian branch of the Royal Asiatic Society*, 38, 1965, pp. 156-172 (here: p. 157).

<sup>13</sup> P. E. PIERIS e H. FITZLER, op. cit.. João A. GRACIAS, *Alemães na Índia nos Séculos XV a XVIII*, Nova Goa, Rangel, 1941.

<sup>14</sup> Horst G. NUSSE (ed.), *Frühe deutsche Entdecker. Asien in Berichten unbekannter deutscher Augenzeugen (1502-1506)*, München, Nusser, 1980, p. 34; Pius MALEKANDATHIL, *The Germans, the Portuguese and India*, Münster, LIT-Verlag, 1999, pp. 23-26 and 31-42; Paulo Drumond BRAGA, *Portugueses no Estrangeiro, Estrangeiros em Portugal*, Lisboa, Hugin, 2005, pp. 237-246; Franz HALBARTSCHLAGER, “Bombardeiros e Comerciantes. Dois Exemplos pela Colaboração dos Alemães na Expansão Portuguesa no Ultramar durante a Época de D. João III”, in Artur Teodoro de Matos (ed.), *D. João III e o Império. Actas do Congresso Internacional comemorativo do seu nascimento*, Lisboa, CHAM, 2004, pp. 661-682; John EVERAERT, “Soldiers, Diamonds and Jesuits: Flemings and Dutchmen in Portuguese India (1505-90)”, in Anthony Disney e Emily Booth (eds.), *Vasco da Gama and the linking of Europe and Asia*, New Delhi, Oxford University Press, 2000, pp. 84-104; Recently, the art historian Carla A. Pinto has also commented on the Bartholomew’s Church in Cochin and its connection to the German artillerists. I am much obliged to her for providing me with her unpublished paper: Carla A. PINTO, “S. Bartolomeu, Afonso de Albuquerque e os bombardeiros alemães. Um episódio artístico em Cochim”, lecture manuscript from the international colloquium “Portugal, Hamburg und die deutschsprachige Welt während der europäischen Expansion nach Übersee” (June 18-20, 2009, Hamburg University), pp. 263-280.

# 1. The *bombardeiros da nómina*:

## A German artillery brigade in Portugal's Atlantic fleets

During the course of the 15<sup>th</sup> century, the expanding Iberian Reconquista kingdoms brought the crusade mentality to Africa and even overseas to Asia and America. The war with the so-called enemies of the Christian faith, alternately referred to as nonbelievers or Moors, was conducted ruthlessly by both sides. In 1415, Portugal laid the foundation for its expansion with the capture of the Moroccan coastal city of Ceuta, an event followed by systematic reconnaissance missions along the coast of West Africa. As early as the siege of Ceuta, Portugal employed more than 40 documented soldiers from the Holy Roman Empire, including the Tyrolean poet Oswald von Wolkenstein (1367-1445).<sup>15</sup> The names of *espingadeiros* (handgunners) and *bombardeiros* (artillerists) from Germany and Flanders, hardly distinguished from one another in the Portuguese source material, are found in royal chancellery registers from the 15<sup>th</sup> century.<sup>16</sup> Upon the conclusion of their service, they received so-called *tenças*, or pensions, from the crown. For instance, the cannoneer mestre Henrique received a yearly stipend of 7200 *reais brancos*.<sup>17</sup> In the year 1489, King João II founded an elite brigade of Germans and Dutchmen known as the *bombardeiros da nómina*. The unit, consisting of 35 artillerists, was assigned naval missions and was led by a certain Mestre Hans. The *bombardeiros* were hand-picked by their commander and appointed (*da nómina*) by the crown. In the charter, the king decreed that they

must be especially suited to serve under us and particularly skilled in shooting culverins [serpentinhas] and other smaller projectiles. Beyond that, they must behave properly, live lawfully, and have a command of nautical knowledge.<sup>18</sup>

<sup>15</sup> Erwin KOLLER, "War der deutsche Ritter etwa Oswald?!" *Zur Teilnahme des Wolkensteiners am portugiesischen Überfall auf Ceuta*, in Wernfried Hofmeister e Bernd Steinbauer (eds.), *Durch aubenteuer muess man wagen vil. Festschrift Anton Schwob zum 60. Geburtstag*, Innsbrucker Beiträge zur Kulturwissenschaft 57, Innsbruck, Institut für Germanistik, 1997, pp. 251-256. António H. Oliveira MARQUES, *Hansa e Portugal na Idade Média*, Lisboa, Presença, 1993, pp. 104-105.

<sup>16</sup> John VOGT, "Saint Barbara's Legion. Portuguese Artillery in the Struggle for Morocco, 1415-1578", *Military Affairs*, 41, 1977, pp. 176-182; Jürgen POHLE, *Deutschland und die überseeische Expansion Portugals im 15. und 16. Jahrhundert*, Münster, LIT-Verlag, 2000, pp. 34-35.

<sup>17</sup> P. D. BRAGA, op. cit., p. 239.

<sup>18</sup> "Charter of the *bombardeiros da nómina*, Evora, 12. November 1489", in João Martins da Silva Marques (ed.), *Descobrimentos Portugueses. Documentos para a sua História*, Vol. 3, Lisboa, Editora do Instituto para a Alta Cultura, 1971, pp. 357-358, n.º 239. Additionally: Nuno Valdez dos SANTOS, *O Armamento Naval Português (1100-1500)*, Lisboa, Marinha, 1999, pp. 63-67; Francisco C. DOMINGUES, "Bombardeiro", in L. Albuquerque and F. C. Domingues (eds.), op. cit., Vol. 1, p. 138. Nuno J. V. RUBIM, "D. João II e o Artilhamento das Caravelas de Guarda-Costas. O tiro de ricochete naval", *Separata da Revista da Artilharia*, Lisboa, Serviços Gráficos da Liga dos Combatentes, 1990, pp. 37-40; P. E. PIERIS e H. FITZLER, op. cit., pp. 295-297.

Under Manuel I, from 1498 to 1520, the names of 36 German and Dutch cannons can be found in the chancellery registers of the crown.<sup>19</sup> The majority of them came from southern German imperial cities and the contiguous territories in Swabia, Bavaria, and Bohemia. However some were from the Hanseatic cities or the Low Countries. More difficult than the question of their provenance is the question of their social status in their respective home countries and their motives for emigrating. A large portion likely came from families of urban manual laborers. Wolfgang von Laupen, son of a Bernese patrician and deep in debt, fled in 1501 after the bankruptcy of his father's business and entered into the service of the Portuguese crown, where he was to remain for the rest of his life, as a bombardier. His fate after his flight to Portugal, heretofore unknown, can now be at least partially reconstructed thanks to the discovery of letters in the Lisbon National Archive and the State Archive of Bern. According to these documents, in 1519, after his death in India, his onetime Swiss business partners appealed to King Manuel that von Laupen's estate be turned over to them as debt restitution.<sup>20</sup> As a further example, in the year 1525, the Dutch farmer Jacob Willemszone of the Scheldt region found himself suddenly in poverty and left his wife behind in order to embark from Portugal to India.<sup>21</sup>

Like craftsmen, the *bombardeiros* were organized in a guild and were initially subject to military jurisdiction.<sup>22</sup> Among their privileges was

<sup>19</sup> P. D. BRAGA, op. cit., p. 241. There is even a record from the year 1520 that has been preserved of a commission for three Germans, the beginning of which is cited here, Lisbon, November 23, 1520, in ARQUIVO NACIONAL DA TORRE DO TOMBO [ANTT], *Corpo Cronológico* [CC], Parte II, Maço 92, n.º 125: "Item nos Joham de frysa de osburgo [Johann de Vries? of Augsburg] E miguel de lubizque [Michel of Leipzig] E clars de Refeque [Klaas of Rostock?] alemães bombardeyros dezemos que somos contentes de seruir el-Rey de portugall no dito ofiço de bombardeyros em seus Reynos E senhorios (...) ou em outra parte E em qualquer armada que nos quizerem enuiar como Jmdia afryca de tudo nos apraz E somos contentes (de) seruir E fazer como bõos homens E ajudar a manear E fazer pedras E todas as outras cousas que pertencem as ditas artilharyas E nos for mandado de nosos comdestabres pagamdo nos cada mes mill rreaes de soldo a cada hum E seremos asentados no lyvro da nomyna como os outros por que posamos gozar de todas as outras liberdades E soldos como se no dito lyuro E ordenança mais largamente contem (...)."

<sup>20</sup> Letter from the Bernese magistrate to King Manuel I, Bern, March 13, 1519, in ANTT, CC, Parte II, Maço 80, n.º 120; Letter of the Portuguese chargé d'affaires in Rome to the Bernese magistrate, Rome, August 1, 1520, STATE ARCHIVE OF BERN [StAB], *Kanzleiarchiv*, Holding "Unnütze Papiere" 52, n.º 73. The family von Laupen and the case brought against them is dealt with at length in Emil BLÖSCH, "Georg von Laupen", *Archiv des Historischen Vereins des Kantons Bern*, 9, 1880, pp. 270-351.

<sup>21</sup> J. EVERAERT, "Soldiers", cit., pp. 87-88.

<sup>22</sup> Privileges bestowed upon the German bombardiers by Manuel I, Abrantes, July 15, 1507, BIBLIOTECA DA AJUDA [BA], BA 51-VI-28, fls. 123-124; Naturally the king also promoted the transmission of specialized knowledge and the training of Portuguese artillery units, cf. for example: D. Manuel and D. Sebastião's privileges bestowed upon the Portuguese *bombardeiros da nómina*, Almeirim, January 29, 1515 and Lisbon, December 15, 1564, in João M. CORDEIRO, *Apontamentos para a História da Artilharia portuguesa*, Lisboa, Comando Geral da Artilharia, 1895, pp. 381-384, n.º 1-2.

an exemption from all duties, for example, on the purchase of wine and weapons. They could not be publically punished or flogged, nor could they be conscripted for construction work on fortresses, wells, streets, or bridges. During their missions, they were provided with free board, which they took separately from the rest of the crew.<sup>23</sup> Their monthly wage of 1200 *reais* was later raised to 1400 *reais*. For the purpose of comparison: a Portuguese *soldado* in this time earned a mere 800 *reais*.<sup>24</sup> The privileges of the *bombardeiros da nómina* were later confirmed and revised. However the number of foreigners among them consistently declined. According to the German-Portuguese academic literature, the brigade of the *bombardeiros da nómina* was dissolved at the beginning of the 17<sup>th</sup> century.<sup>25</sup> However, the registers from the period of Portuguese union with Spain (1580-1640) edited by Leonor Freire Costa make explicit reference to the German cannoneers. Here, the king decreed that, of his two hundred *bombardeiros da nómina*, half should be Germans.<sup>26</sup> After Portugal re-established independence in the year 1640, the *bombardeiros da nómina* were integrated into Portugal's reorganized armed forces as an ordinary regiment.

On board, the artillerists likely received their orders in a Low German idiom exclusively from their *condestável*. These officers, appointed by the king, reported directly to the captain and most were promoted to the rank of *cavaleiros*. With time, many were able to ascend to high positions in the military, in Portugal and overseas.<sup>27</sup> The Fleming Guillaume of Bruges (†1543) was, as of 1514, still a simple *bombardeiro* in southern Indian Cochin, where he was paid in grain due to a shortage of coins.<sup>28</sup> In 1529, he appeared in Goa as a *condestável*, where, after twenty years of service, he was appointed *condestável-mor* for life for all forts and fortifications on the island. He died

<sup>23</sup> P. MALEKANDATHIL, *The Germans*, cit., p. 41; P. E. PIERIS and H. FITZLER, op. cit., pp. 297-298 and 301.

<sup>24</sup> P. E. PIERIS and H. FITZLER, op. cit., p. 311; P. D. BRAGA, op. cit., p. 241.

<sup>25</sup> C. A. PINTO, op. cit., p. 12; P. D. BRAGA, op. cit., p. 240; Paul W. GENNRICH, *Evangelium und Deutschtum in Portugal. Geschichte der Deutschen Evangelischen Gemeinde in Lissabon*, Berlin (inter alia), de Gruyter, 1936, p. 14.

<sup>26</sup> Leonor Freire COSTA, "Os Regimentos sobre a Matrícula dos oficiais da navegação, da Ribeira e bombardeiros de 1591 e 1626", *Revista de História Económica e Social*, 25, 1989, pp. 89-126 (here: pp. 104-105 and 118-119).

<sup>27</sup> The *condestáveis* were sworn into the king's chancellery and received an annual pension of up to 20,000 *reais* from the Portuguese overseas administration. F. M. S. VITERBO, *A Armaria*, cit., pp. 100-109; A. M. P. FERREIRA, op. cit., p. 58.

<sup>28</sup> Albuquerque's payment orders, Cochin, July 12 and July 17, 1512, in Raymundo A. B. PATO (ed.), *Cartas de Afonso de Albuquerque*, 7 vols., Lisboa, Academia Real das Sciencias, 1884-1935, Vol. 6, p. 98, n.º 190, and p. 102, n.º 196; he worked as a *condestável* in Cochin as early as 1527, cf. ANTT, CC, Parte II, Maço 144, n.º 24; His appointment to the office of *condestável-mor* on January 18, 1533 and the most thorough biographical information can be found in F. M. S. VITERBO, *O Fabrico da Pólvora em Portugal. Notas e Documentos para a Sua História*, Lisboa, Typographia Universal, 1896, pp. 22-28.

in 1543 and was buried at his request in a family chapel he had furnished himself in the Franciscan Church on Goa.<sup>29</sup>

In spite of their high level of mobility, Lisbon remained the homeport of the *bombardeiros da nómina*. They maintained their own chapel in the Portuguese metropolis, the St. Bartholomew Chapel, that was later incorporated into the São Julião Church.<sup>30</sup> Although originally founded in the 13<sup>th</sup> century by German and Flemish traders, by the year 1500 the mercenaries had come to constitute such a large majority of the membership that the community is referred to as the *confraria des Alemans bombardeiros* in late medieval documents. The cannoneers formed their own congregation (*confraria*) and chose Saint Barbara and Saint Bartholomew as their patron saints, which they also represented on the altar.<sup>31</sup> The saints' days, December 4 and August 24, were strictly observed in the Portuguese coastal forts and on ships in Europe as well as overseas. On these days, there were gifts of money and food from the king.<sup>32</sup>

The elite troupe of the *bombardeiros da nómina* were also referred to by contemporaneous chroniclers. The Portuguese historiographer Damião de Góis told of a *condestável* by the name of Hans Freis and his German comrade, who, while employed as cannoneers on board a Portuguese warship in 1521, found themselves in a skirmish in the Straits of Gibraltar. They had

<sup>29</sup> ANTT, CC, Parte I, Maço 43, n.º 77; His gravestone, along with his family crest and the following inscription, were still there at the beginning of the 20<sup>th</sup> century, cf. Joaquim H. Cunha RIVARA, "Inscrições lapidares da Índia portuguesa", *Boletim da Sociedade de Geographia de Lisboa*, 8, 1894, pp. 589-743 (here: p. 601): "Esta sepultura/he de Guilherme De/Bruges Condestabre/Que foi desta Fortaleza/de Guoa. Falaceo a sete dias de Novembro. E de seus erdeiros, que falaceo na era de/1543 anos."

<sup>30</sup> According to tradition, in the 13<sup>th</sup> century the Hanseatic wood merchant Michael Overstädt (*Miguel Sobrevila*) had a chapel constructed in the present day Praça do Município dedicated to the apostle Bartholomew. It was later incorporated into a larger church dedicated to Saint Julian. Germans and Dutchmen joined together to create a congregation in order to collect funds for a place of worship and the salary of priest to perform mass in German (likely in Low German). After a legal dispute with the Portuguese clergy, a seventh of the Saint Julian Church was awarded to the community of the Lisbon Archbishop. With the great influx of central Europeans during the course of the 15<sup>th</sup> century, the character of this community changed from that of an association of merchants to a congregation of German mercenaries, so that the tradesmen eventually moved to another chapel. It was not until the beginning of the 17<sup>th</sup> century that the two groups united once more to form the Bartholomew congregation of Germans in Lisbon, which has survived up to this day. Cf. J. POHLE, op. cit., pp. 147-150; Klaus A. MÖRSDORF, *A Irmandade de São Bartolomeu dos Alemães em Lisboa*, Lisboa (inter alia), s.n., 1957.

<sup>31</sup> According to lore, Barbara's pagan father was struck by lightning after his daughter's murder. Cf. Rolfroderich NEMITZ e Dieter THIERSE, *St. Barbara. Weg einer Heiligen durch die Zeit*, Essen, Glückauf, 1995; K. A. MÖRSDORF, op. cit., pp. 19-20. Francesco SPADAFORA and Maria L. CASANOVA, "Bartolomeo, Apostolo", in Filippo Caraffa and Guiseppe Morelli (eds.), *Enciclopedia dei Santi. Bibliotheca Sanctorum*, Vol. 2, Roma, Città nuova, 1962, pp. 852-877.

<sup>32</sup> P. E. PIERIS and H. FITZLER, op. cit., p. 300; Cf. the captain general's instructions to the Portuguese factor in Hormuz regarding the financial assistance of the bombardier Corneles in his preparations for the Bartholomew festival on August 24, Hormuz, May 11, 1515, in R. A. B. PATO (ed.), op. cit., Vol. 6, p. 287, n.º 536.

come in aid of a Portuguese merchant's caravel against four English attackers. In an artillery combat lasting more than two hours, the *bombardeiros*, skilled with a falconet, were able to force the English aggressors to flee. Hans Freis, who directed the barrage, was already an experienced veteran. His presence on one of the fleets en route to India can be documented as early as 1505. Six years later he was stationed there in the Portuguese naval base on Goa.<sup>33</sup>

In his 1586 *Indianischer Boernstein Bericht*, retelling the account of a public official who had returned from Portugal, the doctor Severin Göbel from the Prussian town of Königsberg described a desert island, presumably the island of Arguin off of the Guinean coast, not far from Cape Blanco. To protect the important trading post, the Portuguese had sent a fortress garrison of "many and the great part of German soldiers there, who were particularly good artillerymen."<sup>34</sup>

Some of the bombardiers from the Holy Roman Empire didn't only make a name for themselves in the military. A certain *Mestre João* was a successful watchmaker; Hermann von Kempis (Hermão de Campos) opened a print workshop at the beginning of the 16<sup>th</sup> century and was later appointed court typographer. In his colophon he proudly calls himself "imprimidor y bombardeyro do Rey." In 1517 he published the *Cancioneiro Geral*, a song collection fundamental for Portuguese literature of the Middle Ages.<sup>35</sup> It was likely not arbitrary that Albuquerque, the first Portuguese governor of

<sup>33</sup> Damião de GÓIS, *Crónica do felicíssimo rei D. Manuel*, ed. Joaquim M. Teixeira de Carvalho, 4 vols., Coimbra, Imprensa da Universidade, 1926, Vol. 4, Cap. 78, pp. 187-188; cf. Saturnino MONTEIRO, *Batalhas e Combates da Marinha Portuguesa*, 8 vols., Lisboa, Livraria Sá da Costa, 1989-1996, Vol. 1, pp. 312-313; Maria Themudo BARATA, "A primeira viagem de Lopo Soares à Índia (1504-1505). Um termo e um começo", in Comissão Nacional para as Comemorações dos Descobrimentos Portugueses (ed.), *Congresso Internacional Bartolomeu Dias e a sua época. Actas*, 5 vols., Porto, 1989, Vol. 3, pp. 251-279 (here: p. 277); Albuquerque's payment order to the factor in Goa, Goa, December 6, 1511, in R. A. B. PATO (ed.), op. cit., Vol. 5, p. 171 n.º 374.

<sup>34</sup> Severin GÖBEL, *Vom Indianischen Börnstein Bericht. Item von der Ambra*, Königsberg, Georg Osterberger, 1586, b1 r: "Nemlich das man fast vber 500. Meil weges von Lißbona abgelegten sendet/in eine Insel/welche unter Zona torrida leit/da es am aller heissesten ist/(da auch die Spanier vor grosser hitze nicht wol dauren koennen) solches Gummi findet/solche Insel soll fast goltreich sein/und wird Anime genennet/Und werden zu beschutzung solcher Insel fast und den mehren theil Deutsche Soldaten/sonderlich was gute Büchschützen seind/dahin geschicket/Man sagt das die Deutschen daselbst solche hitze besser dann die Spanier vortragen können (...)." The name *Anime* is possibly, as Göbel himself admits after several pages, an error. What is likely meant is the island of Arguin (colony of Brandenburg from 1685-1721), famous for its production of rubber from acacia resin, located 5 kilometers from the Mauretanian coast near Cape Blanco. The Portuguese maintained a fortified trade station on the island, along with a fort, as early as 1455.

<sup>35</sup> Hermann likely came from Kempen in Rhineland and was active as a printer in Lisbon, Setúbal, and Almeirim between 1509 and 1518. Cf. Frederick J. NORTON, *A descriptive catalogue of printing in Spain and Portugal 1501-1520*, Cambridge, Cambridge University Press, 1978, pp. 499-500; João J. Alves DIAS, "Os primeiros impressores alemães em Portugal", in João J. Alves Dias, (ed.), *No Quinto Centenário da Vita Christi*, Lisboa, Instituto da Biblioteca Nacional e do Livro, 1995, pp. 15-27.

India, chose a French artilleryman as his cook – for his confessor, however, he chose a German.<sup>36</sup>

Unlike Castile, the Portuguese did not primarily structure their 16<sup>th</sup> century expansion efforts around the American continent, although according to the Treaty of Tordesillas (1494) its southeastern part was legally theirs. Thus, in April 1500, Pedro Álvares Cabral (1468-1520?) took possession of Brazil for the Portuguese crown as a way-station en route to East India. A number of German *bombardeiros* already numbered among the members of his crew.<sup>37</sup> Even the Hessian artilleryman Hans Staden (1525-1576), who later became extraordinarily well-known thanks to his experiences in South America, originally came to Portugal by way of Holland “in order to take a look at Indiam”.<sup>38</sup> Initially Staden, along with his compatriots Hans von Bruchhausen and Heinrich Brant of Bremen, signed up for a privateer that would sail past Morocco in the years 1547 and 48. From there he made his way for the first time to the Portuguese outposts on the other side of the Atlantic. On his second voyage to Brazil (1550-1555), Staden was made commander of a small fortification on the strategically important island of Santo Amaro near São Vicente: “When the inhabitants heard that I was German and knew cannons well, they asked me to stay in the house [a fortified pillbox] to guard against the enemy (...).”<sup>39</sup>

Staden defended the Portuguese fortification against the attacking Indian tribes but was taken prisoner during a walk by the hostile Tubinambá. Initially, he, like his co-prisoners, was supposed to be killed and consumed as part of an anthropophagic ritual. However he succeeded in postponing his execution to an ever later date. After nine months of captivity, a French captain traded some quotidian objects for his release and he returned to Europe in 1555. He later described his observations and adventures in a popular travelogue, which is incidentally also recognized as the oldest printed book about Brazil.

---

<sup>36</sup> Albuquerque's payment order, April 8, 1514, in R. A. B. Pato (ed.), op. cit., Vol. 6, p. 57, n.º 121: “yoham de Framça, bombardeiro, meu cozinheiro”; on the topic of Mestre João, Albuquerque's confessor, cf. Fn. 68.

<sup>37</sup> Nina TUBINO, “A Germanidade no Alvorecer do Brasil. A colônia”, in Nina Turbino (ed.), *A germanidade no Brasil. Das Deutschtum in Brasilien*, Porto Alegre, Sociedade Germânia, 2007, pp. 23-37 (here: p. 24); with this, the list of the first Germans in South America produced by Rolf Walter also needs to be corrected: Rolf WALTER, “Nürnberg, Augsburg und Lateinamerika im 16. Jahrhundert – Die Begegnung zweier Welten”, in Stephan Füssel (ed.), *Reiseberichte der Frühen Neuzeit. Wirtschafts- und Kulturhistorische Quellen*, München, W. Fink, 1987, pp. 45-82 (here: p. 73).

<sup>38</sup> Hans STADEN, *Wahrhaftig' Historia vnd beschreibung eyner Landtschafft der Wilden, Nacketen, Grimmigen Menschenfresser Leuthen, in der Newenwelt America gelegen (...)*, ed. Franz Obermeier, Kiel, Westensee, 2007, Vol. 1, Cap. 1, p. 234; Also: Günther KAHLE, “Deutsche Landsknechte, Legionäre und Militärinstruktoren in Lateinamerika”, *Zeitschrift für Geschichte von Staat, Wirtschaft und Gesellschaft Lateinamerikas*, 30, 1993, pp. 355-369.

<sup>39</sup> H. STADEN, op. cit., Vol. 1, Cap. 16, pp. 244-245.

Securing the sea route to India along the African coast was the Portuguese crown's highest priority in the first half of the 16<sup>th</sup> century. According to Hieronymus Münzer, a German humanistic traveler, the king relocated a German artillery regiment to the Moroccan Alcácer (Al-Kasr al Sagîhr). Of these artillerymen, he explicitly singled out the cannoneer Jacobus Swevus of Waiblingen.<sup>40</sup> The presence of some of the men deployed there is also documented in the Portuguese account books.<sup>41</sup> Germans and Dutchmen participated in the defense of the city Ceuta in 1457-1458 under the command of the Swabian knight Georg von Ehingen. His report contains a suggestive remark concerning the linguistic communication among the mercenaries: As commander of a leg of the fortification, he was "assigned to very skillful people, of whom there were many, who could speak and understand Lower German."<sup>42</sup> By John Vogt's estimation, about half of the European artillerists serving in the Maghreb were of German or Flemish origin.<sup>43</sup>

## 2. The War in the Indian Ocean: German Mercenaries in the *Estado da Índia*

The Portuguese ship batteries assumed a key role in the confrontations with Asian armed forces. It is true that the use of firearms was already known in the Indian Ocean. Until that point, however, only light artillery had been used in naval combat, primarily before boarding enemy ships and to cannonade the enemy crew. In the beginning of the 16<sup>th</sup> century, the Portuguese helped to establish the primacy of the long-distance action with heavy artillery fired from massive, sea-faring vessels.<sup>44</sup> King Manuel commanded his admiral Pedro Álvares Cabral to conduct combat with a Muslim sea craft using the following strategy: "(...) you are not to come to close quarters with them if you can avoid it, but you are to compel them with your artillery alone to strike sail' so that 'this war may be waged with greater safety, and (...) less loss may result to the people of your ships.'"<sup>45</sup>

<sup>40</sup> Dr. Jerónimo MÜNZER, *Itinerário*, ed. Basílio de Vasconcelos, Coimbra, Imprensa da Universidade, 1931, p. 33: "habet item Rex bombardarios Almanos expeditissimos in Alkasser, inter quos quidam Iacpos Sweuus de waiblingen opido comitis de wirtemberg, qui multa strenue gessit."

<sup>41</sup> Pedro de AZEVEDO (ed.), *Documentos das Chancelarias Reais anteriores a 1531 relativos a Marrocos*, 2 vols., Coimbra, Imprensa da Universidade, 1915-1934, Vol. 2, p. 357.

<sup>42</sup> Georg von EHINGEN, *Reisen nach der Ritterschaft. Edition, Untersuchung, Kommentar*, ed. Gabriele Ehrmann, 2 vols., Göppingen, Kümmerle, 1979, Vol. 1, p. 52.

<sup>43</sup> J. VOGT, op. cit., p. 180. P. D. BRAGA, op. cit., p. 240.

<sup>44</sup> Vítor L. RODRIGUES, "O Reforço do poder naval português no Oriente com Afonso de Albuquerque (1510-1515): suas implicações", in *AHAM*, 3, 2002, pp. 155-163; Jeremy BLACK, *War and the World. Military Power and the Fate of Continents 1450-2000*, New Haven/London, Yale University Press, 1998, pp. 54-55; Iqtidar A. KHAN, "Early use of Cannon and Musket in India 1442-1526", *Journal of the Economic and Social History of the Orient*, 24, 1981, pp. 146-164.

<sup>45</sup> G. PARKER, op. cit., p. 94.

Manuel's tactics were successful: thanks to the victory at Diu in 1509 against a Mamluk-Gujurati fleet, the Portuguese achieved total dominance of the Indian Ocean. Furthermore this dominance was also only rarely challenged. In South Asia, the Europeans encountered an emerging power vacuum and inserted themselves into the existing system – often peacefully. However, often by means of military interventions they also took advantage of the existing regional rivalries. The establishment of and simultaneous restrictions on the waterways were key. The great mobility of their ships made it possible for the *Estado* to assemble a substantial portion of its armed forces in a relatively short time. Its use of artillery frequently offset its relative lack of manpower. Employing a few trained men and effective cannons, entire military units could be held at bay. The Swedish historian Jan Glete observes that “the Portuguese navy was the first to systematically exploit gunpowder and heavy guns for fighting stand-off actions against enemies which were often superior in manpower.”<sup>46</sup> Naval bases fortified with heavy coast batteries and rampart-like walls as well as the fleets that patrolled the spaces between them made Portugal the first global acting seapower.<sup>47</sup>

German and Flemish artillery specialists participated in almost all Portuguese military expeditions. We have two extant accounts from as early as Vasco da Gama's second voyage to India, both authored by anonymous crew members from the Holy Roman Empire.<sup>48</sup> However, the most important sources are to be found in the Portuguese archives, above all the correspondence of the *Estado da Índia*, contemporary chronicles, as well as the documents of the slowly developing colonial machine. However, in all of this archival material, Germans only appear sporadically, as the general figure of the unknown soldier. This is due on the one hand to their middle- or lower-class origins, on the other hand to the method of reporting employed by the Portuguese royal annalists who primarily wanted to exalt the deeds of their countrymen. Moreover, it is not always possible to identify central Europeans unequivocally due to the corruption of foreign names rendered in Portuguese. However, from time to time the attribute of origin *português* is appended to names, allowing us to deduce that the proportion of foreigners must have been high.

---

<sup>46</sup> Jan GLETE, *Navies and Nations. Warships, Navies and State Building in Europe and America 1500-1860*, 2 vols., Stockholm, Coronet Books, 1993, Vol. 1, p. 108; also Vítor L. RODRIGUES, “Military Structure of the Portuguese Navy in the Indian Ocean – The First Half of the 16<sup>th</sup> century”, in Kuzhipalli S. Mathew (ed.), *Ship-building and Navigation in the Indian Ocean Region, AD 1400-1800*, New Delhi, Manohar, 1997, pp. 140-146.

<sup>47</sup> V. L. RODRIGUES, op. cit., pp. 155-163; George MODELSKI and William R. THOMPSON, *Seapower in Global Politics 1494-1993*, Seattle, University of Washington Press, 1994, pp. 151-186.

<sup>48</sup> The report, written in the Flemish language, is kept short and was printed in Antwerp in 1504: Jan DENUCE (ed.), *Calcoen. Récit flamand du second voyage de Vasco da Gama vers l'Inde, en 1502-1503*, Anvers, De Sikkel, 1931; The second description is more thorough and was written by an Upper German sailor or mercenary: Christine von ROHR (ed.), *Neue Quellen zur zweiten Indienfahrt Vasco da Gamas*, Leipzig, Koehler, 1939, pp. 42-51.

The German contingent in Dom Francisco de Almeida's expedition to India (1504/05) is relatively well documented. After the Portuguese, Germans constituted the largest ethnic group among the armed ship escorts in his squadron.<sup>49</sup> In contrast to Almeida, first viceroy of India, who preferred to temporize, the governor Afonso de Albuquerque (1462?-1515) demanded extensive, strategic conquests. In this first decade of the *Estado da Índia*, the European settlement at Cochin functioned as a central naval base.<sup>50</sup> At the beginning of the 1520's, some 400 Europeans are said to have stayed here and in Kannur.<sup>51</sup> Among them, the proportion of German and Dutch was not inconsiderable. For instance, a royal payment order from 1509 has survived, for three *cruzados* to the treasurer of Cochin, to be paid to the *condestável-mor*, Mestre Anes, and his company consisting of 50 bombardiers of German and Flemish origin.<sup>52</sup> Their numbers and significance within the multinational garrisons must have increased to such an extent that they were able to pressure governor Albuquerque to create a separate place of worship for them. Inside the Portuguese Bartholomew Church from 1514, the governor established an own chapel especially for the Germans, that represented their first place of house of God in India.<sup>53</sup> St. Bartholomew was, according to all appearances, a simple, one-nave church with a portal beneath an oculus that initially featured no church tower. In later city maps of the city of Cochin, the building is shown to the west of the cathedral, near the hospital and the bishop's residence.<sup>54</sup> With squadrons arriving from Europe,

<sup>49</sup> Themudo BARATA, op. cit., pp. 276-278; Joaquim Candeias SILVA, *O Fundador do "Estado português da Índia". Dom Francisco de Almeida 1457?-1510*, Lisboa, CNCDP, 1996, pp. 116-117, pp. 220-221 and 300-301, n.º 8.

<sup>50</sup> Pius MALEKANDATHIL, *Portuguese Cochin and the Maritime Trade of India 1500-1663*, New Delhi, Manohar, 2001.

<sup>51</sup> Hedwig KÖMMERLING-FITZLER, "Der Nürnberger Kaufmann Georg Pock (†1528/29) in Portugiesisch-Indien und im Edelsteinland Vijayanagara", *Mitteilungen des Vereins für Geschichte der Stadt Nürnberg*, 55, 1967/68, pp. 137-184 (here: p. 174).

<sup>52</sup> Payment of the *condestável-mor* Anes and 50 bombardiers, Cochin, December 28, 1509, in R. A. B. PATO (ed.), op. cit., Vol. 4, pp. 229-300, n.º 72; Cf. the payments of December 21 and 27, 1509 with more German and Dutch names, in *Ibid.*, pp. 218-219, n.º 51, and p. 228, n.º 70.

<sup>53</sup> Afonso de Albuquerque's letter to King Manuel I, Goa, October 25, 1514, in António Silva REGO (ed.), *Documentação para a História das Missões do Padroado Português do Oriente*, 12 vols., Lisboa, AGU, 1947-1958, Vol. 1, p. 217, n.º 105: "(...) E porque os alemães querem fazer huma capela sua, tambem deixey o lugar determinado homde ha aviam de fazer, e pois que ho Vossalteza agora mamda, apertal os ey em tall maneira que ha façam, aimda que seja comtra suas vomtades, como foram as cassas das vossas feitoryas." The settlement of the renovation, Cochin, December 30, 1515, in *Ibid.*, p. 276, n.º 127; C. S. PINTO, op. cit., pp. 11-15. P. MALEKANDATHIL, *The Germans*, cit., pp. 33-34; Kömmerling-Fitzler erroneously places the first German chapel in Goa, cf. H. KÖMMERLING-FITZLER, op. cit., p. 141.

<sup>54</sup> Luís SILVEIRA (ed.), *Livro das plantas das Fortalezas, cidades e povoações do Estado da Índia oriental com as descrições do marítimo dos reinos e províncias onde estão situadas e outros portos principais daquelas partes*, facsimile edition, Lisboa, Instituto de Investigação Científica Tropical, 1991, p. 88, n.º 72; The most exact representation of the church, likely destroyed during the Dutch capture of Cochin in 1663, is presumably to be found on a Portuguese military

the number of foreigners continued to rise. An administrative report from the year 1525 requested one hundred more *bombardeiros* from Lisbon. Of these hundred, half were to be German and “more capable and better trained for this occupation than those from the previous years.”<sup>55</sup>

The German cannoneers were among Albuquerque’s most reliable troop outfits and participated in his many expeditions in maritime Asia. With the help of his slaves, the bombardier Rüdiger von Geldern prepared gunpowder and munition for Albuquerque’s decisive conquests in Goa (1510) and Melaka (1511) – conquests in which he also participated. During the four month long defense of Kannur in 1507, he used a culverin to blow apart the cotton bales that the Muslim attackers had erected as protection.<sup>56</sup> Von Geldern hailed from the lower Rhine region, began his career in service of the Portuguese throne in North Africa, served as a *condestável* in India, and was granted nobility by the king in 1515. Towards the end of his life, the German returned to Europe and moved into a house in Antwerp where he became acquainted with the humanists Erasmus of Rotterdam and Damião de Góis.<sup>57</sup>

Strategically significant for the *Estado da Índia* was the occupation of Diu in 1534 on the Gulf of Cambay. A great number of Ottoman-Gujurati troops attempted to take back the city on two occasions. The presence of two German bombardiers among the defenders during the second siege in 1546 is documented.<sup>58</sup> In the course of mobilization of all available forces, the *condestável-mor* João Luís amassed 130 cannoneers from all along the coast of Kerala to man the fleet. Moreover, as he informed the king, he needed an additional “40 or 50 German bombardiers of the old, proven variety.”<sup>59</sup>

---

map of Manuel Godinho de Erédia from the year 1610, cf. José M. GARCIA, *Cidades e Fortalezas do Estado da Índia. Séculos XVI e XVII*, Lisboa, Quidnovi, 2009, p. 153.

<sup>55</sup> The passage cited does not, as Kömmerling-Fitzler claims, come from one of Albuquerque’s letters (he was already dead in 1515), but rather in an inventory report regarding the facilities and equipment of the *Estado*’s naval bases during the administration of the seventh governor Henrique de Menezes (1524-1526), cf. H. KÖMMERLING-FITZLER, op. cit., p. 141 with Fn. 24; “Lembranças de cousas da Índia”, in Rodrigo J. Lima FELNER (ed.), *Subsídios para a História da Índia Portuguesa*, Lisboa, Academia Real das Sciencias, 1868, pp. 1-56 (here, p. 31): “Á y muita necesydade de cem bombardeiros, a metade alemães, e os outros portugueses, e mais sabydos no ofycyo que os que vyerão os annos passados.”

<sup>56</sup> D. Góis, op. cit., Vol. 2, Cap. 16, p. 48; R. A. B. PATO (ed.), op. cit., Vol. 2, pp. 74-75 and 99; Vol. 4, pp. 277-278, 292-293 and 300; Vol. 6, p. 52.

<sup>57</sup> P. MALEKANDATHIL, *The Germans*, cit., p. 35. Cf. King Manuel’s payment order to the Portuguese factor in Antwerp, Lisbon, April 25, 1515, ANTT, CC, Parte I, Maço 17, n.º 116. GRACIAS, op. cit., pp. 64-65 describes him as being married. However there is no substantiation of this in the sources.

<sup>58</sup> *Livro das Mercês que fez D. João de Castro*, fol. 123v., BA, 51-VIII-46. Also P. MALEKANDATHIL, *Portuguese Cochin*, cit., p. 163.

<sup>59</sup> Letter from *condestável-mor* João Luís to King João III, Goa, November 21, 1545, in ANTT, CC, Parte I, Maço 107, n.º 83: “São muito necesarios 40 hou 50 bombardeiros Alemães dos velhos e antigos.”

The seizure of Goa at the mouth of the Mandovi River proved to be pivotal for the continued expansion of the Portuguese Empire in Asia. The western Indian island city was first conquered in February 1510 but because at first it could not be continuously defended, it had to be captured anew nine months later. The presence of numerous German and Flemish artillerymen in the second siege can be documented, on board the ships as well as among the land forces. Governor Albuquerque elevated their rate to 20 *reais* a day in addition to an extra bonus of 20 *pardaus* for their valiant effort in the struggle for Benasterim.<sup>60</sup> The hard-won coastal fort, believed by Albuquerque to be the strategic “key to the island of Goa,” was defended by one hundred Ottoman gunners.<sup>61</sup> The Portuguese ships came under heavy fire at the river’s inlet. With the help of heavy artillery, the land troops were finally able to force the enemy commanders to surrender the fortress. Many of the German cannoners remained in the city long-term after the battle for defense purposes.<sup>62</sup> The Fleming Gillys was awarded a bonus as he had shot “many Moors dead and [shot] breaches in the walls of Benasterim.”<sup>63</sup>

In Goa, the Portuguese absorbed the well-equipped Bijapur arsenal together with its trained men, who quickly attained such a degree of perfection in their craft that by Albuquerque’s estimation they even surpassed the German masters.<sup>64</sup> However Bohemian and Upper German matchlock rifles formed their prototypes, positioned at the beginning of a history of Luso-Asian weapon production which would later thrive.<sup>65</sup> Guillaume of Bruges, who had ascended to the rank of *condestável-mor*, established the first gunpowder mill here, completed in 1547.<sup>66</sup> Thanks to their efficacy,

---

<sup>60</sup> The following eight *condestáveis* were awarded with bonuses: “Joham Grave, Jacome de buz, Rodrigo de breman, anis frisa o moço, amrique de breman [Hinrich from Bremen?], mestre pero, luis fernandes”; this in addition to a number of simple bombardiers, a large portion of whom also came from the Holy Roman Empire, Goa, November 18-30, 1512, in R. A. B. PATO (ed.), op. cit., Vol. 2, pp. 99-104, as well as ANTT, CC, Parte II, Maço 29, n.º 105; Henrique Quirino da FONSECA, *Os Portugueses no Mar. Memórias Históricas e Arqueológicas das Naus de Portugal*, 2.ª ed., Lisboa, Typographia do Comércio, 1923, pp. 162, 229 and 254.

<sup>61</sup> João P. Oliveira e COSTA, Vítor L. RODRIGUES, *Conquista de Goa 1510-1512*, Lisboa, Tribuna da História, 2008, pp. 73-89.

<sup>62</sup> List of salaries, Goa, February 7, 1513, in R. A. B. PATO (ed.), op. cit., Vol. 5, pp. 408-410, n.º 881 as well as the payment order to the factor Francisco Corvinel, March 6, 1514 in *Ibid.*, Vol. 6, p. 39 n.º 79.

<sup>63</sup> Afonso de Albuquerque’s payment order to the factor of Goa, Goa, November 30, 1512, in R. A. B. PATO (ed.), op. cit., Vol. 2, p. 104: “por o servir muito bem de seu oficio nestes partes e matar muitos mouros e derrubar o muro de benasterym.”

<sup>64</sup> Albuquerque’s letter to the king, Kannur, December 4, 1513, in R. A. B. PATO (ed.), op. cit., Vol. 1, p. 203, n.º 41.

<sup>65</sup> Rainer DAEHNHARDT, *Espingarda feiticeira – The bewitched gun. The Introduction of the Firearm in the Far East by the Portuguese*, Lisboa, Texto Editores, 1994, pp. 39-67; F. M. S. VITERBO, *Artes e Artistas em Portugal. Contribuições para a História das Artes e Indústrias Portuguezas*, Lisboa, Livraria Ferreira, 1920, p. 168.

<sup>66</sup> ANTT, *Chancelaria de D. João III*, Doações, ofícios e mercês, Parte I, liv. 49, fol. 21. The gunpowder mill was located in the eastern part of the Terreiro do Paço, cf. José Manuel de

the incendiary projectiles (*panelas de pólvora*) and fire bombs produced there, a specialty of the German gunsmiths, were among the most feared arms of the 16<sup>th</sup> century and provided the Portuguese with a crucial advantage in conflicts where they tended to have considerably fewer men.

### 3. The Portuguese and the Germans: Conflict and Every-Day Life in the Colonies

Life in the outposts of *Ásia Portuguesa* was largely structured by the military and the church throughout the whole of the 16<sup>th</sup> century.<sup>67</sup> No ships could go on patrol from June to September, the rainy season of the South-west Monsoons. Every base was largely on its own. The soldiers lived in close quarters in the only place that offered them protection – behind the ramparts and walls. Sickness and plague, such as cholera, were their constant companions. In Goa, a certain Frei João Alemão oversaw the care for the ill. Although likely, it cannot be ascertained for certain whether the clergyman was also active as the pastor for the community of his countrymen. On the other hand, we do know of his marksmanship as a *bombardeiro*, which he must have so impressively demonstrated during the conquests of Goa and Melaka that he was explicitly applauded for his military service in a letter to the governor.<sup>68</sup> As one of his closest confidants, Albuquerque, already 60 years old, appointed him his confessor. In a report to the king, he praised Frei João in a friendly tone: “I always revealed all of my sins and transgressions to him and feel a certain warmth and affection for him.”<sup>69</sup>

In the early days of the *Estado* it was strictly forbidden to bring women to the Portuguese *conquistas*. Consequently, Europeans often maintained several local concubines at once. Prostitution, widespread in Cochin, ultimately led to the segregation of Christians from the rest of the population.

---

MASCARENHAS, “Portuguese Overseas Gunpowder Factories, in particular those of Goa (India) and Rio do Janeiro (Brazil)”, in Brena J. Buchanan (ed.), *Gunpowder, Explosives and the State. A technological History*, Aldershot, Ashgate, 2006, pp. 183-205 (here: p. 186); F. M. S. VITERBO, *Fabrico da Pólvora*, op. cit., pp. 25-28.

<sup>67</sup> Artur Teodoro de MATOS, “Daily Life at the Cannanore Fortress between 1516 and 1520”, in Kuzhipalli S. Mathew, Joy Varkey (ed.), *Winds of Spice. Essays on Portuguese Establishments in Medieval India with Special Reference to Cannanore*, Tellicherry, Institute for Research in Social Sciences and Humanities of MESHA, 2006, pp. 87-102; António H. Oliveira MARQUES, “Travelling with the Fifteenth-century Discoverers: Their Daily life”, in Anthony Disney, Emily Booth (ed.), *Vasco da Gama and the linking of Europe and Asia*, New Delhi, Oxford University Press, 2000, pp. 30-47.

<sup>68</sup> A. S. Rego, op. cit., Vol. 1, pp. 121-122, n.º 46-47, p. 136, n.º 54, pp. 166-167, n.º 72, and pp. 174-176, n.º 77; in the document from September 13, 1510, he identifies himself as *doutor Frey Joam*, cf. *Ibid.*, p. 103, n.º 37; Frei António’s letter to Afonso de Albuquerque, undated (1513?), in *Ibid.*, pp. 176-177, n.º 77.

<sup>69</sup> Albuquerque’s letter to the king, Goa, October 25, 1512, in R. A. B. PATO (ed.), op. cit., Vol. 1, p. 93, n.º 17.

Nevertheless, the crown had a different plan. In order to combat the chronic lack of Portuguese personnel and to establish permanent administrative structures, the king offered to marry his soldiers to converted local women. The idea was to create a Eurasian “mixed race” that would be less susceptible to tropical diseases but still loyal to Portugal. Governor Albuquerque expressly encouraged such bonds with the local elites and propagated the view that Muslims and Hindus of the highest castes were to be regarded as more or less white.<sup>70</sup> In April of 1512, he reported to the king with satisfaction that several Germans had already married local women.<sup>71</sup> In 1512, the bombardier Anrique de Nostradama (Hendrik of Amsterdam) received 3000 *reis* for his marriage to a slave woman with whom he lived in Goa after the wedding.<sup>72</sup> Married soldiers (*casados*) were allowed to withdraw from military service and take up residence as settlers. They were awarded trading privileges. In this way, the crown hoped to create incentives to develop the slowly growing Luso-Asian private sector. The Welser agent Hans Schwertzer, one time *bixssen schiesser* (handgunner), entered the diamond trade with the Hindu Vijayanagara Empire and later married a Portuguese noblewoman.<sup>73</sup> Jacob and Joseph van de Couteren, brothers of Flemish extraction, also later made their careers in this business. In an autobiographical account, Jacob summed up the supposed contradiction between his two professions in the following way: “I was a soldier and, when given the opportunity, also a merchant.”<sup>74</sup> Others abandoned the service of the crown entirely and defected in order to work as well-paid specialists under local Asian potentates. For instance, the ex-soldier *Marcos Roiz Dalemánha* served as secretary for the young Raja of Cochin.<sup>75</sup> Possible reasons to desert the Portuguese, in

<sup>70</sup> FRANCISCO BETHENCOURT, “Race Relations in the Portuguese Empire”, in Jay E. Levenson (ed.), *Encompassing the globe. Portugal and the World in the 16<sup>th</sup> & 17<sup>th</sup> Centuries. Essays*, Washington D.C., Arthur M. Sackler Gallery/Smithsonian Institution, 2007, pp. 45-53; Sanjay SUBRAHMANYAM, *The Portuguese Empire in Asia, 1500-1700. A political and Economic History*, London (inter alia), Longman, 1993, pp. 219-222.

<sup>71</sup> Albuquerque’s letter to the king, Cochin, April 1, 1512, in R. A. B. PATO (ed.), op. cit., Vol. 1, p. 63, n.º 9: “(...) porque casam muitos homeens de bem e muitos ofeciaes ferreiros e carpinteiros, torneiros e bombardeiros, e alguns alemãees sam quá casados; (...)”

<sup>72</sup> R. A. B. PATO (ed.), op. cit., Vol. 2, p. 100; Vol. 5, p. 325, n.º 683, and p. 347, n.º 734.

<sup>73</sup> P. MALEKANDATHIL, *The Germans*, cit., pp. 39-42; J. EVERAERT, “Soldiers”, cit., p. 92.

<sup>74</sup> Jacques de COUTRE, *Andanzas asiáticas*, ed. Eddy Stols, Benjamin Teensma and Johan Werberckmoes, Madrid, Historia 16, 1991, cap. 3, p. 94: “Desde entonces comencé a tener hazienda, siendo soldado y mercader quando se offrecía.” Because the foreign mercenaries in the service of the crown enjoyed trade privileges, many of them managed extra income through lucrative business. Guillaume of Bruges for instance presented the Herward trade agent Jörg Imhoff with a set of jewels consisting of rubies and a sapphire for the Lisbon-based *condes-tável* António Bispo, as well as for another German; cf. Hermann KELLENBENZ, “The Herwards of Augsburg and their Indian trade during the first half of the sixteenth century”, in Kuzhipalli S. Mathew (ed.), *Studies in Maritime History*, Pondicherry, Pondicherry University, 1990, pp. 69-84 (here: p. 76).

<sup>75</sup> J. EVERAERT, “Soldiers”, cit., p. 89; P. MALEKANDATHIL, *The Germans*, cit., pp. 40-41.

addition to delinquent and deficient payment, included greater and greater discrimination as well as religious pressure.

With the emerging denominational conflict in Europe, the Germans and Dutchmen fighting for the Portuguese crown came increasingly under the scrutiny of the Inquisition authority existing in the kingdom since 1536. Central European ideas of Reformation were gradually arriving in Portugal too, by way of merchants and mercenaries.<sup>76</sup> On May 16, 1543, a case was brought collectively against nearly all of the cannoneers in the German Bartholomew congregation on the charge of non-compliance with Catholic practice, a case however that was not followed up on.<sup>77</sup> The first documented charge of Lutheranism was brought against António Bispo (Bishop), the *condestável* of the artillery brigade, in the year 1543. He had long attracted attention due to his irreverent comportment in churches. Upon entering a place of worship, he would not take off his hat and made no gesture of respect before saints or the holy sacrament. During mass, Bispo was said to have never kneeled during transubstantiation. Instead he was known to stand up and walk around in the church and then sit down with crossed legs in a corner of the German chapel, a vantage point from which he was unable to see the elevation of the consecrated elements.<sup>78</sup> The charges often led to imprisonment, investigations and finally to trial – and on occasion to jail sentences. Mostly however they ended with capitulation and a plea for forgiveness.<sup>79</sup>

Despite extensive repressive measures, the Inquisition was unable to prevent Protestants, along with their reform-minded writings, from infiltrating Portugal and even reaching as far as the overseas territories in individual cases. The Hessian gunner Hans Staden, likely the first Lutheran

---

<sup>76</sup> There are no basic studies on the history of Protestantism in Portugal. Historical encyclopedias such as the *Dicionário Enciclopédico da História de Portugal* or the *Dicionário de História de Portugal* have no entry under the term *reforma*. The first published meditations on the matter, such as those of Marques or Cardoso, surprisingly skip the 16<sup>th</sup> century as the century of the Reformation, cf. João F. MARQUES, “Para a História do Protestantismo em Portugal”, *Revista da Faculdade de Letras*, 12, 1995, pp. 431-475; Manuel P. CARDOSO, “Protestantismo em Portugal”, *ICALP: revista/Instituto de Cultura e Língua Portuguesa*, 18, 1989, pp. 141-151.

<sup>77</sup> João J. ALVES, “Zur Geschichte der deutschen Kolonie im Portugal des 16. Jahrhunderts. Einige Prozesse der Lissaboner Inquisition”, in Peter Hanenberg, Marília dos Santos Lopes and Ulrich Knefelkamp (eds.), *Portugal und Deutschland auf dem Weg nach Europa*, Pfaffenweiler, Centaurus-Verlagsgesellschaft, 1995, pp. 27-35 (here: p. 30); Id., “A colónia alemã de Lisboa face à Inquisição: um olhar sobre o século XVI”, in Maria M. Gouveia Delille (ed.), *Portugal-Alemanha: Memórias e imaginários*, Coimbra, Minerva/Centro Interuniversitário de Estudos Germanísticos, 2007, pp. 75-83 (here: p. 78).

<sup>78</sup> J. J. ALVES, “Zur Geschichte”, cit. p. 28; Id., “A colónia alemã”, cit., p. 77.

<sup>79</sup> J. J. ALVES, “Zur Geschichte”, cit., p. 32; John EVERAERT, “Non-Portuguese Westerners trialed by the Goa Inquisition (1563-1523)”, in Pius Malekandathil and Jamal Mohammed (eds.), *The Portuguese, Indian Ocean and European Bridgeheads 1500-1800. Festschrift in honour of Prof. K. S. Mathew*, Tellicherry, Institute for Research in Social Sciences and Humanities of MESHAAR, 2001, pp. 149-162 (here: p. 155).

in Brazil, in a state of despair during his captivity in the hands of the Tubinambá, intoned Martin Luther's musical score of Psalm 130 "Aus tiefer Not schrei ich zu dir" (Out of the depths, I cry to you, O Lord).<sup>80</sup> He later reported that his captors after a while were able to appreciate his spiritual songs. In contrast, the reactions from the Portuguese colonial authorities were certainly less understanding. On December 7, 1552, a Jesuit priest wrote from the Indian Bassein (Vasai), near the present day Mumbai:

I believe that some Lutherans come here, under the pretense of being bombardiers, in order to spread their heresies, which is very dangerous in these regions due to widespread debauchery and extravagance here. Therefore we must spare no pains and instruct all those who are responsible for the fact that the Flemish, English, Germans, and also French flock here in undiminished numbers. Many of them maintain, as we know, ties to the Moors; others are infected by the Lutheran sect.<sup>81</sup>

The Jesuit persisted in his indictments and reported that he had a number of the heretics imprisoned and delivered them over to the Bishop's tribunal. Nine days later, a confrère informed Portuguese higher-ups in the order of a further arrest and of the confiscation of several texts written in German, among them a Psalter allegedly annotated by Martin Luther.<sup>82</sup>

A further case was reported from the Portuguese stronghold in the Persian island of Hormuz, where a priest interrogated seven or eight alleged Lutherans and heretics who were said to have denied the doctrine of purgatory and the authority of the Roman Church. After a long disputation, the Jesuit apparently succeeded in converting them and restoring the unity of their church.<sup>83</sup> The accused did not always get off so easily: torture experienced a revival as an instrument of interrogation before the readmission to the Roman-Catholic communion. In the worst, if also rare, cases, the death penalty could be applied. Because the Fleming Nicolao Mont had absconded and thus evaded the Inquisition, an image of him was burned in effigy. The German artillerist Alberto Homem, accused of Protestantism and sodomy, was executed in 1607 without trial. His compatriot Andre Maldar of Rostock was condemned to ten years in the galleys under the same charges, which amounted to a slow death sentence.<sup>84</sup>

The statutes of the Archdiocese of Goa from the year 1568 explicitly excommunicate and banish adherents of the "Martin Luther sect" and

<sup>80</sup> H. STADEN, *op. cit.*, Vol. 1, Cap. 20, p. 247.

<sup>81</sup> Belchior Nunes' report, Bassein, December 7, 1552, in A. S. REGO, *op. cit.*, Vol. 5, pp. 261-262, n.º 50.

<sup>82</sup> Letter written by Manuel Teixeira, Bassein, December 16, 1552, in A. S. REGO, *op. cit.*, Vol. 5, p. 284, n.º 53.

<sup>83</sup> Ludovicus Frois' report to the Jesuit college in Coimbra, Goa, December 1, 1552, in A. S. REGO, *op. cit.*, Vol. 5, p. 244, n.º 49.

<sup>84</sup> J. EVERAERT, "Westerners", *cit.*, pp. 155-158; Id., "Soldiers", *cit.*, pp. 89-90.

prohibit reading or owning reform-minded writings.<sup>85</sup> In the sixty years following the official arrival of the Inquisition in Goa (1560), a total of 27 trials were conducted against Germans, Flemings, and Dutchmen. The accused were predominantly soldiers and were investigated as alleged Protestants, as blasphemers, or for the possession of banned books. Interestingly enough, however, there are also four documented charges of conversion to Islam as well as sodomy.<sup>86</sup> Xenophobia and religious reservations, above all the crown's measures to monopolize power in the colonies may have contributed to the ever-decreasing number of foreigners coming to *Ásia Portuguesa*. The suspicion directed towards Germans and the Dutch was legally formalized in a royal decree on March 18, 1605, arranging for the expulsion of all European foreigners from the Portuguese colonies in India, Brazil, and on the Atlantic islands.<sup>87</sup> It is true that this ban did not directly bear upon mercenaries, who were privileged by the king, during the term of their service, however in general the quality of life for foreigners worsened with the implementation of these measures. Portugal was already less and less attractive for foreign mercenaries. At this juncture, however, it is appropriate to observe that long before the missionaries, the first protestants to arrive the overseas territories were German military men on the incoming Portuguese ships.

#### 4. Summary

This attempt of a prosopographical study sheds some light onto the lives of soldiers in the Portuguese Empire who hailed from Germany. No new history of German heroes is being written here; instead, this investigation is fundamentally concerned with the importance of the cannoneers and their methods of warfare, as well as their mentalities, living conditions, and everyday lives. Military history is not to be understood here as an end in its own right but instead as a piece of the social history of a German- and Dutch-speaking minority in an environment dominated by the Portuguese. In particular, the first phase of Iberian expansion, in the 15<sup>th</sup> and 16<sup>th</sup> centuries, is almost unthinkable without the use of Central European arms expertise. For example, in Lisbon and South Indian Cochin, they formed a community of compatriots and enjoyed a remarkable legal and administrative special status. They represented a significant portion of the crews manning Portuguese ships and forts in Europe and overseas. The historian Fernando

---

<sup>85</sup> Constituições of the archdiocese of Goa, 1568, in A. S. REGO, op. cit., Vol. 10, pp. 711 and 798, n.º 54.

<sup>86</sup> J. EVERAERT, "Westerners", cit., pp. 153-154, 156 and 161-162.

<sup>87</sup> Decree issued by King Phillip III, Valladolid, March 18, 1605, in José J. de Andrade e SILVA (ed.), *Coleção Chronologica da Legislação Portuguesa*, 11 vols., Lisboa, J. J. Andrade e Silva, 1854-1859, Vol. 1, pp. 108-109.

G. Pedrosa sees their involvement as one of the most decisive factors in Portugal's military successes.<sup>88</sup> Finally, in combat situations they always operated as a unit under Portuguese high command. In the practice of their vocation, they were not fundamentally different from their comrades: Germans and Dutchmen fought, killed, and took slaves like the other conquistadors. They strove for social advancement, sought to attain material riches, and, on a case-by-case basis, were ready to desert.

## Manuscript Sources

### ARQUIVO NACIONAL DA TORRE DO TOMBO

*Chancelaria de D. João III*, Doações, ofícios e mercês, Parte I, liv. 49.

*Corpo Cronológico*, Parte I, Maço 17, n.º 116; Maço 43, n.º 77; Parte I, Maço 107, n.º 83; Parte II, Maço 80, n.º 120; Parte II, Maço 92, n.º 125; Parte II, Maço 144, n.º 24; Parte II, Maço 29, n.º 105.

### BIBLIOTECA DA AJUDA

Cod. 51-VI-28, fls. 123-124.

### STAATSARCHIV BERN (StAB)

*Kanzleiarchiv*, Holding "Unnütze Papiere" 52, n.º 73.

## Bibliography

ALBUQUERQUE, Luís de and DOMINGUES, Francisco C. (eds.), *Dicionário de História dos Descobrimentos Portugueses*, Vol. 1, Lisboa, Caminho, 1994.

ALVES, João J., "Zur Geschichte der deutschen Kolonie im Portugal des 16. Jahrhunderts. Einige Prozesse der Lissaboner Inquisition", in Peter Hanenberg, Marília dos Santos Lopes, Ulrich Knefelkamp (eds.), *Portugal und Deutschland auf dem Weg nach Europa*, Pfaffenweiler, Centaurus-Verlagsgesellschaft, 1995.

ALVES, João J., "A colónia alemã de Lisboa face à Inquisição: um olhar sobre o século XVI", in Maria M. Gouveia Delille (ed.), *Portugal-Alemanha: Memórias e imaginários*, Coimbra, Minerva/ Centro Interuniversitário de Estudos Germanísticos, 2007.

AMBURGER, Hannah S., "Die Familiengeschichte der Koeler. Ein Beitrag zur Autobiographie des 16. Jahrhunderts", *Mitteilungen des Vereins für Geschichte der Stadt Nürnberg*, 30, 1931, pp. 153-288.

---

<sup>88</sup> F. P. PEDROSA, op. cit., p. 138.

- AZEVEDO, Pedro de (ed.), *Documentos das Chancelarias reais anteriores a 1531 relativos a Marrocos*, 2 vols., Coimbra, Imprensa da Universidade, 1915-1934.
- BAÊNA, Miguel Sanches de, "A artilharia moderna", in Rafael Moreira (ed.), *História das Fortificações Portuguesas no Mundo*, Lisboa, Alfa, 1989.
- BARATA, Maria Themudo, "A primeira viagem de Lopo Soares à Índia (1504-1505). Um termo e um começo", in Comissão Nacional para as Comemorações dos Descobrimentos Portugueses (ed.), *Congresso Internacional Bartolomeu Dias e a sua época. Actas*, 5 vols., Porto, 1989.
- BETHENCOURT, Francisco, "Race Relations in the Portuguese Empire", in Jay E. Levenson (ed.), *Encompassing the globe. Portugal and the World in the 16<sup>th</sup> & 17<sup>th</sup> Centuries. Essays*, Washington D.C., Arthur M. Sackler Gallery/ Smithsonian Institution, 2007.
- BIEBER, Hans-Joachim, "Deutsche Indienbilder. Phantasie-, Wunsch- und Gegenbilder vom Mittelalter bis zur Gegenwart", in Markus Bernhardt, Gerhard Henke-Bockschatz (eds.), *Bilder – Wahrnehmungen – Konstruktionen. Reflexionen über Geschichte und historisches Lernen. Festschrift für Ulrich Meier zum 65. Geburtstag*, Schwalbach, Wochenschau-Verlag, 2006.
- BLACK, Jeremy, *War and the World. Military Power and the Fate of Continents 1450-2000*, New Haven/London, Yale University Press, 1998.
- BLÖSCH, Emil, "Georg von Laupen", *Archiv des Historischen Vereins des Kantons Bern*, 9, 1880, pp. 270-351.
- BOTELHO, José J. Teixeira, *Novos Subsídios para a História da Artilharia Portuguesa*, 2 vols., Lisboa, Comissão da História Militar, 1944.
- BRAGA, Paulo Drumond, *Portugueses no Estrangeiro, Estrangeiros em Portugal*, Lisboa, Hugon, 2005.
- CARDOSO, Manuel P., "Protestantismo em Portugal", *ICALP: revista/Instituto de Cultura e Língua Portuguesa*, 18, 1989, pp. 141-151.
- CIPOLLA, Carlo M., *Guns, Sails and Empires. Technological Innovation and the Early Phases of the European Expansion 1400-1700*, New York, Pantheon Books, 1965.
- CLAYTON, Lawrence A., "The Iberian Advantage", in George Raudzens (ed.), *Technology, Disease and Colonial Conquests, Sixteenth to Eighteenth Centuries. Essays Reappraising the Guns and Germs Theories*, Leiden (Inter alia), Brill, 2001.
- CORDEIRO, João M., *Apontamentos para a História da Artilharia Portuguesa*, Lisboa, Comando Geral da Artilharia, 1895.
- COSTA, João P. Oliveira and RODRIGUES, Vítor L., *Conquista de Goa 1510-1512*, Lisboa, Tribuna da História, 2008.
- COSTA, Leonor Freire, "Os Regimentos sobre a Matrícula dos oficiais da navegação, da Ribeira e bombardeiros de 1591 e 1626", *Revista de História Económica e Social*, 25, 1989, pp. 89-126.
- DAEHNHARDT, Rainer, *Espingarda feiticeira – The bewitched gun. The Introduction of the Firearm in the Far East by the Portuguese*, Lisboa, Texto Editores, 1994.

- DENUCÉ, Jan (ed.), *Calcoen. Récit flamand du second voyage de Vasco da Gama vers l'Inde, en 1502-1503*, Anvers, De Sikkel, 1931.
- DHARAMPAL-FRICK, Gita, *Indien im Spiegel deutscher Quellen der Frühen Neuzeit 1500-1750. Studien zu einer interkulturellen Konstellation*, Tübingen, Niemeyer, 1994.
- DIAS, João J. Alves, "Os primeiros impressores alemães em Portugal", in João J. Alves Dias, (ed.), *No Quinto Centenário da Vita Christi*, Lisboa, Instituto da Biblioteca Nacional e do Livro, 1995.
- DOMINGUES, Francisco C., "Bombardeiro", in Luís de Albuquerque and Francisco C. Domingues (eds.), *Dicionário de História dos Descobrimentos Portugueses*, Vol. 1, Lisboa, Caminho, 1994.
- EHINGEN, Georg von, *Reisen nach der Ritterschaft. Edition, Untersuchung, Kommentar*, ed. Gabriele Ehrmann, 2 vols., Göppingen, Kümmerle, 1979.
- EVERAERT, John, "Soldiers, Diamonds and Jesuits: Flemings and Dutchmen in Portuguese India (1505-90)", in Anthony Disney e Emily Booth (eds.), *Vasco da Gama and the linking of Europe and Asia*, New Delhi, Oxford University Press, 2000.
- EVERAERT, John, "Non-Portuguese Westerners trialed by the Goa Inquisition (1563-1523)", in Pius Malekandathil, Jamal Mohammed (eds.), *The Portuguese, Indian Ocean and European Bridgeheads 1500-1800. Festschrift in honour of Prof. K. S. Mathew*, Telli-cherry, Institute for Research in Social Sciences and Humanities of MESHAAR, 2001.
- FELNER, Rodrigo J. Lima (ed.), *Subsídios para a História da Índia Portuguesa*, Lisboa, Academia Real das Sciencias, 1868.
- FERREIRA, Ana M. Pereira, "Estrangeiros na Índia no tempo de Afonso de Albuquerque: Os Anónimos", *Anais de História de Além-Mar*, 1, 2000, pp. 53-58.
- FONSECA, Henrique Quirino da, *Os Portugueses no Mar. Memórias Históricas e Arqueológicas das Naus de Portugal*, 2.<sup>a</sup> ed., Lisboa, Typographia do Comércio, 1923.
- GARCIA, José M., *Cidades e Fortalezas do Estado da Índia. Séculos XVI e XVII*, Lisboa, Quidnovi, 2009.
- GENNRICH, Paul W., *Evangelium und Deutschtum in Portugal. Geschichte der Deutschen Evangelischen Gemeinde in Lissabon*, Berlin (inter alia), de Gruyter, 1936.
- GLETE, Jan, *Navies and Nations. Warships, Navies and State Building in Europe and America 1500-1860*, 2 vols., Stockholm, Coronet Books, 1993.
- GÖBEL, Severin, *Vom Indianischen Börnstein Bericht. Item von der Ambra*, Königsberg, Georg Osterberger, 1586.
- GÓIS, Damião de, *Crónica do felicíssimo rei D. Manuel*, ed. Joaquim M. Teixeira de Carvalho, 4 vols., Coimbra, Imprensa da Universidade, 1926.
- GRACIAS, João A., *Alemães na India nos séculos XV a XVIII*, Nova Goa, Rangel, 1941.
- HALBARTSCHLAGER, Franz, "Bombardeiros e Comerciantes. Dois Exemplos Pela Colaboração dos Alemães na Expansão Portuguesa no Ultramar durante a Época de D. João III", in Artur Teodoro de Matos (ed.), *D. João III e o Império. Actas do Congresso Internacional comemorativo do seu nascimento*, Lisboa, CHAM, 2004.

- KAHLE, Günther, "Deutsche Landsknechte, Legionäre und Militärinstrukteure in Lateinamerika", *Zeitschrift für Geschichte von Staat, Wirtschaft und Gesellschaft Lateinamerikas*, 30, 1993, pp. 355-369.
- KELLENBENZ, Hermann, "The Herwards of Augsburg and their Indian trade during the first half of the sixteenth century", in Kuzhipalli S. Mathew (ed.), *Studies in Maritime History*, Pondicherry, Pondicherry University, 1990.
- KHAN, Iqtidar A., "Early use of Cannon and Musket in India 1442-1526", *Journal of the Economic and Social History of the Orient*, 24, 1981, pp. 146-164.
- KOLLER, Erwin, "'War der deutsche Ritter etwa Oswald?!' Zur Teilnahme des Wolkensteiners am portugiesischen Überfall auf Ceuta", in Wernfried Hofmeister e Bernd Steinbauer (eds.), *Durch aubenteuer muess man wagen vil. Festschrift Anton Schwob zum 60. Geburtstag*, Innsbrucker Beiträge zur Kulturwissenschaft 57, Innsbruck, Institut für Germanistik, 1997.
- KÖMMERLING-FITZLER, Hedwig, "Der Nürnberger Kaufmann Georg Pock (†1528/29) in Portugiesisch-Indien und im Edelsteinland Vijayanagara", *Mitteilungen des Vereins für Geschichte der Stadt Nürnberg*, 55, 1967/68, pp. 137-184.
- MALEKANDATHIL, Pius, *The Germans, the Portuguese and India*, Münster, LIT-Verlag, 1999.
- MALEKANDATHIL, Pius, *Portuguese Cochín and the Maritime Trade of India 1500-1663*, New Delhi, Manohar, 2001.
- MARQUES, António H. Oliveira, *Hansa e Portugal na Idade Média*, Lisboa, Presença, 1993.
- MARQUES, António H. Oliveira, "Travelling with the Fifteenth-century Discoverers: Their Daily life", in Anthony Disney, Emily Booth (ed.), *Vasco da Gama and the linking of Europe and Asia*, New Delhi, Oxford University Press, 2000.
- MARQUES, João F., "Para a História do Protestantismo em Portugal", *Revista da Faculdade de Letras*, 12, 1995, pp. 431-475.
- MARQUES, João Martins da Silva (ed.), *Descobrimentos Portugueses. Documentos para a Sua História*, Vol. 3, Lisboa, Editora do Instituto para a Alta Cultura, 1971.
- MASCARENHAS, José Manuel de, "Portuguese Overseas Gunpowder Factories, in particular those of Goa (India) and Rio do Janeiro (Brazil)", in Brena J. Buchanan (ed.), *Gunpowder, Explosives and the State. A technological History*, Aldershot, Ashgate, 2006.
- MATHEW, Kuzhipalli S., *Indo-Portuguese trade and the Fuggers of Germany. Sixteenth Century*, New Delhi, Manohar, 1997.
- MATOS, Artur Teodoro de, "Daily Life at the Cannanore Fortress between 1516 and 1520", in Kuzhipalli S. Mathew, Joy Varkey (ed.), *Winds of Spice. Essays on Portuguese Establishments in Medieval India with Special Reference to Cannanore*, Tellicherry, Institute for Research in Social Sciences and Humanities of MESHAAR, 2006.
- MODELSKI, George and THOMPSON, William R., *Seapower in Global Politics 1494-1993*, Seattle, University of Washington Press, 1994.
- MONTEIRO, João G., *A Guerra em Portugal nos Finais da Idade Média*, Lisboa, Notícias, 1998.

- MONTEIRO, Saturnino, *Batalhas e Combates da Marinha Portuguesa*, 8 vols., Lisboa, Livraria Sá da Costa, 1989-1996.
- MÖRSDORF, Klaus A., *A Irmandade de São Bartolomeu dos Alemães em Lisboa*, Lisboa (inter alia), s.n., 1957.
- MÜNZER, Dr. Jerónimo, *Itinerário*, ed. Basílio de Vasconcelos, Coimbra, Imprensa da Universidade, 1931.
- NEMITZ, Rolfroderich and THIERSE, Dieter, *St. Barbara. Weg einer Heiligen durch die Zeit*, Essen, Glückauf, 1995.
- NEWITT, Malyn, "The Portuguese Nobility and the Rise and the decline of Portuguese military power 1400-1600", in David J. Trim (ed.), *The Chivalric ethos and the development of military professionalism*, Leiden (inter alia), Brill, 2003.
- NUSSER, Horst G. (ed.), *Frühe deutsche Entdecker. Asien in Berichten unbekannter deutscher Augenzeugen (1502-1506)*, München, Nusser, 1980.
- PARKER, Geoffrey, *The Military Revolution: Military Innovation and the Rise of the West 1500-1800*, Cambridge, Cambridge University Press, 1988.
- PATO, Raymundo A. B. (ed.), *Cartas de Afonso de Albuquerque*, 7 vols., Lisboa, Academia Real das Sciencias, 1884-1935.
- PEDROSA, Fernando G., *Os Homens dos Descobrimentos e da Expansão Marítima*, Cascais, Câmara Municipal, 2000.
- PEREIRA, António dos Santos, "A metalurgia portuguesa em finais de Quatrocentos e primórdios de Quinhentos: alguns subsídios", in Comissão Nacional para as Comemorações dos Descobrimentos Portugueses (ed.), *Congresso Internacional Bartolomeu Dias e a sua época*. Actas, 5 vols., Porto, 1989.
- PIERIS, Paulus E. and FITZLER, Hedwig, *Ceylon and Portugal. Kings and Christians (1539-1552)*, Leipzig, Asia Major, 1927.
- PINTO, Carla A., "S. Bartolomeu, Afonso de Albuquerque e os bombardeiros alemães. Um episódio artístico em Cochim", in Curvelo, Alexandra (ed.), *Portugal und das Heilige Römische Reich (16.-18. Jahrhundert). Portugal e o Sacro Império (séculos XVI-XVIII)*, Münster, Aschendorf, 2011, pp. 263-280.
- POHLE, Jürgen, *Deutschland und die überseeische Expansion Portugals im 15. und 16. Jahrhundert*, Münster, LIT-Verlag, 2000.
- REGO, António SILVA (ed.), *Documentação para a História das Missões do Padroado Português do Oriente*, 12 vols., Lisboa, AGU, 1947-1958.
- RIVARA, Joaquim H. Cunha, "Inscrições lapidares da Índia portuguesa", *Boletim de Sociedade de Geographia de Lisboa*, 8, 1894, pp. 589-743.
- RODRIGUES, Vítor L., "Military Structure of the Portuguese Navy in the Indian Ocean – The First Half of the 16<sup>th</sup> century", in Kuzhipalli S. Mathew (ed.), *Ship-building and Navigation in the Indian Ocean Region, AD 1400-1800*, New Delhi, Munshiram Manoharial, 1997.
- RODRIGUES, Vítor L., "O Reforço do poder naval português no Oriente com Afonso de Albuquerque (1510-1515): suas implicações", *AHAM*, 3, 2002, pp. 155-163.

- ROHR, Christine von (ed.), *Neue Quellen zur zweiten Indienfahrt Vasco da Gamas*, Leipzig, Koehler, 1939.
- RUBIM, Nuno J. V., “D. João II e o Artilhamento das Caravelas de Guarda-Costas. O tiro de ricochete naval”, Separata da *Revista da Artilharia*, Lisboa, Serviços Gráficos da Liga dos Combatentes, 1990.
- RUBIM, Nuno J. V., “Artilharia Naval”, in Luís de Albuquerque e Francisco C. Domingues (eds.), *Dicionário de História dos Descobrimentos Portugueses*, Vol. 1, Lisboa, Caminho, 1994.
- SANTOS, João Marinho dos, *A Guerra e as Guerras na Expansão Portuguesa. Séculos XV e XVI*, Lisboa, GTMECDP, 1998.
- SANTOS, Nuno Valdez dos, *O Armamento Naval Português (1100-1500)*, Lisboa, Marinha, 1999.
- SERRÃO, José, “Demografia portuguesa na época dos descobrimentos e da expansão”, in Luís de Albuquerque e Francisco C. Domingues (eds.), *Dicionário de História dos Descobrimentos Portugueses*, Vol. 1, Lisboa, Caminho, 1994.
- SILVA, Joaquim Candeias, *O Fundador do “Estado português da Índia”. Dom Francisco de Almeida 1457?-1510*, Lisboa, CNCDP, 1996.
- Silva, José J. de Andrade e (ed.), *Coleção Chronologica da Legislação Portuguesa*, 11 vols., Lisboa, J. J. Andrade e Silva, 1854-1859.
- SILVEIRA, Luís (ed.), *Livro das plantas das Fortalezas, cidades e povoações do Estado da Índia oriental com as descrições do marítimo dos reinos e províncias onde estão situadas e outros portos principais daquelas partes*, facsimile edition, Lisboa, Instituto de Investigação Científica Tropical, 1991.
- SMITH, Roger C., *Vanguard of the Empire: Ships of Exploration in the Age of Columbus*, New York, Oxford University Press, 1993.
- SPADAFORA, Francesco and CASANOVA, Maria L., “Bartolomeo, Apostolo”, in Filippo Caraffa e Guiseppe Morelli (eds.), *Enciclopedia dei Santi. Bibliotheca Sanctorum*, Vol. 2, Roma, Città nuova, 1962.
- STADEN, Hans, *Wahrhaftig’ Historia vnd beschreibung eyner Landtschafft der Wilden, Nacketen, Grimmigen Menschenfresser Leuthen, in der Newenwelt America gelegen (...)*, ed. Franz Obermeier, Vol. 1, Kiel, Westensee, 2007.
- SUBRAHMANYAM, Sanjay, *The Portuguese Empire in Asia, 1500-1700. A political and Economic History*, London (inter alia), Longman, 1993.
- TUBINO, Nina, “A Germanidade no Alvorecer do Brasil. A colônia”, in Nina Turbino (ed.), *A germanidade no Brasil. Das Deutschtum in Brasilien*, Porto Alegre, Sociedade Germânia, 2007.
- VITERBO, Francisco M. Sousa, *O Fabrico da Pólvora em Portugal. Notas e Documentos para a Sua História*, Lisboa, Typographia Universal, 1896.
- VITERBO, Francisco M. Sousa, *A Armaria em Portugal. Notícia documentada dos fabricantes de armas brancas que exerceram a sua profissão em Portugal*, Lisboa, Academia Real das Sciencias, 1907.

- 
- VITERBO, Francisco M. Sousa, *Artes e Artistas em Portugal. Contribuições para a História das Artes e Indústrias Portuguezas*, Lisboa, Livraria Ferreira, 1920.
- VOGT, John, "Saint Barbara's Legion. Portuguese Artillery in the Struggle for Morocco, 1415-1578", *Military Affairs*, 41, 1977.
- WALTER, Rolf, "Nürnberg, Augsburg und Lateinamerika im 16. Jahrhundert – Die Begegnung zweier Welten", in Stephan Füssel (ed.), *Reiseberichte der Frühen Neuzeit. Wirtschafts- und Kulturhistorische Quellen*, München, W. Fink, 1987.
- WESTERMANN, Ekkehard, *Silberrausch und Kanonendonner. Deutsches Silber und Kupfer an der Wiege der europäischen Weltherrschaft*, Lübeck, Schmidt-Römhild, 2001.