# Variety and Spatial Distribution of Occupations in the late 1800s in the Pueblos of Manila

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## **Abstract**

The occupational structure of a city provides interesting information on the patterns of urban development that underscores its economic, cultural, and political functions. Characterizing the labor market of the arrabales of Manila in the 19<sup>th</sup> century would complement the work contributed by distinguished scholars such as Doeppers (1998), Gealogo (2010), Camagay (1995), Reed (1967, 1972, 1978), among others, by extending the discussion on the urban economies of the city, taking account of the workforce and the types of occupation they were engaged in, across the pueblos surrounding the colonial capital.

This research sought to explore further the spatial tendencies of the labor market in the pueblos of Manila to further enrich the existing literature on the urban development of the colonial city toward the last years of the Spanish government. Wage, gender, and the spatial distribution of occupations are the elements explored in this study through spatial visualization tools and descriptive statistical analysis.

Key Words: Manila, urbanization, occupations, 19th century, GIS, Extramuros

# 1. Introduction

Geographer Mark Jefferson is noted in literature for his conception of urbanism in the western world specifically the primacy of select urban centers, which aside from amassing a large share of a nation's population also served as a "multifunctional center" of national and international economic, cultural, and political significance. Such characteristics of a primate city are evident in both the western world and the colonized territories. It is not uncommon to find reference to the city of Manila as the first primate city in Southeast Asia (see Owen, 1984 p.210), but while many scholarly works have described the various elements of urban development that constitute its primacy (e.g., McPhelin, 1969; Owen, 1984; Reed, 1967, 1972, 1978), the breadth of available information from the Spanish registry on the economic activities that its residents engaged in under the Spanish colonial rule remains to be limited.

Urbanization is a process of transition to service-oriented economic activities and employment opportunities from the predominance of agriculture-related occupations. Occupational structure and the spatial distribution of occupations can provide a more nuanced description of this transition that may contribute to a deeper appreciation of Manila as a colonial and primate city at a historic phase in its development in the 19<sup>th</sup> century.

This study used aggregated statistical data based on the Padrones General de Vecindario during the years 1884-1887. Relevant variables such as age, gender, occupation and occupation classification were used to illustrate the spatial

tendencies and distribution of jobs in the arrabales of Manila surrounding Intramuros.

This paper explores the occupational structure of three pueblos in Manila to gain a deeper understanding on the characteristics of Manila as an economic center during the 19<sup>th</sup> century, when the urban market had shifted from an emporium of imported goods to exporting its native produce and mobilizing its local agricultural resources for the local population. The distribution of the work force in different industries and the concentration of specific types of jobs in certain pueblos may shed light on the economic roles and functions of the "second ring" of settlements outside of Intramuros, to further underscore the relevance of Extramuros in the urbanization of the capital city.

# 2. Objectives

This study generated descriptive statistical information on occupational structure and distribution based on the Vecindario records from the following years: 1884, 1886, and 1887. The Geographic Information Systems (GIS) and spreadsheet tools were used to illustrate and visualize certain properties of the 19<sup>th</sup> century labor market in the Extramuros of Manila to assist in identifying spatial and occupational tendencies

This research describes the composition of the work force in three districts of Manila that were economically central to the development of the capital city, but politically and economically peripheral to Intramuros and, to a certain extent, to the districts

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north of the Pasig River. This study characterized these pueblos – San Fernando de Dilao, Malate, and Pandacan, based on the occupations supplied by their respective residents to the labor market of Manila through the combined performance of the Geographic Information Systems (GIS) and descriptive statistical summaries. The main data source from which all the information herein included are based is the Padrones General de Vecindario, a registry of men and women aged 18 or above that indicates the subject's name, age, profession, place of baptism, and civil status.

#### 3. Methods

Vecindario entries under eight pueblos in Manila (Tondo, Binondo, Quiapo, Sampaloc, Dilao, Pandacan, Ermita, and Malate) were collected from the National Archives in Manila and collated into a digital database using MS Excel. Occupations were grouped following the classes employed in the 1903 (American) census of the Philippines for simplicity of job classification. The procedure for creating the spatial data and layers was based from Lagman and Martinez, 2014.

Statistical summaries were all derived using MS Excel functions, while maps were generated using ArcGIS 10.1.

## 4. Formation of the Extramuros

Reed identifies the establishment of churches as the primary factor in the organization of settlements in Extramuros, as opposed to how the Japanese quarter in Dilao or the Chinese clusters in Parian and in Binondo were designated and planned by the Spanish government. Geographically, the settlements outside of Intramuros that are presented in this study can be grouped into two: those located north of the Pasig River and those that emerged south. Binondo and the former Chinese settlement Parian were often described in literature as the commercial nucleus outside of Intramuros (Reed, 1972 p.58), with various types of business establishments and services. The landscape that stretched 10 kilometers outside of the walled urban core was dotted with more than 15 churches and smaller chapels and several hospitals in addition to other religious structures by the mid-1600s (p. 60). Two other northern arrabales, Quiapo and Tondo, where farming communities resided in by Christian Chinese, the latter having a significant population of Filipinos and was a Muslim stronghold until the 1500s. At one point in the following century, both Tondo and Binondo accommodated the Spaniards who moved from Bagumbayan, another settlement immediately south of the walled city. By the late 19th century, both Tondo and Binondo were characterized by the overwhelming presence of shopkeepers (Camagay, 1995). Tondo later on was noted as the residence of the lower class (Reed, 1967). The outlying pueblos

of Ermita, Pandacan, San Fernando de Dilao, Malate developed as clusters of settlements at the "right" (south) side of the Pasig River.

By the 17<sup>th</sup> century, laborers in areas immediately adjacent to Intramuros became wage-earners while traces of suburban processes became more evident in their population size and "degree of economic diversification" (Reed, 1978 p. 61), although residents in outlying areas remained to be fisher folks and workers in agricultural lands (p. 61). See figure below.

Figure 1. The Extramuros and Surrounding Arrabales

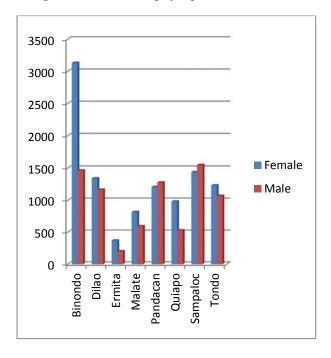


# **PUEBLOS OF THE EXTRAMUROS**

# 5. Distribution of Occupations across Pueblos

The Vecindario reveals that in the latter 19<sup>th</sup> century Binondo outnumbered the other arrabales of the Extramuros, the smallest ratio of which is nearly 2 to 1. The said pueblo also registered the most number of women engaged in at least one occupation. Closely following Sampaloc are Dilao and Pandacan, while Ermita had the least number of persons with occupation. See illustration below.

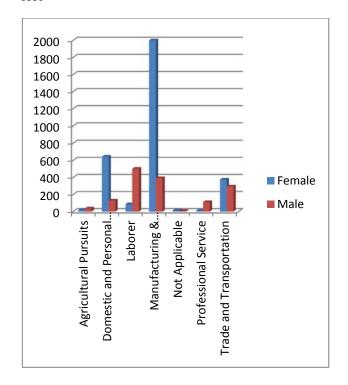
Figure 2. Number of Employed per Pueblo, 1884-1887



## 5.1.1. Binondo

More than majority (52%) of the employed residents of Binondo is engaged in manufacturing and mechanical tasks. These pursuits include sewing and cigar-making, which were performed by an overwhelming number of women laborers. On the other hand, clothes washing and manual labor employed 15% and 13% of the pueblo's workforce, respectively. Only in jobs that required manual labor did men outnumber women. The graph below highlights the aforementioned patterns.

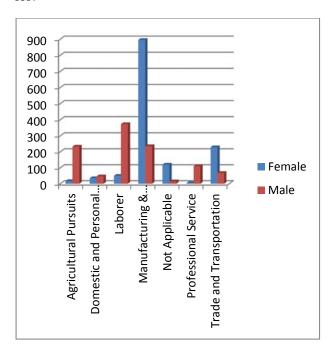
Figure 3. Occupation and Gender of Workers in Binondo, 1886



# 5.1.2. Tondo

Cigar-making employed the largest share of the workforce engaged in manufacturing and mechanical jobs at 30% of the total number of gainful workers registered in Tondo. On the other hand, manual laborers and storekeepers were 17% and 11% of the workforce in the pueblo, respectively. Despite its proximity to Binondo and Quiapo, the pueblo is unique in that there was a significant number of residents employed in agricultural activities specifically fishing (7% of the gainful workforce) and farming (3%).

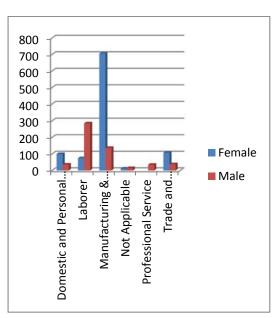
Figure 4. Occupation and Gender of Workers in Tondo, 1887



# 5.1.3. Quiapo

The top five types of workers in Quiapo were: seamstresses (28%), laborer (23%), cigar maker (18%), storekeeper (8%), and clothes washer (7%). The graph below looks very similar to that of Binondo, an adjacent pueblo.

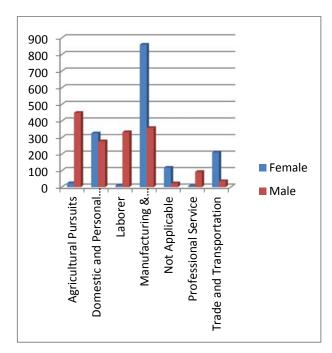
Figure 5. Occupation and Gender of Workers in Quiapo, 1887



## 5.1.4. Sampaloc

Sampaloc has a unique distribution of workers across occupation types, as shown in the graph below. Unlike the other arrabales north of the Pasig River, Sampaloc's workforce were distributed among different kinds of economic activities – workers engaged in manufacturing and mechanical pursuits comprise 38% of all the employed workers, while domestic and personal services, agriculture-related jobs, and those who provided manual labor to different industries were distributed nearly equally among different occupation types (19%, 15% and 11% respectively).

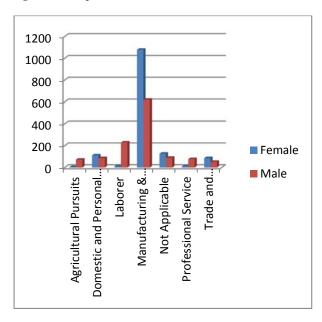
Figure 6. Occupation and Gender of Workers in Sampaloc, 1887



# 5.1.5. Dilao

Seamstresses comprise 31% of the gainful workers in Dilao, followed by cigar makers at 13% and manual laborers at 9%. Similar to Binondo, the workforce in Dilao were primarily engaged in the manufacturing industry and other mechanical occupations. Occupations related to domestic and personal services as well as agricultural activities had minimal shares of the workforce.

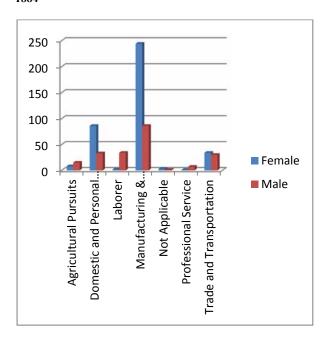
Figure 7. Occupation and Gender of Workers in Dilao, 1886



## 5.1.6. Ermita

Sewing employed the largest proportion of workers in Ermita (30%), making manufacturing the industry with the highest number of employed workers in the pueblo. Clothes washers (under domestic and personal services) and cigar makers (manufacturing and mechanical pursuits) rank second and third in terms of share of employment.

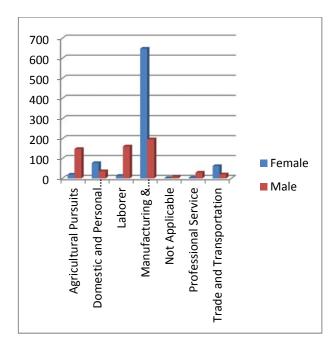
Figure 8. Occupation and Gender of Workers in Ermita, 1884



## 5.1.7. Malate

Sixty percent of the residents of Malate were engaged in manufacturing and mechanical jobs, while manual laborers and those working in the agricultural sector altogether comprise 24% of the workforce. The Vecindario data indicates that Malate is central to the embroidery industry in the Extramuros, as 25% of all the workers in the pueblo were engaged in the enterprise.

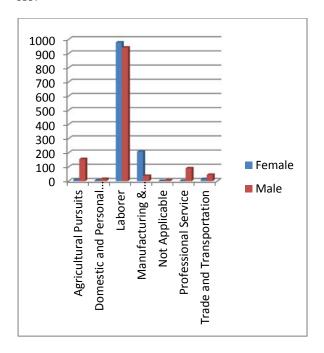
Figure 9. Occupation and Gender of Workers in Malate, 1887



# 5.1.8. Pandacan

Nearly seventy-seven percent of the workers in Pandacan were day laborers who provided service to agricultural or construction-related tasks. In addition, only in Pandacan did women and men have nearly equal participation in providing manual labor. See figure below for comparison among different occupation types.

Figure 10. Occupation and Gender of Workers in Pandacan, 1887



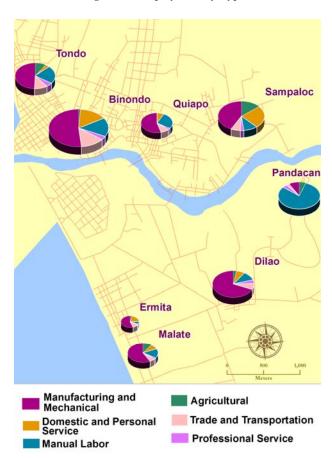
# 6. Variety of Occupations

The eight pueblos presented in this study altogether registered 76 different jobs, 57 (75%) of which were concentrated in Dilao. Binondo (46 different kinds of occupations) and Sampaloc (44) also had diverse kinds of occupations, while Tondo and Ermita had the least diverse contribution of occupations to the labor market during the period in question.

## 7. Spatial Distribution of Occupations

Domestic and personal services seem to be associated with relatively large pools of employed individuals, as exemplified by the labor pool of Binondo and Sampaloc, where the share of people with occupation was not lower than 15% of the employed workforce. Manufacturing and mechanical pursuits, on the other hand, took in substantial proportions of laborers from all the pueblos except for Pandacan. Trade and transport is almost intuitively related to the density of transport infrastructures like roads. Refer to Figure 11 below for illustration of the aforementioned patterns.

Figure 11. Employment by Type



Since wage was indicated for most of the occupations, it was possible to analyze wage distribution by classifying them into low, medium and high wage. Thus, the following classification:

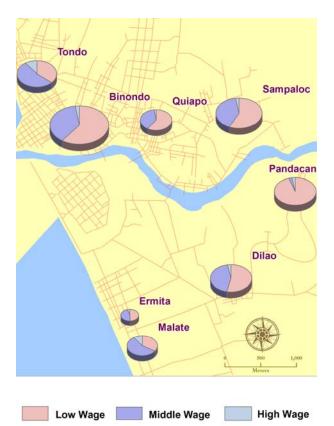
Low wage - P0.20-0.50 (e.g. seamstresses, clothes washer)

Middle – P0.6-0.87 (e.g., silversmith, cigar maker) High – P1.0 or higher (e.g., artist, barber, fisherman)

Note that actual data breaks were used as class break values.

It is apparent from the map below that majority of the workforce of the Extramuros are engaged in jobs that paid low compensation, especially in the manual workers' dominated labor pool of Pandacan. Only in Malate were low wage workers not a majority.

Figure 12. Workers by Wage Level



When wage level is further classified by gender of worker, the Vecindario data reveals that women were engaged in low and middle level wage classes. The only exception to this would be Sampaloc, Dilao and Pandacan (for low and middle wage classes), the pueblos that are farthest from Intramuros and further inland from the coast of Manila Bay. See succeeding maps.

Figure 13. Low Wage Workers by Gender

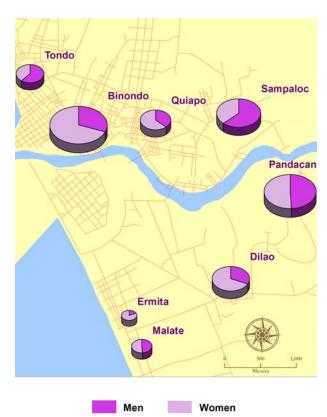


Figure 14. Middle Wage Workers by Gender

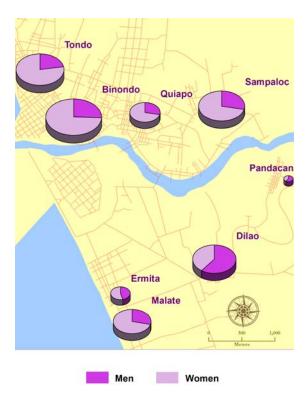
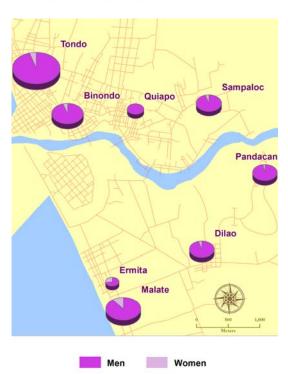


Figure 12. High Wage Workers by Gender



## 8. Observations

The results of this research presented the trends and patterns of employment that characterize the urban economies of Manila in the late 19<sup>th</sup> century, when the Philippines and the urban economy of Manila began to promote and export its domestic products and when several infrastructural developments also supported the growth of the local economy. Although the distribution of workers by occupation types were similar among the eight pueblos, Sampaloc and Pandacan present unique characteristics in that the former had a pool of workers that significantly catered to several types of industries not just in manufacturing while the latter was the only pueblo where manual labor dominates occupation opportunities. In addition, the predominance of women in manufacturing and mechanical-related occupations was also an evident pattern. They also had minimal access or participation in high-paying occupations.

Further research focusing on the ethnicity of workers as well as their age distribution is necessary to enrich the findings of the study.

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