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The article analyzes the relations between public health and empire in Spain under the reign of Isabel II (1833-68). After presenting certain conceptual notions, the case of military health is proposed as a specific example of these relations. On a journey through the Empire's different settings (the Iberian peninsula, Cuba, Porto Rico, and the Philippines), the text explains the role played by different groups, often marginalized from historical accounts.

KEYWORDS: history; public health; Spanish empire; nineteenth century; military health.

Francisco Javier Martínez Antonio

Laboratoire REHSEIS Paris San Antonio María Claret 27 1º C 50005 Zaragoza España pacoalemania@yahoo.com

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Introduction. Searching for the empire

This paper follows a line of historical studies on "medicine" and empire" which started in the mid 1990's. This line continues the path of previously existing fields such as "colonial medicine", "medicine and imperialism" or "post-colonial studies on medicine" which, during the last decades, have provided an abundant historiographical production, rich in different and sometimes complementary approaches. The continuity is given by the fact that, somehow, the studies on "medicine and empire" aim to tackle some of the core problems unsolved in that historiography, especially those underlying the dichotomy centreperiphery or metropolis-colony, the nature of "colonial science" or the interaction between European and extra-European medical knowledge and practices. In our opinion, this new research could set the foundations for a new historiographical "paradigm", as we might express it in Kuhnian terms if that concept were not so overused.

The search for an "imperial framework" which enables a unified analysis of the relationship metropolis-colony stands out as one of the main features of this impulse for renewal. Actually, this is not a specific task of the history of medicine, but one assumed by the social and human sciences in general. Thus, in the book *Tensions of Empire*, published in 1997 by Frederick Cooper and Ann Laura Stoler, both authors considered that the study of "empires over time, in relation to one another and in relation to their component parts" should be a priority of the *Cultural Studies* research agenda. Therefore, metropolis and colony had to be studied in "a single analytical field, addressing the weight one gives to causal connections and the primacy of agency in its different parts". Both authors admitted that "identifying the social and political reverberations between colony and metropolis is a difficult task" (Cooper & Stoler, 1997, pp. 1, 4).

Focusing on the history of medicine, Warwick Anderson complained in a review-essay published in 1998 about the unconscious exportation of the state-nation framework to the study of colonial medicine. In his opinion, in this study, the "successful building" of a "disciplinary enclave of implicitly nationalist historians of medicine" would have occurred. To Anderson, "if the history of colonial medicine was once the history of derivative European ideas, it is now more likely to resemble a history of derivative European social formations" (Anderson, 1998, pp. 523, 528). In another review published in 2003, Anderson assumed Cooper and Stoler's above mentioned proposals by stating that "we need eventually to work out how to study colonial medicine, and other imperial projects, with greater discursive symmetry and

inclusiveness, to hold 'center' and 'periphery' within the same analytic frame" (Anderson, 2003, p. 405).

Recently, in a monographic issue of the journal Isis, several renowned historians of science and medicine in the colonies such as Mark Harrison or Michael Osborne reflected on this sense. For Harrison, his paper mainly aimed to raise "some questions about the analytical framework in which colonial science has traditionally been viewed, highlighting interactions with indigenous scientific traditions and the use of network-based models to understand scientific relations within and beyond colonial contexts" (Harrison, 2005, p. 56). In his opinion, the term "colonial science" could have been "little more than a label of convenience, lacking precise definition and of questionable utility" (Harrison, 2005, p. 63). Finally, a collective work on "science and empires" published by Benedikt Stuchtey in 2005 made a call for "national historiographies to integrate the imperial factor into their histories", pointing out that "European nations developed, at least in part, within the context of their colonial/imperial projects, and colonial changes were simultaneously determined by European conflicts and events" (Stuchtey, 2005, pp. 30-31).

Despite such calls, research on an imperial scale is obviously a difficult enterprise. The idea of studying public health within a whole particular empire, as this paper aims, might at first sight look reckless – and not mainly because of the brevity hereby demanded. Perhaps this would not be so much the case of the 19th century Spanish Empire, but it would probably be that of the classical Spanish Empire or of the modern French and British Empires. Nonetheless, the question is not so much the exhaustiveness of empirical research (every historical study, including local histories or micro-histories, seems to be liable to greater data compilation), but the identification of the specific problems of an imperial approach. This basically demands an effort of synthetic definition, which is not incompatible with a later stress on particular issues and the subsequent necessary increase in the use of documentary sources.

Then, it would be necessary to bear in mind that studies of this kind are still few in number in the history of public health and in the history of the Spanish Empire. In the first case, it is true that a higher relevance has been given to colonial issues within discussions on health campaigns, health politics or health care systems, as it can be seen in the differences between the two classical books of George Rosen and Dorothy Porter (Rosen, 1958; Porter, 1999a). Apart from the publications already mentioned in the former paragraphs, an essential aspect to place the "empire" within the field of public health has been the study of tropical medicine, in which crucial aspects such as the circulation of knowledge and

professionals or the construction of "whiteness" have been given increasing attention (Bashford, 2000; Haynes, 2001; Anderson, 2003).

Regarding the Spanish Empire, the works by Antonio Lafuente, Juan Pimentel and Jorge Cañizares-Esguerra on science in the classical period until the 18th century are pioneering (Lafuente, 2000; Pimentel, 2000; Cañizares Esguerra, 2003, 2005), but need further contributions. For the 19th century, studies are even more scarce (Elena & Ordóñez 2000). In the history of public health, the only source is a monograph on malaria in metropolitan and colonial 20th century Spain coordinated by Esteban Rodríguez Ocaña (Rodríguez Ocaña et al, 2003). Our PhD dissertation took on the subject of empire, in a preliminary way, for the 19th century (Martínez Antonio, 2005a), an approach which we attempt to further develop here.

This lack of research about medicine/science in the Spanish Empire could be no doubt explained, among other factors, by the biased ideological sense which the term "empire" received in Francoist historiography. Besides, the very historical fact that the "age of the empire" (Hobsbawn, 1988) actually coincided with the fall of Spain as a colonial power has created difficulties to make comparisons with other cases. For example, depending on the author, the Spanish Empire finished at the beginning of the 19th century, with the loss of the continental American colonies, in 1898, with the loss of Cuba and the Philippines or in 1976, after the withdrawal of Western Sahara. In our opinion, it is necessary to go beyond both precautions in order to favour new interpretative standpoints in the field "science/technology/medicine in the Spanish Empire", which assume the essential parallelisms existing with other European and non-European cases.

Public health and empire. Analytical concepts. The place of the Army health system within the Spanish Empire

Due to this paper's necessary brevity, an in-depth reasoning of the analytical approach used here is not possible. Therefore, we will just make some brief remarks on the concepts "empire" and "public health" as we use them here, as well as on the reasons for regarding the Army health system as a valid "imperial" subject. By "empire", firstly, more than a political or social status formally defined in some Western countries in a certain period, is meant, rather, the continuous domination of those countries over other non-Western societies. Regarding France, for instance, the *Empire* and the *Seconde Empire* were specific historical periods in the 19th century, but French imperialism and Empire existed outside them throughout the whole century. Regarding Spain, the independence

of the continental American colonies did not mean the Spanish Empire to disappear, though it was much reduced both in size and importance.

Secondly, "empire" would mean not only the colonies but the metropolis plus the colonies. Usually, the British or French Empires are said to comprise as many thousands of square kilometres or as many millions of people, but these estimates usually tend to exclude Great Britain or France as such. By contrast, the empire as a whole should be considered as the basic unit of analysis of historical events (Kamen, 2003). This would put an end to the usual practice of studying historical events in the European metropolis on the one hand, and on the other hand, in the colonies (generally in each one of them separately). However, the goal is not to propose a mere juxtaposition of metropolis and colonies, but to leave this dichotomy behind. In this sense, both entities should be considered as a temporary, changing outcome of a certain trans-imperial interaction or relation, which should become the main topic of research.

On the one hand, the relational character of the empire, which according to Bruno Latour, has been systematically "purged" from explanatory accounts (Latour, 1997, p. 106), means considering that either the metropolis or the colonies have initiative, both provoke changes in each other and evolve simultaneously in time. Of course, this approach does not state the outcome of such interaction to be equality or balance, therefore the meaning of empire as domination, but on principle it considers both Western and non-Western societies as essentially similar and comparable human realities. On the other hand, the trans-imperial character of such relation obliges to break down the essentialism of metropolis and colonies in favour of a network model, a perspective which allows considering a higher number of actors and at the same time, appreciating their "translocation" through the empire. This is not contradictory with the confluence of networks and the subsequent definition of relatively closed and homogeneous metropolitan and colonial spaces, with relative separation between them, but despite all, such tendency is never absolute.

Finally, an empire does not exist in isolation, but related to other empires. In such relation, a reduced number of them move to a prevailing position and others become subordinated. In this last case, the trans-imperial relation tends to weaken and both the metropolitan and colonial spaces become more explicitly opened and heterogeneous. Depending on its level of weakness, an empire may be influenced, intervened, assimilated or even annihilated by another one. In a *longue-durée* perspective, it could be said that the competition among empires would have reduced its total number until, perhaps, becoming a unique one, of planetary scale.

Regarding the concept of public health, it could be understood in the widest sense as "the collective actions regarding the health of populations" (Porter, 1999b, p. 14). More specifically related to the concept of empire, public health would be the imperial dimension associated to collective health and disease. Just as an imperial state, an imperial economy, an imperial culture or an imperial politics would have existed, an imperial public health should be also considered. From this standpoint, the history of imperial public health would be just a particular version of imperial history, since all general questions and problems of empire would appear in its specific context, just as in any other. There is no general history of empire if it is not a set of particular histories which share the same common grounds and can illustrate or translate each other.

Besides this, we believe a further widening of the concept of public health to be necessary. Usually this concept addresses exclusively "civil" aspects and, within them, those which might be called "inland" or "territorial". The history of public health has therefore paid preferential attention to aspects such as the creation of the Ministries of Health, the political and social struggle on health issues, the epidemics in the cities and the countryside, the scientific research on laboratories. Against this, "maritime" public health has been left much aside while the study of "military" public health (in the Army, Navy and Air Forces) has been usually left in the hands of history-fond military doctors (at least in Spain and France). However, the definition of public health should also include these other aspects. We propose here to consider that, at least in the 19th century, the period under study in this paper, public health would have been organised according to a double interiorexterior, civil-military axis, defining four essential health branches: public health as such (inland or territorial), maritime (coasts and frontiers), military (Army's) and naval (Navy's). These branches would have been inseparable and mutually conditioned (Martínez Antonio, 2005a).

To end this section, the election of the Army health system or military public health in order to consider the imperial perspective for the Spanish case will be briefly argued. During the Elizabethan period (1833-1868) and, in general, during the whole 19th century, the Spanish Empire occupied a weak international position, showing both problems of internal cohesion and of growing inherence from other empires. Both in the general social context and in the particular field of public health, this reflected especially in the loss of naval power (accelerated by the defeat of Trafalgar in 1805) and in the semi-permanent division and confrontation of civil society, both in the peninsula and in *Ultramar* (overseas). For those reasons, the other two components of the state and public

health, i.e., the military and the maritime, enjoyed a relatively better situation and therefore tried to compensate the general lacks. Military and maritime public health became the two branches with a truly imperial dimension in Spain in that time and, therefore, they are the most adequate to study the questions here stated.

The general framework of military public health in the Spanish Empire (1833-1868)

In a strict sense, Spanish military public health (Sanidad militar) was born during the reign of Queen Isabel II (1833-1868). Developments in corporative organization, in the training of physicians and surgeons, in administrative articulation within the Ministry of War, in territorial re-arrangement, in hospital modernization or in scientific and technical development, all of them coming from the last third of the 18th century, finally took shape. Apart from a failed attempt at organising a 'service of military public health' by the liberal doctor Mateo Seoane during the Liberal Triennium (1820-1823), it was the 1836, 1846, 1853 and 1855's regulations, along with some complementary legal provisions that definitely established the term Sanidad militar for the medical, surgical and pharmaceutical service of the Army. The new name reflected the change from the previous model of "medical police" to a "sanitary model" in accordance to contemporary developments in collective health in Spain, in the main European countries and in their respective armies (Rosen, 1957; Porter, 1999a; Marset & Sáez, 1998; Rodríguez Ocaña, 1992, 1994, 2005; Martínez Antonio, 2005a).

Unlike other countries, the military health legislation approved by the Ministry of War in Madrid was in theory homogenously implemented throughout the empire. Certainly, from the 1846 regulation on, there existed in all these legal texts a specific section on the "overseas service" (servicio de Ultramar) where certain particularities regarding length of stay, professional status or duties of the doctors, differed from the peninsular service. Besides, some specific decrees for the Army health service overseas were elaborated, such as the ones following the report on Philippines military hospitals prepared by the Ministry of State in 1856 (Regodón, 2002). Nonetheless, both kinds of provisions basically established the need to organize the Army medical service overseas like in the peninsula. Therefore, the famous and never passed "special laws" for the general government of the "overseas provinces", firstly planned by the 1837 Constitution, were also absent in the case of military public health (Fradera, 1999).

The management of imperial military health issues was centralised in the General Direction, located in Madrid. This Direction had been created by the 1846's regulations to substitute a previous Board of Directors composed by a medical, a surgical and a pharmaceutical Inspector. After some months in which three Directors co-existed, an 1847 provision gave unique power to Manuel Codorniu Ferreras (1788-1857) (figure 1). One of the key actors in the Elizabethan Army public health, Codorniu officially held his office during the next eight years (except for thirteen months between 1853 and 1854), although he had already taken it unofficially between 1837 and 1846 (Guerra, 1973, 1975; Parrilla Hermida, 1980; Calbet & Corbella, 1981; Massons, 1994). Despite Codorniu's prestige, the General Direction did not manage to have full executive power in health affairs, the responsibility of which remained in the hands of the minister of War and military chiefs, as it happened in other European armies (Ring, 1962; Lefevbre, 1987; McAllister, 1993; Haynes, 2000). As time went by, the Direction increased its powers, got a general secretariat and several administrative departments and also a Higher Medical Board, which advised the director in professional, corporative and technical issues (Martínez Antonio, 2005a).

Under the General Director were placed the Chiefs of the military health districts the empire was divided into, which corresponded to the territories of the General Captaincies. Although there were slight changes in different moments, from 1846 on there were basically 17 districts with their capitals: Andalusia (Seville), Aragon (Saragossa), Balearic Islands (Palma de Majorca), Burgos (Burgos), Canary Islands (Santa Cruz de Tenerife), Castilla la Nueva (Madrid), Castilla la Vieja (Valladolid), Catalonia (Barcelona), Cuba (Havana), Extremadura (Badajoz), Philippines (Manila), Galicia (La Coruña), Granada (Granada), Navarre (Pamplona), Basque Provinces (Vi-



Figure 1 - Portrait of Manuel Codorniu Farreras.

toria), Puerto Rico (San Juan) and Valencia (Valencia) (figure 2). Thus, the organization of military and civil public health (both with strong chronological and terminological parallels in that period) was different, since the latter, in the peninsula, was structured according to the provincial division (49 provinces) established by Javier de Burgos in 1833.

The Chiefs of districts had the military rank of Vice-Directors, first, and Sub-inspectors, later, and some two or three of them formed, along with the General Director, the Source: Biblioteca Nacional de España. Higher Medical Board. The next hierarchical step was occupied by the Directors of military hospitals, located in the capitals of the General Captaincies, in the plazas with Military Government and in other less important localities. The imperial network of military hospitals, despite a decrease of the total figure due to the closing down of centres in small towns or inherited from the first two Carlist Wars (1833-1840 and 1846-1849), accounted for over 50 centres. They were ordered in five different "classes" depending on their quality and importance and complemented by a number of military and regimental infirmaries, as well as by some temporary centres in case of epidemics or armed actions.

The Army Medical Corps was the only body of state medical functionaries existing in the Spanish Empire until the creation of the State Corps of Vaccinators in 1885 (Molero & Jiménez Lucena, 1997). Its theoretical staff increased from 92 doctors and surgeons in 1836 to 270 doctors in 1846 and to 372 in 1855, leaving aside pharmacists, "debutante doctors" and several categories of "assistant" or "temporary" physicians. Just as it happened in the Army at large, this Corps suffered from a chronic tendency towards "macrocephaly" (Busquets, 1984; Puell, 2000), the number of doctors and pharmacists being disproportionate with regard to the number of nurses, assistants and auxiliary soldiers despite the organization of the first "health groups" from 1862 on. Nevertheless, the "immobility" of the ranking scale was not totally safe from interferences related to any of the frequent political ups and downs

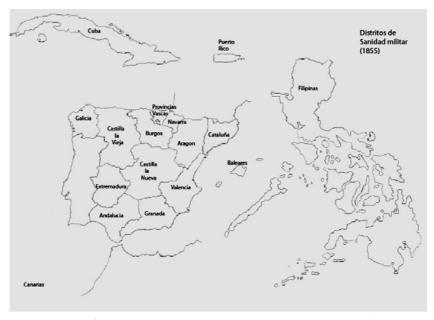


Figure 2 – Map of the Army public health districts in the Spanish Empire (1855) Source: Prepared by the author.

of the time. In this sense, it is very representative that both Manuel Codorniu and his successor at the General Direction, Nicolás García-Briz y Galindo (in 1856-1866), had a close personal relationship with the *espadones* (generals with an active participation in political life) General Baldomero Espartero and General Francisco Narváez respectively, forged in the first case during the Peninsular War (1808-1814) and, in the second, during the First Carlist War.

Finally, the 1855 regulations planned the creation of a School of Military Medicine, following the one set up in the *Hôpital de Val-de-Grace* in Paris, as well as a Central Store of Medical Equipment and a Central Laboratory of Drugs, all of them in Madrid. In 1859, only the station was set up due to the War of Africa (1859-1860) between Spain and Morocco (Massons, 1994, vol. II, p. 219), whereas the drug laboratory existing in Malaga from the end of the 18th century (since the time of the Spanish sieges of Gibraltar and the Moroccan sieges of Melilla) remained as sole centre of its kind (Roldán, 1955). In the Military Hospital of Madrid, there existed a Histo-chemical Laboratory from the 1850's, where anatomical-clinical researches were developed, and in the next decade a new Anatomical Museum started under the impulse of Dr. Cesáreo Fernández de Losada (Moratinos, 1988).

Havana, the centre of the empire?

The wide distance between legal provisions and reality in Spain is sufficiently known by historians. Therefore, a literal analysis of legislation as done in the previous section misses the particular link existing between Spain and Cuba during the 19th century. In our opinion, the core of the Spanish Army health system in that time was actually made up by a trans-imperial axis Madrid-Havana, although, as we will see, this connection explained that none of the two localities accomplished their centralising duties in their respective Spanish and Cuban "spaces"¹. Due to this fact, Havana could be considered in many aspects as centric as Madrid in the imperial military public health or even more.

The trans-imperial character of the axis Madrid-Havana started to be clearly defined from the 1840's on. As already mentioned, after the 1846 regulations were passed, three military doctors coexisted with the official status of General Director: Manuel Codorniu, Nicolás de Tapia y Ureta and Fernando Bastarreche Bidot. The two latter had played an important role in the First Carlist War at Codorniu's command, the former as secretary of the Sub-inspection of Medicine and the latter in charge of several technical commissions and in campaign actions with generals such as Aldama, the Count of Luchana and Espartero himself². Maybe

- ¹ The connection between the Spanish elite in Cuba and the nucleus of power in the peninsula has been analysed in detail in its different aspects by several Spanish and Cuban historians, though not strictly in imperial terms. See, for example, Cayuela Fernández (1993); Moreno Fraginals; Moreno Masó (1993); Moreno Fraginals (1995).
- ² Personal record of Fernando Bastarreche Bidot. Archivo General Militar de Segovia (later on, AGMS), Sección 1, Legajo B-1078. Personal record of Nicolás de Tapia y Ureta. AGMS, Sección 1, Legajo T-128.

because of his veteran prestige, Codorniu finally got the command, but at the same time he had to appoint both colleagues to appropriate posts, according to their new condition. Tapia was placed at the head of the Direction's secretary, somehow keeping his previous duties. From then on, this post became the true prelude to power, and probably the only reason why Tapia did not succeed Codorniu in 1856 was his lack of contacts with some *espadón*. Meanwhile, Bastarreche was appointed Chief of the district of Cuba, where he remained between 1850 and 1859.

The existence of a General Director at the head of a district was an exceptional, unique event, which symbolised and gave reality to the central place of the Sub-inspection of Cuba in the Army health system. The close relation and equal status of Bastarreche and Codorniu meant the possibility of a decisive influence of Cuba's interests in the Direction's decisions. On the other hand, through the General Captain of the island, José Gutiérrez de la Concha, who was appointed for the same period 1850-1859, Bastarreche was also able to influence the Ministry of War in Madrid independently from Codorniu. His position was more stable than Codorniu's, since he was not deprived of his status neither subordinated to military chiefs as the latter between 1853 and 1854. Significantly, Bastarreche was not substituted by a doctor coming from the peninsula, but by the secretary of the Sub-inspection of Cuba, Ramón Piña Piñuela, thus establishing a parallel "succession line" to the one in Madrid. Therefore, the Sub-inspection of Cuba and the General Direction shared a somewhat unique central position. They converged in the direction of the imperial Army health system as if the distance of thousands of kilometres had faded away.

In fact, the convergence in power between Madrid and Havana showed a general connection between Spanish and Cuban military public health, in which the latter acted in some way as the main stage. As Moreno Fraginals points out, mid 19th-century Cuba stopped being only Havana and Santiago to "show a true island physiognomy", due to the extension of the administration and institutions to greater sectors of the land and population (Moreno Fraginals, 1995). However, this newly configured "Cuban space", by excluding the Creoles, decisively promoted and justified the creation of the Spanish Army, in general, and of Army public health, in particular. For instance, the theoretical staff of doctors increased unceasingly in Cuba from 22 posts in 1846 to 71 in 1858 and 105 in 1865, although in 1867 was reduced to 74 (leaving aside the "debutante doctors", the civil assistants and the "honorary doctors")3. In the whole island there existed 18 hospitals and 6 military infirmaries, nearly a third of the Spanish total, no doubt the most important network of the empire (Guerra, 1994). With the reorganization of health groups in 1867, two military Health

³ Reglamento del Cuerpo de Sanidad militar. 7 de septiembre de 1846. Colección Legislativa de España, 3er trimestre, pp. 292-326. Reglamento del Cuerpo de Sanidad militar. 12 de abril de 1855. Colección Legislativa de España, 2º cuatrimestre, pp. 348-388.

Brigades were created, one for the whole Peninsula and another one just for Cuba⁴.

Thus, for a great number of Spanish military doctors, the service in Cuba became just another usual *step* in their professional careers. Since there was neither a specific duty towards the "native" Cuban population, nor colonial troops, the only particularities of "overseas service" were a minimum stay of six years and slightly higher wages and status than in the peninsula⁵. This situation helped consolidate the Army Medical Corps as such, also because an important number of doctors stayed out of the political disturbances frequent in the peninsula. As a further advantage, the military doctors enjoyed more chances for private practice than in the peninsula, and usually worked for welfare charity or took part in the civil health administration (Delgado, 1996b). Likewise, there were also more chances to develop scientific abilities, thanks to more available means and closer contact with other countries' innovations. In short, between Cuba and Spain a space of trans-imperial circulation was drawn.

The centrality of the "Cuban space" in the imperial public health was materialised in certain institutions and organisms which gave prominence to Havana and to Cuba in general. For instance, the General Military Hospital of San Ambrosio in Havana became probably the bigger and most modern military hospital in the empire. The only first class hospital in the island, it reached a capacity of a thousand beds and its technical staff rose to 92 people (Del Pino, 1963; Massons, 1994; Delgado, 1996b; Ancheta, 2003). Bastarreche made 'strong reforms in order, policy and healthiness' and introduced 40 Hermanas de la Caridad (Sisters of Mercy) to work as nurses. Until the 1840's, several professorships from the Faculty of Medicine were located in it and, later on, a small research laboratory was created in order to study the main diseases of the island, such as malaria and yellow fever. The Cuban district pioneered the creation of a section of Statistics (1851), of a TB sanatorium – which functioned during 1851 on the island of Pinos under direction of Ramón Piña Piñuela – and of an acclimatisation hospital or warehouse, which changed its location several times since the 1840's. Likewise, in 1858, a drug laboratory was created in Havana, over 25 years before the central laboratory of Madrid was established⁶. In the city, there was also a store of medical equipment during the 1860's7. In many ways, Havana and Cuba looked like the real centres of the Spanish military public health.

The Catalans in the Army health system

Contrary to what it is usually said about the Army Officer Corps in general (Clara *et al*, 1995; Puell, 2000), the participation of

- ⁴ Real Orden aprobando el reglamento para las Brigadas sanitarias de la península e Isla de Cuba. Madrid, 6 de junio de 1868. Boletín Oficial de Sanidad militar, Tomo X, pp. 567-597.
- ⁵ Reglamento del Cuerpo de Sanidad militar. 7 de septiembre de 1846. Colección Legislativa de España, 3er trimestre, pp. 292-326. Reglamento del Cuerpo de Sanidad militar. 12 de abril de 1855. Colección Legislativa de España, 2º cuatrimestre, pp. 348-388.
- ⁶ Real orden reorganizando el servicio sanitario en la Isla de Cuba. *Memorial de Sanidad del Ejército y Armada*, Años 1858-1859, pp. 111-114.
- ⁷ Real orden dando conocimiento de la de 17 de mayo anterior por la que se reforman las plantillas del personal del Cuerpo en la Isla de Cuba. *Boletín Oficial de Sanidad militar*, Tomo X, pp. 427-430.

⁸ To support this and other statements, we have crossed data from the following sources: the "Escalillas de Sanidad militar" of 1853 and 1858 located in the library of the Servicio Histórico Militar of Madrid; the "Estado del personal de Sanidad militar del Ejército de África" published in the journal Memorial de Sanidad del Ejército y Armada en 1859; and the personal records of military doctors kept in the Archivo General Militar of Segovia. Besides, Massons (1994), as well as the information provided by Dr. Josep Danón of the Fundación Uriach 1848 have been very useful.

Catalans in the Elizabethan Army Medical Corps was very relevant, especially since the end of the 1840's. From then on, over 30% of its members were Catalans, a clearly higher figure than corresponded to this territory in terms of population⁸. This fact points out that, maybe, Catalan participation in the Elizabethan Spanish Army took place mainly within technical corps (Artillery, Engineers, Medicine) rather than in the *Armas generales* (Infantry, Cavalry). In any case, more important than the number was the way Catalonia contributed to configure the imperial military public health.

As some researchers have previously studied for trade, industrial activity and migration, the Catalans set up their own network within the Elizabethan Spanish Empire, not always confined within its official boundaries (Fradera, 1987; Yáñez, 1992; AA.VV., 1995; Enciclopèdia Catalana, 1997; Jardí, 1998). Such "differentiated" participation, never explicitly regulated in official legislation, took also place in military public health. The circulation of Catalan military doctors, even though within the general imperial framework, defined particular spaces in the peninsula and overseas territories, as well as specific mechanisms of organisation in relation to the core axis Madrid-Havana. Such "relative autonomy" made it possible – and at the same time limited – the reach of Catalan contribution to the Army health system, which no doubt was decisive for its creation and operation in this period.

A good start point for the analysis of the Catalan component of military public health is to follow up the geographical distribution of doctors throughout Corps scales and personal records. From the end of the 1840's, in the peninsula, a predominant concentration of Catalan doctors is seen in Catalonia or in territories of the ancient Crown of Aragon (Aragon, Balears, Valencia). The management of Catalan military hospitals moved slowly to the hands of local doctors, and at least from 1858 on, the Sub-inspection of the district was held by a Catalan (first, Joaquim Sayrols i Velat and between 1860 and 1868, Antoni Martrús i Codina). Regarding the small number of Catalans placed outside the above mentioned areas, a preference is seen for the Basque Provinces or peripheral districts such as Canary Islands, Extremadura and Granada. In overseas territories, the service of Catalans was much more frequent in the Caribbean than in the Philippines, but with a particular distribution. In Cuba, Catalan doctors were mainly concentrated, as did Catalan emigrants in general, in cities of the Eastern part of the island such as Santiago de Cuba, Guantánamo and Cienfuegos. Meanwhile, Puerto Rico was a destination in great demand and Catalan doctors often held the Sub-inspection of the district (for instance, Miquel Pinet i Artigalás in 1845-1846 and Jaume Campreciós i Costa in 1846-1852) (Massons, 1994, vol. II, pp. 151, 171).

This process of 'Catalanisation' of the Principality and of definition of a Catalan space overseas was achieved through a lower 'rhythm' of circulation than the one in the core of Army public health. This meant that, in general, Catalan doctors either used to stay for a long time in their placements in Catalonia and surroundings, or used to emigrate for long periods (sometimes definitive) to Cuba and Puerto Rico. While for non-Catalan doctors the posts in the peninsula and Cuba were mere steps of their professional careers, for Catalan doctors it was more an election between settling down in Catalonia or overseas. In this way, they managed to ensure their particular spaces throughout the empire instead of being integrated in the core imperial circulation. The result of this practice was probably a lower chance of promotion within the Corps, but this was compensated by a higher tendency to harmonize the service in the Army with private practice or with the participation in civil public health or welfare.

The higher tendency of Catalans to develop activities outside the Army ended up with some frequency in complete separation. However, during the Elizabethan period there were certain paramilitary or pseudo-military organizations which made "appealing" to a number of Catalan doctors to engage with the Army, or at least avoided their complete dissociation from it. Such organisations changed according to the political sign of the moment and included Somatén and Milicias Provinciales/Cuerpos francos, in Catalonia, and Voluntarios del Comercio and Milicias blancas, in Cuba (Pérez Garzón, 1978; Vallverdú, 1986; González Calleja, 1992; Cayuela, 1993; Moreno, 1995; García Balañá, 2002). In general, these irregular forces were assisted by military doctors as such or by 'assistant', 'temporary' or 'honorary' doctors, who either were civil doctors or military doctors away from the active service or even retired. Given the local character of Somatén and Milicias provinciales of cities such as Barcelona and Reus, as well as the significant rate of Catalans in Cuban paramilitary forces, the participation of Catalan doctors must have been significant.

Apart from Manuel Codorniu's exceptional case, Catalan doctors did not reach positions of higher responsibility in the Army health system during this period. Nonetheless, they established their own hierarchical itineraries apart from the axis General Direction – Subinspection of Cuba. In peninsular Catalonia, for instance, Barcelona's military hospital became the vehicle to reach the Subinspection of the district, which might be regarded as a kind of "Catalan General Direction". For example, Pere Carreras i Pujol served at the Hospital of Barcelona since 1842 and was its director at least between 1853 and 1858 (figure 3)⁹. His long stay in the biggest hospital of the Principality must have turned him into a kind of unofficial Chief of military public health in Catalonia against

⁹ Personal record of Pedro Carreras Pujol. AGMS, Sección 1, Legajo C-1611.

the periodic changes in the Sub-inspection, which for a long time was run by a number of non-Catalan doctors. When in his last year Carreras was moved to Granada as Chief of district, he was replaced in the post by Antoni Martrús i Codina, who had been working in the hospital at least since 1853. Martrús was appointed to the Sub-inspection of Catalonia in 1860 and, then, was substituted as director by Josep Carles i Martí, another doctor from the hospital. In overseas territories, similar events could have happened, though we lack precise data.

The particular involvement of Catalonia in the Elizabethan Army helps to explain two short military expeditions launched during the 1840's, whose medical direction was assumed by Catalan doctors. In 1848, the Captain General of Puerto Rico, Joan Prim i Prats, put down a revolt in the Caribbean island of Saint Thomas, with the consent of the colonial power in charge, Denmark (De Diego, 2003). Saint Thomas was in practice a "captive market" of Puerto Rico and the restoration of order was in benefit of Catalan commercial interests. On the other hand, in 1849 Spain sent a military force to Italy, as part of its participation in the Holy Alliance, to re-establish Pio IX's Papacy against the newly proclaimed "Roman Republic" (Marín, 2005). An expeditionary force left from Barcelona with some 10,000 men, many of whom were Catalans, and whose medical directors were Pere Carreras i Pujol and Joan Faura i Canals, at the time director of Tortosa's military Hospital (Tarragona). The expedition acted mainly in the territory of the reign of Naples and, given either the historical connection of the area with Catalonia, or the Catholic aims of the mission, it must have found significant support in conservative Catalonia.

In short, all these facts show that during the Elizabethan period (especially in its last decades) a "differentiated" participation of Catalonia in the Spanish military public health was achieved, which at the same time contributed to its general stability. During the First Carlist War, the Army health system had to confront the very serious problem of the alternative medical organisation set up by the forces of the pretender Don Carlos. The new "sanitary model" of Army public health suffered the risk to die before being born. Meanwhile, in Catalonia, the gap between liberal and traditionalist sectors avoided, during that same conflict, any attempt of defining a particular Catalan position within Spain (or of changing Spain to get that position). Through the development of the last decades, mainly the "Catalanisation" of the Principality and the creation of the 'Cuban space', a relatively stable Spanish Army public health was achieved (although its organisational and scientific level was frequently considered insufficient) and a certain degree of autonomy was obtained for Catalans within it (although certain sectors claimed for more).

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Figure 3 – First page of the personal record of Pere Carreras i Pujol. Source: Archivo General Militar de Segovia, Sección 1, Legajo C-1611.

The open colony: Creole, coolies and black practitioners and military public health in Cuba

As the two previous sections have shown, the "Cuban space" was essential for the Spanish Army health system, as it provided a decisive component for the creation of the trans-imperial circulation of peninsular military doctors and of the particular circulation of Catalans. On the contrary, it is obvious that Cuban doctors were paradoxically excluded from that space, even though around the middle of the 19th century it was certainly difficult to define what a "Cuban doctor", or what "Cubanity" in general, was (Moreno Fraginals, 1995). This fact points out directly to the insufficient or weak imperial articulation of the Spanish Army health system and it is essential for its understanding.

In a "typical" modern colonial empire, trans-imperialness must be a phenomenon with a set of very particular features. For instance, the metropolis has to act as unified, unique supplier of personnel for the colonies. This means that the circulation has to be organised through common institutional ways and with uniform criteria, not existing other parallel circuits towards the colonies from other metropolis. Besides, the number of this personnel has to be relatively modest; its circulation, characterized by long-term stays; the freedom of action with regard to metropolitan policies, significant. A trans-imperial connection with such stability is reflected in a closed, homogeneous metropolitan space, in the subordination of inner local sub-state structures and of the capacity of expansion towards neighbour societies.

In the case of Spanish Army public health, the circulation of doctors towards Cuba and Puerto Rico was not unified, since Catalan military doctors set their particular itinerary and, as it will be seen later, there were other areas such as the Basque Provinces which contributed well below their possibilities. Besides, that circulation was not unique, since, for instance, a network of Cuban Creole doctors was established between Cuba and several European countries, USA and Venezuela. Due to existing circumstances on the island, many Creole doctors decided to study in Paris, London or New York, or travelled there in order to know the new scientific doctrines and techniques. Therefore, in many ways, their level was higher than the Spaniards' and some of them got international prestige in their specialties (Massons, 1994; Moreno Fraginals, 1995; Delgado 1996a). Instead of working for the Army, Cuban doctors had private cabinets or clinics and a number of them finally settled down in foreign countries because of professional reasons or because they were constrained to go into exile by the Spanish Cuban authorities. In both cases, these doctors often joined "annexionist" circles or returned to Cuba in several different moments in order to take part in the revolts against the Spanish rule.

Of a different kind was the circulation of Chinese doctors, connected to the arrival to the island of over 150,000 Chinese indentured workers from China and the Philippines (known as *coolies*) and of several thousands of Chinese emigrants previously established in California (Delgado, 2004). The official authorities, including those of military public health, systematically ignored these doctors, although the level of Chinese medicine made also difficult its mere assimilation. Finally, the constant introduction of black slaves on the island, though slowed down from the 1840's, meant a transatlantic connection, which included healers of different African societies, who occupied an extremely marginalised position. Paradoxically, these two circuits were tolerated by Spanish authorities. No doubt, the aim was to create a radically opposed element to the Europeanised Creole doctors, in order to avoid the possibility of an independent Cuban health system.

The imperfect unity of the circulation of Spanish military doctors, along with the parallel networks out of the authorities' control, affected the stability of the trans-imperial connection. Thus, the number of peninsular military doctors sent to Cuba and Puerto Rico was "excessively" high. The rhythm of circulation was relatively quick, provided that the compulsory stay established by law was of only six years. In Cuba, for instance, there were at least three district Sub-inspectors between 1846 and 1868 (although in the Army in general it was worse, since there were eight General Captains in the same period)¹⁰. Regarding freedom of action, it was cut down, since the framework of the development of Army public health closely followed the peninsular legislation and institutions.

As a result of such instability, Spain was unable to set up in Cuba a colonial army public health system in the way that other European powers did in some of their colonial territories. In the first place, the "public health space" of the island lacked both homogeneity and closeness. As previously said, Catalan doctors had a particular geographic settlement, which also extended towards Puerto Rico, and a higher tendency to private practice. There were also differences between the equipment of the Western and Eastern half of the island, as well as a gap of health structures between them. In short, everything made the new 'island physiognomy' less complete than what Moreno Fraginals suggests, also for Army public health.

Secondly, the Spanish Army public health was clearly unable of taking on the local structures, although for very opposite reasons. Regarding Creole doctors, their training, equipment and income level were paradoxically better and higher than what the Army could offer them. Had they taken part in military public health, they should have been given relevant posts, a possibility that Spanish authorities could not permit. On the contrary, the lack of

¹⁰ In the British Empire, the length of overseas stays of military doctors was significantly higher, as it may be seen in Harrison (1996) and Haynes (2001).

integration of both Chinese physicians and black healers was due to their systematic marginalisation and exclusion from Cuban society respectively. Just as no colonial troops with Spanish officers and black or Chinese soldiers were created in Cuba, no Health Brigade with Spanish doctors and black or Chinese assistants (medical assistants, nurses and auxiliary soldiers) was established.

Finally, there were hardly any chances for a possible expansion of Army public health in Cuba, either on the island or overseas. Regarding the former, the measures taken in the brief period 1853-1854, when Milicias blancas were created and Batallones de negros y mulatos restored, had little impact due to their small size and to the absence of .further development. Their influence on Army public health must have been small. Regarding the latter, the international context in the Caribbean and in the American continent did not help either the Spanish and European expansionism against the young Latin-American republics and the USA. No doubt the lack of integration of non-Spaniards in the military health system was partly linked to this impossible expansion. In fact, the only time when a small number of Creole doctors and assistants were recruited was during the Spanish annexation of Santo Domingo between 1861 and 1865 (Massons, 1994, p. 192). Likewise, some "emancipated blacks" were recruited in Havana in 1862 to boost the colonization of Fernando Poo island (in the gulf of Guinea), where they were employed by the local Spanish military units in the creation of a small "facility of acclimatisation and recovery" on the island (De Castro, 1994).

In short, the important direct presence of Spanish Army public health in both Cuba and Puerto Rico ultimately attempted to compensate the general instability of the trans-imperial connection. The Spanish authorities were always concerned about the risk of Creole doctors organizing independent health structures; therefore causing their exclusion or exile and making the attraction measures such as the expedition to Santo Domingo or the forced introduction of Chinese doctors and African healers to make collaboration against the Spanish authorities as hard as possible. A fragile balance was achieved, but it did not prevent the different Cuban groups to start collaboration during the Ten Years War (1868-1878).

The open metropolis: Military public health in the Basque Provinces and in the Camp of Gibraltar

The unstable imperial articulation of the Spanish Army public health was reflected as much in the peninsula as it was in overseas territories. In brief, both facts were inseparable. The metropolis was also configured as an open, heterogeneous space, with alternative circulations not fully integrated in the general core. Two particular regions showed most clearly these features, though by opposite reasons: the Basque Provinces and the Camp of Gibraltar.

Although the situation of the Basque Provinces was not the only reason why the First Carlist War broke out, no doubt it was one of its main causes. In the field of Army public health, as previously said, the Carlists set up a whole health system of their own, the nucleus of which was located in the so called 'Northern front'. The Carlist Army health system had its own Director (firstly, Teodoro Gelos; afterwards, Bartolomé Obrador), its own regulations (passed nearly simultaneously with the first Elizabethan regulations of 1836), its own hospitals and health personnel (Massons, 1994, vol. II, pp. 106-119). The war did not end in victory or defeat but in an agreement symbolized by the 'hug of Vergara', which started a period of 'exceptionality' for the Basque Provinces within the Constitutional frame, including the army. Until 1876, most of their traditional legal regime was kept, including among other things the maintenance of their own government institutions (Juntas Generales, Diputaciones), and tax and military service exemption (Castells, 2003, p. 121).

After the war, the Basque participation in the Spanish Army health system decreased. Military hospitals were slowly closed down, mainly from the 1850s on, except for those of Vitoria and San Sebastian. Parallel to this, the figure of Basque military doctors decreased to a much more modest number than what corresponded to this area in terms of population, both in Spanish and overseas posts. Just a small number of Carlist doctors chose the "assimilation" within the Constitutional military health system after the war (Massons, 1994, vol. II, pp. 114-116). The Basque Subinspection was usually held by second-class Sub-inspectors, unlike, for instance, in important districts such as Catalonia and Castilla La Nueva, and generally by doctors born in other regions (among others, León Anel Sin between 1851 and 1855 and Ángel Saleta Galli until at least 1858)¹¹.

Basque doctors mainly chose civil public health or private practice (individual or in mutual aid societies). For instance, in 1836, during the Bilbao siege by the Carlist army, the Civil Hospital of Achuri was opened in the city, funded by the town council and the *Diputación General* of Vizcaya, which had a great development throughout the century (Granjel & Goti, 1983). But there were also doctors, medical assistants or auxiliaries who, at the end of the war, chose to exile in France, returning later in some cases to take part in new armed uprisings (Massons, 1994, vol. II, p. 115). Finally the war was an essential factor in the first big wave of Basque emigration towards America in the 19th century. Among the thousands of emigrants there were doctors, surgeons and

¹¹ Personal record of León Anel Sin. AGMS, Sección 1, Legajo B-1787. assistants, both liberal and Carlist, who resumed their jobs not in Cuba or Puerto Rico, but in countries such as Uruguay or Argentina, as the example of Cayetano Garviso shows (Gil Pérez, 2001).

Contrasting with this Basque ability of articulating a space and network of their own, for the most part outside the axis and the spaces of the Spanish Army public health, the case of the Camp of Gibraltar represented an opposite case. This county, located near the Rock of Gibraltar and occupied by Great Britain since 1705, comprised around a fourth of Cadiz's province and represented a peculiar formation within the Spanish administrative system. Its origin dated back to the British conquest of the Rock and was the consequence of a personal decision of King Philip V. This king gathered a strong contingent of troops around Gibraltar with a view to its reoccupation and ordered that its former inhabitants, relocated in the towns of San Roque, Algeciras and Los Barrios, were to be considered as "my city of Gibraltar settled in its camp" (Montero, 1860, p. 326). Even though the General Commander of the Camp, first residing in San Roque and from 1805 on in Algeciras, theoretically depended on Cadiz's Military Government, in practice he acted autonomously and depended on the central authorities as if he were a General Captain. With time, he also took on powers for tax-collection and since 1852 those of the Civil Governor, thus gathering in his hands both the civil and military power in the area (Montero, 1860). Despite the widening of the Camp boundaries and the increase of its Governor's powers, its existence was hardly ever recorded in the legislation.

Regarding Army public health, none of the rules that were passed during the Elizabethan period made any reference to the Camp of Gibraltar. Nonetheless, a military hospital "specific of the Camp" functioned in Algeciras with its own director, who acted as health Chief in the area. For instance, José María Santucho Marengo, who became General Director between 1866 and 1868, served as director of the hospital for five years (1839-1844?) (Hernández Giménez, 1990). The doctors of the regiments established in the Camp – whose number decreased as garrison decreased, although in this period it still meant some thousands of soldiers – depended on the Algeciras Hospital. Just as the general military administration, Army public health in the Camp concentrated some powers of the civil health system, due to the lack of public health or welfare institutions in the area.

The *de facto* existence of the Camp of Gibraltar and of the "personalist" concentration of power by its military authorities reflected the more general fact that a wide area in the south of the peninsula escaped the Army and military public health organization. But, unlike the Basques, it did it 'from below'. The weak presence of Army structures in Andalucia and Granada was

worsened by the British occupation of Gibraltar, which had an attraction effect in competition with the Spanish authorities. The British occupation of the Rock was not only accepted as irreversible (there were no more "sieges" like those of the 18th century), but also likely to increase territorially, as it did in several occasions during this period (Cordero, 1960). Gibraltar consolidation was reflected in the creation of a health board, first called "the health commissioners" and afterwards the "health council" of Gibraltar, in charge of all the health measures in the Rock. In practice, these measures, especially when epidemics took place – such as cholera in 1858 and 1865 - affected not only Gibraltar's population but also the Camp's and beyond (Montero, 1860). For all this, the General Commander of the Camp took on also civil health powers as a means to stop the increasing 'impact' of the Rock's measures. Nonetheless, the bigger the size of the Camp and the authority of its military chief, the greater their vulnerability towards Gibraltar influence.

On the other hand, the direct military presence of Great Britain in the Rock was inseparable of the social disorganisation all along Andalusia and Granada throughout this period. Smuggling was traditionally the main source of income of Gibraltar and gave some of the Andalusia and Granada population –unwilling or with no chances to fit into society- both guns and products such as tobacco or textiles to earn their living and stay "outside the law". The existence of armed groups outside the Army and the Civil Guard (created in 1844) reflected the inadequate extension of military structures in this part of the country and made the relatively small troop contingents of the districts of Andalusia and Granada stay in a state of "pseudo-campaign". The location of the Camp of Gibraltar was strategic in the routes of the bandits-smugglers, so one of its main tasks and justifications was the suppression of their activities.

Although the number of doctors from Andalusia and Granada in the military health system was important in this period (General Directors García-Briz and Santucho were from Malaga; Bastarreche, from Cadiz), it was actually lower than what corresponded to the population of both areas. Until 1854 there was a kind of 'line' of military hospitals following the boundary between the districts of Andalusia and Granada¹². This line started at Cordoba's hospital and followed through the ones in Ecija, Osuna and Medinasidonia, until the one in Algeciras. All of them must have been justified by the Army's activities against banditry-smuggling.

12 R.O. determinando los hospitales militares en que ha de establecerse el servicio por administración directa, y los que han de suprimirse. Madrid, 5 de junio de 1854. Colección Legislativa de España, 2º cuatrimestre, pp. 121-122.

Inside or outside the empire? Army public health in the Philippines

Up to this point of our analysis of the imperial configuration of the Spanish Army public health system, the Philippines have not been mentioned. The reason is that its situation around the middle of the 19th century showed perfectly the weakness of the Spanish imperial organization, though for opposite reasons to the case of Cuba. While the Spanish Antilles had an "excessive" weight within the military health system, the Philippine archipelago had no doubt too little. In formal terms, the development of the Army health organization in this territory was closer to a "colonial model" than anywhere else in the whole Spanish Empire in this period. However, their extreme modesty limited to a minimum any impact on the peninsular context and even on the archipelago itself, to an extent that it seemed to be more outside than inside the empire.

In the Philippines, Spanish military doctors acted with unity regardless their place of birth. For instance, it is significant that two Catalan doctors, Antoni Codorniu Nieto, between 1844-46 and 1849-59 (figure 4), and Josep Brangulí i Doménech, between 1859 and 1865, were in charge of the Sub-inspection of the district¹³. Their own careers before and alter their work in the Philippines reflected a higher level of integration in the imperial frame than the Catalan group in general. Thus, Codorniu studied in the College of Surgery of San Carlos in Madrid and worked in Madrid's military hospital before departing for Manila. Later on, he was appointed Sub-inspector of Castilla La Nueva and took part in the War of Africa before finally joining the Higher Medical Board. Meanwhile, Brangulí had been appointed to the Military Hospital of Badajoz and as Sub-inspector in the Canary Islands. However, the scarce number of Army doctors in the Philippines (12 in 1846 and 23 in 1859), prevented this dynamics to foster the unity of peninsular and imperial circulations.

The rhythm of circulation of peninsular doctors towards the Philippines was way too slow. The minimum stay period established by law, six years (as in Cuba), and the number of Sub-Inspectors from 1844 to 1868, the same as in the Spanish Antilles, do not seem to reflect this fact. However, due to the strongly 'unhealthy' conditions for Europeans and to the Spanish projects for expansion in the archipelago, it would have been more logical to organize a more frequent rotation. On the contrary, military doctors used to exceed the minimum stay by far, like Antoni Codorniu, who stayed in Manila for 15 years, or Rufino Pascual y Torrejón, who served there between 1854 and 1862. As a result, mortality rates were very high and, for instance, Codorniu had to replace two Sub-inspectors who died there, José Fernández de Ceballos, in 1844, and Joaquín

¹³ Personal record of Antonio Codorniu Nieto. Sección 1, Legajo C-2977.

TOPOGRAPIA MÉDICA

DE

LAS ISLAS FILIPINAS

POR EL DOCTOR

D. ANTONIO CODORNIU Y NIETO,

Subinspectoa Médico de primera clase del Euerpo de Sanidad Moilitar, y Gefe del mismo Euerpo en aquellas Islas.



MADRID: 1857.

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IMPRENTA DE D. ALEJANDRO GOMEZ FUENTENEBRO, calle de la Colegiata, núm. 6.

Figure 4 – Frontpage of the book "Topografía médica de las Islas Filipinas" (1857) by Antoni Codorniu i Nieto.

Ponce Beato, in 1849. Therefore, service in the Philippines was neither a simple *step*, nor a prolonged *settlement*, but rather a kind of *adventure*, with the subsequent damage for the general operation of the military health system.

On the other hand, there was hardly any possibility for Philippine Creoles to set up a military health system independent from the Spanish authorities, given their scarce number and their general collaboration with colonial institutions. Other European powers such as Great Britain, France and the Netherlands did not put a threat either, despite the non-rare presence of a number of doctors from those countries in the archipelago. By contrast, it could be said that Spanish colonial ambitions were at a disadvantage, or had to re-affirm themselves constantly, against those of other local societies in the region. The definition of an "island physiognomy" in the Philippines was very far from being reached in this period, since the Spaniards did not even have their hegemony guaranteed in the archipelago.

To understand this, one must bear in mind that the number of Spaniards and Creoles remained more or less around 5,000 for a native population of about 3 and 5 millions of people (Regodón, 2002, p. 23). In comparison, the number of Chinese emigrants (known as *sangleys*) was of 9,000 in 1854 and increased up to 50,000 at the end of the century (Regodón, 2002). In the south of the archipelago, the population of the Muslim Sultanate of Joló may have been even higher. Besides, the Spanish presence in the archipelago was limited in this period to a part of the islands of Luzón and Cebú and to a number of coastal forts and enclaves in Mindanao and other smaller islands. Thus, the greatest part of the land and the population were actually out of reach of the Spanish administration. The geographical distribution of the *sangleys* followed Spaniards, while the Muslim population was concentrated in the South.

Under these circumstances, the Spaniards could not attempt at integrating those groups, but rather had to guarantee their own supremacy against them. For instance, according to Regodón, the Spanish authorities were always reluctant towards the *sangleys*, "suspecting that, with time, they could feel tempted to seize the country" (Regodón, 2002, p. 24). This fear was not only due to their great number, but also to their high level of organization and the preservation of their habits and culture. To neutralise them, politics of restrictive immigration and systematic segregation from the administration and institutions were implemented, preventing them from any kind of participation in the army and the military health system. Traditional Chinese doctors in care of *sangleys* must have outnumbered Spanish doctors. They focused on private practice and on the service of their own community, although they

also "enjoyed some reputation and had patients among the Europeans" (Regodón, 2002, p. 31). There must have been frequent contacts with continental China to acquire equipment and drugs. However, since the *sangleys* used to follow the slight advances of the Spanish army in the archipelago, it does not seem adventurous to think that some of these doctors assisted the soldiers or were allowed to act among the native population with "attraction" purposes, though always without official links to the military health system.

Against this "pacific" firmness towards *sangleys*, confrontation with Muslims was constant. The Spanish authorities frequently complained about the "piratical" acts carried out by the "Moors" from Joló or from other Southern islands, but the truth is that Muslim presence in the area was very consolidated and reached a significant part of Mindanao, the second largest island in the archipelago. To counteract it, a military expedition of some size was carried out against the Sultanate of Joló in 1851, where Antoni Codorniu acted as medical chief (Massons, 1994, vol. II, pp. 204), although its outcome was modest. As part of this general confrontation, the competition of Muslim doctors meant a threat to the supremacy of Spanish medicine, with apparently no contact points as in the case of Chinese doctors.

In both cases, the integration of practitioners, which could have been of great help for the spread of the Spanish military health system, was neither wanted nor feasible. Actually, their presence was so relevant and autonomous that they almost could aspire to compete with that system. On the other hand, without a clear dominant position in the Philippines, it seemed an utopia to try and expand Army public health to other Spanish legal possessions in the region, such as the Carolinas and Marianas islands, or to undertake new colonial enterprises as it happened with the military expedition to Cochinchina in 1859 (done in collaboration with France).

In this period, the first steps were taken towards the constitution of a colonial army, later known as the 'indigenous army of the Philippines' (Massons, 1994, vol. II, p. 203). The huge mortality suffered by the regiments sent from the Peninsula, along with the great difficulty to keep a steady communication (the distance from Spain was 24,000 kilometres and, not yet existing the Suez channel, the trip took some five months) were the reasons why native soldiers were called to join the army, generally in those areas where Spanish presence was stronger. In the expedition to Joló, native soldiers must have been a great part of the 3,000 men mobilized, apart from other group of 1,000 natives with no official relation with the army. We lack precise information about the health care received by these men, but it is not unreasonable that they took their own healers.

When the Health Brigade of the Philippines was created in 1869, all its men were native, except four Spanish sub-officers (Massons, 1994, vol. II, p. 200). However, the reach of these measures was insignificant regarding the total population, territory and ethnic groups of the archipelago, so speaking about a 'Philippine colonial' army or a 'Philippine colonial' military health system seems quite excessive.

According to all these facts, the place of the Philippines district within the context of the imperial military health system was rather secondary with regard to administrative or institutional development. As previously said, the poor state of military hospitals in the archipelago was registered in a report of the Ministry of State in 1856. The military hospital in Manila, a building from the 16th century, was at this period in such a pitiful state that their patients had to be moved out to the Hospital of San José or San Juan de Dios in Cavite, which was also the Navy's hospital. Actually, the reform projects of the hospital had started in 1844, but the centre did not function until 1886, after countless delays and even a collapse of the building under construction by a cyclone in 1882 (Regodón, 2002, p. 63). Apart from it, there were only two small military hospitals in Cebú and Pollock (Mindanao).

To expand or to break up. The peninsular Army public health and the War of Africa

Despite its internal and international weaknesses, the 19th century Spanish Empire reached a fragile balance which allowed an attempt of expansion of both the metropolitan and colonial spaces. This attempt took place during the government of the Unión Liberal, led by General Leopoldo O'Donnell, between 1858 and 1866, and has been described as the "policies of military expeditions" or the "policies of prestige" to point out either its main activities, or its poor practical outcomes (Jover Zamora, 1992). Contemporary actors did not ignore that such an expansion went along with the inner consolidation of the peninsular and overseas administrative and institutional structures, and some of them considered it as the main actual goal of such policies. Both processes were inseparable and therefore, internal unity resulted as weak and ephemeral as expansion itself (García Balañá, 2002).

The Morocco campaign or War of Africa represented the metropolitan aspect of this imperial effort of expansion and cohesion¹⁴. This conflict took place when Europe seemed to go back to its secular armed conflicts with the Crimea (1853-1856), Italy (1859), Austro-Prussian (1866) and finally, Franco-Prussian (1870-1871) wars. Despite a symbolic, almost clandestine participation in Crimea through the "trip to Orient" of General Prim (De Diego,

14 The "military expeditions" included, by chronological order, those of Cochinchina (1859), Marruecos or *Guerra de África* (1859-1860), Santo Domingo (1861-1865) and Mexico (1862), besides a Navy expedition known as *Guerra del Pacífico* (1866) (Marín, 2005).

2003), and of a ghostly "Iberian legion" which may have supported Garibaldi in Italy in the 1860s (García Balañá, 2002), the truth is that Spain did not have enough military strength to take part in such European conflicts. In this sense, a war with Morocco was the closest thing Spain could afford itself. Despite the aggressively colonialist rhetoric used to "orientalise" or "barbarise" the Maghrebi country, a hypothetical attack was actually a difficult enterprise, both due to the relatively strong Moroccan army and to the powerful European interests focused on the region.

Besides, as Alberto García Balañá points out, the wars of that period had an inner, very clear aspect of "reform", intended to "socially open the civil and military administrations" to the middle and working classes, but also a "nationalist" one, to strengthen the cohesion of or fulfil the liberal patriotic ideals, including the 'nation in arms' (García Balañá, 2002). In the Spanish case, the movements in this sense were modest, symbolized by the weak balance of the Unión Liberal and by O'Donnell's personalist government. Some internal agreement allowed at least to strengthen the central administration and to deepen the army reform started by Narváez in the 1840s, as well as searching for a higher identification with the nationalist project of areas such as Catalonia (Jover Zamora, 1992; Puell, 2000; García Balañá, 2002).

Regarding external expansion, and specifically for Army public health, the Moroccan campaign meant the strengthening of the Spanish presence in Morocco. For the first time, military doctors could act beyond coastal enclaves (Ceuta, Melilla, Chafarinas Islands, Rock of Vélez de la Gomera and Rock of Alhucemas) into inland Moroccan areas. For example, during the combats, two small military hospitals were set up in Tettouan, and during the occupation of the city (1861-1863) the Catalan doctor Sebastián Cabanes i Matarrodona remained in charge of the troops (Massons, 1994). The war also meant a stimulus for Spanish enclaves. The camps of Ceuta and Melilla widened, at least legally. Ceuta stopped depending on the Andalusia district and became the General Captaincy of Africa, with its own health chief. All enclaves were declared free ports and, with time, military hospitals and infirmaries were set up or those already existing were improved (Martínez Antonio, 2005b).

In the end, the outcome was much less than expected, provided the high sanitary expenses of the campaign and the nearly hundred military doctors who participated in it¹⁵. Great Britain's opposition to the occupation of Tangier was decisive in this sense. France could not oppose to it directly, although in the same year 1859 it had sent a military expedition to the East of Morocco from the Algerian Oranais. But it is also true that Morocco's initiatives helped reducing Spanish success. In the diplomatic field, the Sultan managed

¹⁵ Ejército de África. Estado del personal de Sanidad militar. Memorial de Sanidad del Ejército y Armada, Años 1859-1860, pp. 663-667. European rivalries for the benefit of the country's sovereignty. Militarily, both Muley Abdehrraman (1822-1859) and Muley Mohammed (1859-1860) started a reform of the army and its health system, known as *nizam* (New Order), which paralleled those of the Ottoman Empire and Egypt (Rollman, 1983; Martínez Antonio, 2005b). In this period, a number of Moroccan medicine students were sent to the military medicine schools in Istanbul and Cairo to get trained and later on to work in the new military units called *askar*. Exchanges of scientific works, many of military content, were promoted with those countries and Tunisia (Moussaoui & Roux Dessarps, 1995). During the War of Africa, Morocco got British technical help from Gibraltar, maybe also for public health issues. In the following years, a certain number of the men sent to the Rock for military education were trained as "medics" (Pennell, 2000).

Inside the peninsula, the degree of unity of the Spanish Army public health system became higher than usual. For instance, over 30 Catalan doctors were distributed quite homogenously all through the four divisions of the army of operations. The medical direction of this army was also in the hands of another Catalan, León Anel Sin, probably due to his personal relation with General O'Donnell, although he got sick and had to be replaced first by José María Santucho and later by Antoni Codorniu (Massons, 1994, vol. II, p. 222). But at the same time, there was a more explicitly defined Catalan participation through the corps of Voluntaris catalans (Catalan volunteers) organised by the Diputación Provincial of Barcelona commanded by General Prim. The 500 voluntaris were assisted by 30 Catalan civil doctors recruited and paid by the Diputación, which also established a civil hospital for them in the Camp of Gibraltar, run by Dr. José Esteva Vidal (Calpena & Junqueras, 2003, p. 166; Massons, 1994, vol. II, p. 223). The participation of voluntaris and civil doctors meant that the "liberal" or "mesocratic" sector of Catalan society, which had only involved itself in the creation of Milicias Provinciales and Cuerpos Francos in short periods (the most recent one, in 1856), was now significantly articulated with the army. There were also Basque volunteers from the Diputación General of Vizcaya, with their own doctors.

Besides, the War of Africa came along with a number of administrative and institutional developmental actions of the peninsular military health system. In 1860 the Central Store of medical equipment was founded in Madrid, in order to store and distribute first-aid kits, instruments or means of transport for the wounded of all districts. In that same year, the first 'health group' was set up in Ceuta, which, despite being dissolved at the end of the war, provided a precedent for Health Brigades created in the following years. The reform of army barracks according to new sanitary

criteria was also accelerated, as well as the construction of new hospitals and the collection of statistical data on the ill and diseased in hospitals and regiments (Martínez Antonio, 2005a). However, neither the School of military medicine, nor the drug laboratory were finally created in this period, nor doctors achieved the technical control of health issues against military chiefs.

In short, the degree of expansion and cohesion achieved through the War of Africa was small and did not last long. The image left by the Army public health system during the war was that of thousands of cholera patients being evacuated through hospitalships or simple merchant boats to a great part of the peninsular military hospitals (Serrallonga, 1998). In the context of international competition, not to grow meant risking to break up. Only some years later, the military health structures set up by the Independentists in Cuba and by the Carlists and Cantonalists in Spain put the very existence of the Army public health system in danger throughout the empire. Once these problems were somewhat solved, the expansion of the Spanish Army health system started to shift towards Africa, although by that time the traditional position of force in Morocco had been lost.

Conclusion: the "visible weft" of the empire

The Elizabethan period was another relevant historical phase in the trajectory of collective action against disease in the Spanish Empire. After the loss of the American continental possessions in the first decades of the 19th century, Spanish public health found itself in a substantially weaker position in the international context and with serious problems of internal fragmentation. This was reflected, on the one hand, in a preferential development of the maritime and military branches of the health system, which became actually the only ones with a true imperial scale. On the other hand, in maritime and military public health – the latter has been the object of this paper – the establishment of a "sanitary model" stable enough to substitute the previous one of "medical police" character was only possible on the basis of a trans-imperial axis Madrid-Havana, in which both cities converged as the imperial centre. The translocation of the core of the imperial military health system revealed the crucial role of the Cuban space for the balance of the system as a whole.

However, this connection was too close: the general weakness of the Spanish Army public health was reflected in the impossibility of creating "typical" metropolitan and colonial spaces, with enough separation between them. Likewise, it was not possible to establish metropolitan and colonial spaces sufficiently close and homogeneous. The impossibility of preventing external influences

and internal division was reflected in events such as the "differentiated" participation of Catalan doctors in the military health system, the particular trajectories of the Basque Provinces and the Camp of Gibraltar in the peninsula, the specific circulations of Creole, *coolies* and black practitioners in Cuba and of *sangleys*, Muslim and native practitioners in the Philippines. This territory, in this period, still remained more outside than inside the empire, in sharp contrast with the position of Cuba and Puerto Rico. Finally, during a short period between the end of the 1850's and the beginning of the 1860's, it seemed that the system had reached a balance which made possible a certain strengthening of the imperial articulation. However, as the case of the War of Africa (and also those of the campaigns of Mexico and Cochinchina) showed, such a balance was short-lived and had little practical results.

In our opinion, the analysis of the case of the Spanish Empire is useful to prove the general validity of the imperial perspective because it helps to observe in an especially explicit way the transversal connections hidden in other empires. In the Spanish case, the trans-imperial "weft" in medicine and public health was particularly "visible", but we may assume its generalised existence in other imperial health systems of the time. The only difference would have been the degree of "visibility" of networks and circulation.

In sum, we believe that the use of an imperial approach has allowed a better understanding of the historical evolution of the Spanish Army public health, either in the peninsula, or in overseas territories, and also to identify the initiative of certain groups and territories which were absent from official narratives and from historiographical accounts. The limited length of this paper has not allowed many details, but as we said before, the question was more the synthesis, the formulation of "imperial questions" as such, than detailed description, though our paper has tried to keep a balance between the two. We believe that a higher level of complexity often means a higher level of reality.

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