HARLAND BARTHOLOMEW AND RACIALLY INFORMED ZONING:

THE CASE OF ST. LOUIS

HARLAND BARTHOLOMEW E O ZONEAMENTO RACIALMENTE INFORMADO:

o caso de St. Louis

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A B S T R A C T: This paper seeks to reexamine the racial questions that helped shape the comprehensive zoning proposals developed by Harland Bartholomew for St. Louis, Missouri, between 1916 and 1947. In addition to being one of the most productive urban planners in the US, Bartholomew also became a key reference for urban planning in São Paulo. The case of St. Louis is emblematic for its context of sharp racial territorial dispute, in which part of the white elite that politically supported the plans advocated the adoption of an urban residential segregation law. Thus, we analyze the plans made for St. Louis between 1918 and 1946, comparing its decisions to the racial strife present at each moment in the city. With this article, we aim to bring new elements to the public debate regarding zoning as a pertinent instrument for regulating the use and occupation of urban land.

K E Y W O R D S: Harland Bartholomew; Urban Racial Segregation; Comprehensive Zoning; St. Louis City Plans; Protection of Property Values.

R E S U M O: Este artigo busca recuperar os fundamentos raciais que contribuíram para configurar as propostas de zoneamento compreensivo desenvolvidas por Harland Bartholomew para a cidade de St. Louis, Missouri, entre 1916 e 1947. Além de ter sido um dos urbanistas que mais produziu planos e propostas de zoneamento dos EUA, Bartholomew também tornou-se referência fundamental para o urbanismo em São Paulo. O caso de St. Louis é emblemático por ter se implantado em um contexto de grande disputa racial no território, em que parte da elite branca que dava sustentação política aos seus planos urbanísticos defendia a adoção de normas legais de regulação da segregação residencial na cidade. Assim, analisamos os planos feitos por Bartholomew para St. Louis entre 1918 e 1946, cotejando as decisões estabelecidas nesses processos com os embates raciais presentes em cada momento. Com este trabalho, buscamos trazer novos elementos para o debate público acerca da pertinência do zoneamento como instrumento de regulação de uso e ocupação do solo urbano.

PALAVRAS - CHAVE: Harland Bartholomew; segregação racial urbana; zoneamento compreensivo; Planos urbanísticos de St. Louis; proteção dos valores das propriedades.

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INTRODUCTION

The Brazilian historiography that has examined the origins of modern urban thought has devoted little attention to the work of Harland Bartholomew (1889-1989), a North American author known as the creator of the *City Efficient*, and who rendered a significant impact on urbanism practiced in São Paulo after the 1920s. Bartholomew was responsible for creating more than 500 city plans and zoning proposals for around 300 cities in the US and other countries (LOVELACE, 1993: 53). Harland Bartholomew & Associates (HB&A) enjoyed a long existence between 1919 and 1984, the first 42 years of which were under the command of its founder. As early as 1958, the magazine *Architectural Forum* recognized the significance of the character: "without seeming to try, he made his planning firm the country's biggest." According to the magazine, at the time, the plans of most major American cities were drawn up by Harland Bartholomew. The firm was undoubtedly the largest company of its kind in the country (ARCHITECTURAL FORUM, 1958: 88-91).

In the US, much of the discussion regarding his work has been laudatory. In the 1970s, Johnston (1973) highlighted the geographical extent and technical reach of his performance. Lovelace (1993), a member of the HB&A team, published a biography of the urbanist, emphasizing the pioneering nature of his trajectory and of the debates with his peers. Twelve years later, Heathcott (2005) returned to his work, reiterating his experimental role as a planner, supported by a moral vision of urbanism.

A critical tone with regard to his production has only appeared more recently, through the work of Sandweiss (2001), Gordon (2014) and Benton (2017). They have all focused more closely on the experience of Bartholomew in St. Louis, where he was given the opportunity of conducting long-term work, through which the limits of his actions become more evident.

Bartholomew's work is tangential to a rarely-discussed aspect, but one that deserves particular attention: the racial question. Racial segregation is not new to the modern city. In order to situate the genesis of urban segregation in the history of civilizations, Carl Nightingale identified the practice of reserving the best parts of the urban structure for the privileged elites of even the remotest civilizations (NIGHTINGALE, 2012: 2). Since ancient times, governments have made use of several mechanisms, such as legislation and instruments to control urban land occupation, so as to ensure such results. In racial terms, according to Nightingale, segregation became effective from the beginning of the eighteenth century. According to the author, the modern movement of racial urban segregation is interconnected on a global scale through government institutions, networks for the intellectual exchange of ideas and real estate agents (idem: 4-8). In the present article, we seek to achieve an exact determination of the presence of racial aspects in the planning foundations proposed by Harland Bartholomew, selecting as a guideline, his extensive, continuous intervention in the city of St. Louis.

The North American debate on urban racial segregation has been long and prolific. By and large, the bibliography is divided into two major strands in identifying the causes of the phenomenon. The first, and most common, is linked to the housing policy and market. In a pioneering text on social housing, Abrams (1949) circumscribed the problem of racial segregation in the planning structure and

provision of public housing in the US. Taeuber & Taeuber (1965) used indicators of racial dissimilarity in the concentration of urban population per block within several North American cities, to establish patterns of residential segregation across the country. Wilson (1987) associated the problem of the production of black poverty with structural economic transformations and the formation of ghettos. In 1993, Massey and Denton conducted a major systematization of knowledge concerning racial urban segregation in the US, in order to defend its structural effect on perpetuating the condition of poverty amongst the black population. In the same vein, Gotham (2000) discussed the racial segregation arising from the housing policy promoted by the Federal Housing Administration in 1934.

Another group of authors based their analyzes on the issue of urban racial segregation in the US through the laws of land-use planning. Rice (1968) studied the laws of racial segregation that prevailed in Southern cities between 1911 and 1917. Flint (1977) systematized the historical processes involved in the creation of zoning laws in Chicago, Atlanta, and St. Louis through the racial conflicts, which emerged in these cities during the first decades of the twentieth century. Rabin (1989) demonstrated the effects of residential segregation involved in zoning, while Silver (1991) sought to reveal the racial motivations in the first zoning laws in cities of the US Southern states.

Therefore, the approach proposed by this work is closer to the second aspect, seeking to demonstrate the presence of racial foundations in the historical origins of North American zoning. We will seek to reveal that, despite the noble intentions and certain actual achievements by North American social reformers and urban planners, and particularly Harland Bartholomew, in promoting civic cities, organized efficiently from rational assumptions and occupied by families educated and prepared for collective life, the social disputes that surrounded zoning soon gave in to political pressure for the demarcation of privileged areas to be protected by legal recourse.

The prematurity, longevity and constancy of Bartholomew's performance in St. Louis prominently positioned the city as the founding matrix or "laboratory" of a professional practice that quickly spread to cities across the whole country. Thus, through studying the case of St. Louis it becomes possible to verify the stimuli, motivations and strategies adopted by the urbanist so as to validate his arguments and the product of his efforts, in the form of plans, projects and laws that were to be reproduced throughout countless North American cities.

In Brazil, interest in studying this author is associated with the fact that he has been an important conceptual and practical reference for urban planning in São Paulo. Despite the historical and cultural differences between the two countries - such as the central role of the judiciary in North American social life, where jurisprudence is one of the commonest methods of formulating laws, including those that regulate urbanism itself – from the end of the 1920s, urban planning practiced in the US became a central matrix, which influenced the concepts and practice of planning in Brazil. The most evident example is the spread of urban occupation in sparsely populated cities, supported by a transport system that ran on tires and a complex road network, a model widely disseminated and implemented in plans under the authorship of Bartholomew.

Luiz Ignácio de Anhaia Mello, one of the most important precursors of urban planning in São Paulo, is one of the authors who has drawn on Bartholomew's work

1 Cf. George Ford, "The City Scientific", 1913, apud Heathcott, 2005: 326.

as a central reference for his ideas and plans. Anhaia Mello referred explicitly to the author in one of his early writings, where he referred to Bartholomew as "the most respected of North American urban planners" (Mello, 1927: 347. [This and all citations hereafter from Portuguese have been translated by the author.]). At a later date, in several other texts, Anhaia Mello referred to his own ideas using Bartholomew's conceptions on zoning and his comprehensive plan (cf. Mello, 1929a: 58-9; Mello, 1929b: 145, amongst others).

However, although Bartholomew's work was a fundamental reference for the urban conceptions of Anhaia Mello, it has nonetheless remained little known in Brazil. Apart from a quotation by Angotti-Salgueiro (2014) recognizing this importance, few authors have reflected on the legacy of this North American urbanist and have thereby failed to identify the extent of Bartholomew's influence in Brazil, including in terms of racial issues. It is therefore of particular interesting to recover this legacy since, in the North American context, social conflicts involving racial issues have been more explicitly placed in the public debate, thereby allowing us to detect phenomena that could pass more covertly within the Brazilian context, hegemonically dominated by ideology of "racial democracy".

In summary, the argument we intend to develop in this article is that, by analyzing the plans developed by Harland Bartholomew for St. Louis, it is possible to verify the weight and importance that the racial question played in constituting the main instruments of urban planning that he developed across the US. To accomplish this goal, we draw on an analysis from a set of primary sources formed of laws, plans and zoning proposals developed by Bartholomew for St. Louis, supplemented by other data such as the geographical concentration of African-Americans within the neighborhoods, as well as reports and minutes from various city civic authorities. Another set of data consulted were the texts published by Bartholomew , which help to decipher the foundations of his conceptions. A third set of sources is made up of plans and legislations from other cities, which enable us to compose the historical context during which these ideas were formulated. These sources are compared with the already consolidated reflections on the subject by the bibliography, in order to constitute a broader picture of the problem under focus.

WHY ST. LOUIS?

Until the end of the seventeenth century, when it was appropriated by French settlers, the region where St. Louis is located was occupied by native Indians. Its port location, on the right bank of the Mississippi River, at the confluence point of its tributaries, the Missouri and the Illinois Rivers, from early on, favored intense commercial activity. The region was incorporated into the US and became part of its territory in 1803.

One hundred years later, in 1904, the city hosted the St Louis's World Fair to commemorate the centennial of the purchase of Louisiana by the North Americans. Its growth, in the early twentieth century, is associated with its geographical position as a regional port, which also contributed to the creation of a major industrial park in the city.

St. Louis is considered one of the most racially segregated cities in the country (Benton, 2017: 1-2), which would hardly constitute a boastful position. The city's

clear, strong "color line", distinguishes two predominantly black areas of occupation, along the Northern extension of the railroad and the borders of the Mississippi River.

Until the present day, the region of St. Louis is marked by racial conflicts. In August 2014, African-American Michael Brown was shot and killed by white police officer Darren Wilson in broad daylight in Ferguson, a Northern suburb of St. Louis. Different versions of the case confirm that the police officer fired a shot from inside his vehicle, hitting Brown on the hand, who then ran, but had no chance of surviving the shots that followed. His body remained on the ground for around four hours, thereby drawing desperate crowds. The protests that followed added an international dimension to the case. The repercussion eventually brought to public attention, practices perpetrated against African-Americans by the Ferguson Police Department. The case elevated the international black movement, revealing the suspicion and the use of violence by the police against the black population. Bearing in mind the degree of violence that such an extreme situation engenders, in this article, we intend to relate the commissioning of the young Harland Bartholomew in 1915, to develop an urban plan for that city mid-way between the seas and the country's frontier latitudes, and the important racial segregation that characterized the city before and after a long intervention by the urbanist.

The history of racial segregation in St. Louis refers to the context of the Great Migration across North America, the beginning of which coincides precisely with when Bartholomew was initially hired. The so-called Great Migration constituted the largest internal population displacement recorded in US history, characterized by the exodus of the African-American population from the black belt cotton plantations in the South towards a number of large Northern and mid-western cities. Demographic displacement lasted from 1910 to 1970 and involved more than 6 million people. The reasons behind the geography of this movement were environmental and economic, due to problems that affected cotton farming. Outstanding amongst these would be the crisis suffered by agrarian production in the South, related to floods and pest attacks, which led to a decrease in the demand for agricultural labor and a reduction in the associated wages (GROSSMAN, 1989: 38-65). At the same time, there was an intense industrialization of the cities in the North. However, the decline of European immigration due to World War I increased the supply of urban jobs in the industrialized areas, seen, by the black population from the South, as a great opportunity.

However, migration also had strong racial rationales: the Jim Crow atrocities and the use of violence against African-Americans. Jim Crow may be considered the most forceful, consolidated and consistent process of racialization registered in North American society from the abolition of slavery through to the civil rights movement in the 1960s.² The segregation laws imposed during this regime obliged African-Americans to use inferior facilities of buses, schools, restaurants, drinking fountains, etc. At the same time, there were various recurring practices of violence against blacks, amongst them lynching. Between 1882 and 1910, a total of 1,893 blacks were lynched by whites, particularly in the states of Mississippi and Georgia (Tolnay & Beck, 1992: 104). The tendency to join the exodus was stronger in places where more acts of violence occurred. Stimulated by the calls published in the African-American newspaper the *Chicago Defender*, widely read in the South, entire families sought to escape the ills of oppression by fleeing North. Therefore, the search for better

2 Racialization is the imposition of a form of racial domination that is established when human phenotypic characteristics acquire content that begins to structure their social relations. Cf. Silvério, 2013.

job opportunities in cities, but also the guarantee of physical survival, marked the geography of migration.

At the same time, a new modality of legislation began to nourish the aspirations of racial segregation in the cities across the South, directed towards residential occupation. Black communities were usually concentrated in the oldest, more central districts of the cities. With migration, these areas became densified but received no support from public policies, thereby generating a sequence of urban violence and problems. White authorities demonstrated little interest in sanitizing neighborhoods mostly occupied by the black population. On the other hand, those blacks who could afford better conditions sought to settle outside the central districts, encountering resistance from the whites, who intended to "keep blacks in their place" (RICE, 1968: 180).

This situation engendered a mobilization in favor of residential segregation, in the context of a growing movement for social reform, which was gaining strength within civil society and the public authorities. The movement was directed towards combating illiteracy, morbidity, crime and poverty, identified as the evils of urbanized industrial society. One of the central concerns of the movement was poor housing, considered a threat to urban health and public order. Charities commissioned studies on housing conditions in the cities, focusing mainly on neighborhoods occupied by African-Americans and immigrants. The studies sought to identify neighborhoods with collective housing, devoid of air and light, with the aim of taking "the first steps towards the removal of these evils". (Janet Kemp, Housing Conditions in Baltimore, 1907, apud Power, 1983: 294).

In the wake of this movement, on April 7 1911, for the first time in the country, a racial segregation legislation was passed in the city of Baltimore, Maryland, prohibiting the acquisition of property by a buyer whose race differed from the predominant race of the neighborhood in which the property was located. The text of the law clarified that it was

An ordinance for preserving peace, preventing conflict and ill feeling between the white and colored races in Baltimore city and promoting the general welfare of the city by providing, so far as practicable, for the use of separate blocks by white and colored people for residences, churches and schools". (Baltimore Ordinance n. 654, approved April 7, 1911).

The law prevented a black person from moving into or using for residential purposes any property or part thereof located within a white block, and vice versa, except for the case of domestic servants who resided in the properties in which they worked. The law also excluded the blocks where the majority of landlords indiscriminately accepted occupation by whites or blacks. The due penalty was a fine of between US\$5.00 and US\$50.00 per day of violation.

Those who supported the law argued that the physical separation of racial groups would reduce conflicts between them. Nevertheless, the main appeal was based on the idea that the presence of black residents devalued property in the neighborhoods. Soon, the idea spread: Richmond, Virginia, passed a law of racial segregation, followed by countless other cities, such as Atlanta, Louisville, Oklahoma, New Orleans, and St. Louis, amongst others (SILVER, 1991: 192-5). Although they had the approval of much of the white population, these laws

quickly raised opposition not only from the majority of blacks, but also from white landlords on predominantly black blocks. Property owners on racially mixed blocks were also disadvantaged by the law. Throughout the second decade of the twentieth century, the legislation of racial segregation through blocks acquired several versions seeking to adapt itself to the contestations in the courts. Even in Baltimore, for example, amendments were made to the law from time to circumvent legal disputes (POWER, 1983: 302-7).

In St. Louis, the social reform movement differed very little from the Southern cities. From the turn of the century, therefore, before the beginning of the Great Migration, St. Louis was keen to draw up a city plan. In 1901, an independent, non-partisan Civic League was organized in the city as a social reform agency. Studies were commissioned, resulting in the publication of *A City Plan for St. Louis* in 1907. The report was a veritable instrument of social engineering, designating the poorest groups as "masses of human beings ignorant of the simplest laws of sanitation, the evils of child labor, the corruption in political life, and above all, the weakening of the ties which bind together the home" (St. Louis Civic League, 1907: 37). This document already contained wording, which defended the creation of a rule for St. Louis regarding the use of land, in support of improving the residential districts. Shortly thereafter, the League published a study on the housing conditions in the city (RUMBOLD, 1908).

In the following decade, groups of white people created a movement in favor of segregationist legislation, assuming that excluding blacks from neighborhoods would thereby preserve the value of properties. In 1915, they filed a petition in favor of residential segregation, signed by Charles Logan, Wayne Wheeling, L. E. Rottweiller, Arthur Stoehr and Felix Lawrence, all members of the United Welfare Association (UWA). Created by groups of white property owners to protect the value of real estate and ensure racial segregation in their neighborhoods, the UWA received support from the Real Estate Exchange, a powerful organization of the city's real estate agents (CHRISTENSEN, 1972: 226-8). As in the cities of the South, the argument used in the campaign that circulated the petition in favor of residential segregation through race was based on the notion that the presence of black families devalued real estate, that blacks allowed the properties they occupied to deteriorate, and that they were "noisy, destructive, improvident, and indifferent to the rules of the sanitation, and asserted that blacks lived in the white neighborhoods because they wanted inter-racial marriages" (idem: 244).

The petition written in St. Louis included a statement very similar to that of the law passed in Baltimore in 1911. The main difference between them however, was that while in Baltimore the law referred to the simple majority, in St. Louis a majority was defined as a 75% occupancy of a particular race in order to prohibit people of another race from settling there (St. Louis Petition No. 1601, 1915).

The petition was approved the following year by direct vote of the city's electorate. Of the 140,000 eligible voters, less than 10,000 were black, thereby opening the way for the bill to be passed by a large majority (KELLEHER, 1970: 246), highlighting the context in which modern western urbanism was rationalized and herein exemplified.

At the same time that the movement gained strength, however, opposition to it also strengthened, organized around the National Association for the Advancement

of Colored People (NAACP), founded in 1909 by W. E. B. du Bois, Mary White Ovington and Moorfield Storey, in a national context. Immediately, the NAACP filed lawsuits against the racial segregation laws. In Louisville, the NAACP conducted a carefully planned case. An African-American, William Warley, proposed buying a plot on a predominantly white block. The owner of the plot, Charles Buchanan, was opposed to the segregation law. Having received an unfavorable decision from both the city and state courts, the NAACP raised funds for an appeal to be filed in the Supreme Court, and which went to trial in April 1917. The defense was based on the right of sale to any interested buyer, regardless of race (RICE 1968: 194).

Thus, the law in St. Louis was short-lived, for within a year of its adoption, the US Supreme Court declared residential segregation unconstitutional, based on the Louisville case. It was therefore within this context that Bartholomew was hired as a town planner in St. Louis, one year before passing the bill that would fall soon after.

Harland Bartholomew was born near Boston in September 1889. He lost his mother at the age of two and was raised by his grandparents and then by his sister. He studied engineering for two years at Rutgers University, but did not reach graduation.³ Economic difficulties led him to interrupt his studies and take up a job at the engineering firm of E. P. Goodrich and George Ford in New York. In 1912, the office was commissioned to make the plan of Newark, New Jersey, and he was assigned to represent the firm and draw up the surveys, maps, and proposals. At the age of 23 and with no experience whatsoever, he was initially disappointed by the appointment (JOHNSTON, 1973: 115-16). However, with support from members of the Planning Commission, he began to discern the professional opportunity he had been presented, which at the time, was a new and promising field - urban planning. In those days in the US, the practice of urban planning was still very much in its infancy. The first comprehensive plan made in the US in 1909 by Daniel H. Burnham for Chicago was only three years old. For having dealt with the Newark plan practically single-handed in 1914, the City Planning Commission appointed him as its engineer and secretary, and he became the first full-time municipal planning officer in the US (ARCHITECTURAL FORUM, 1958: 90).

In 1915, at the age of 26, he partook in the preparation of the New York Zoning and in the National Conference on Urban Planning in Detroit. In the same year, by appointment of George Ford, he was called on to produce the plan of St. Louis, where he moved the following year. The invitation was made by Luther Ely Smith, chairman of the City Plan Commission, and the architect Henry Wright, Clarence Stein's future partner in Radburn (HEATHCOTT, 2005: 326)

The Plan Commission was a civil organization composed of six members from the administration and nine citizens nominated by the mayor. Its members were lawyers, architects, engineers, and businessmen; none of whom was from the middle and lower classes. Designated by the City Planning Association, it was founded in 1910 at the initiative of the Civic League, the main incentive of the city's planning program. When the Commission was structured, it ultimately took the place of the Civic League. At the time of Bartholomew's hiring, it was presided over by Dwight F. Davis,⁴ then succeeded by the architect Ernest J. Russell, one of the most active members of the Civic League, who remained in the position for nearly a decade.

3 Although he did not graduate, Bartholomew received the title of honorary engineer in 1921 and of doctor in 1952, both by Rutgers. Cf. Johnston, 1973: 115-16.

4 From 1903, Davis was a member of several commissions in St. Louis. Curiously, he was also the US Secretary of War (1923-1929), Governor General of the Philippines (1929-1932) and creator of the tennis Davis Cup (1900). Cf. American National Biography.

THE COMPREHENSIVE PLAN AND DEFENDING THE VALUE OF PROPERTY: "SAFETY, HEALTH AND WELL-BEING"

The practice of regulating urban land use through zoning originated in the late nineteenth century in Frankfurt, Germany, with comprehensive legislation for the entire city. The law organized the city into concentric zones, for which it defined the limits of height and the projection of buildings for industrial, residential or mixed use (MANCUSO, 1978: 27). In German urban planning, during a phase of intense industrialization, zoning was aimed at controlling the increases in the value of urban land, and at avoiding the precariousness of working-class housing, but also at regulating the construction of sanitation infrastructure and providing areas for the lighting and ventilation of buildings. At the beginning of the twentieth century, the tool was adopted in the Netherlands, Sweden and the UK where, under the influence of Darwinism,⁵ it was seen as a tool capable of preventing the deterioration of the race in the working class neighborhoods by improving housing (RABIN 1984: 103).

In the US, the first zoning experiments took place in the late nineteenth century in cities in California, where the major concern was to exclude undesirable uses, such as laundries frequented by the Chinese in predominantly white neighborhoods (LOGAN, 1976: 381). The first comprehensive zoning in the US was conducted in New York, influenced by the work of the Committee on the Congestion of the Population. One of its central objectives was to provide entry for air and light into buildings, but other issues were also important, such as controlling the value of urban properties through the creation of single-family residential areas, thereby creating exclusivity and exclusion. Such questions, Logan points out, were never central to German urban planning (idem: 383).

Bartholomew advocated zoning as a prime part of the comprehensive plan. He considered comprehensive zoning legislation if, and only if, it were to contain regulation of *use*, *height* and *area*, and if it was applicable to the entire city and was in accordance with the unity of the plan. In addition to encompassing the whole city, the comprehensive plan should contain "a complete quantitative and qualitative study, an analysis of city growth and the preparation of a scheme based on these studies, producing unity of composition and establishing certain desirable minimum standards for individual structures" (Bartholomew, 1928: 03). Individual structures, in this case, were urban properties.

The idea of totality referred, on the one hand, to the importance deemed by Bartholomew towards creating legislation that would remain unquestioned as to how it reflected specific, oscillating interests. A fragmented law that would regulate only certain sectors of the city, adopted as an expedient instrument, that would be doomed to the instability of future alterations according to the interests at stake, compromising their legitimacy and effectiveness (LOVELACE, 1993: 50). Legislations that only segregated uses, according to Bartholomew, were ineffective and *did not transform the market*, were contested in court and, over a short period of time, considered invalid (AMERICAN CIVIC ASSOCIATION, 1920: 38, emphasis added).

The first comprehensive US-type zoning ordinance was adopted in New York in 1916. Its success was measured by preventing the "vast depreciation in numerous districts" (idem: 39, emphasis in original), as well as its effectiveness

5 Here, the term "race" has a double connotation, referring explicitly to the human race, but referring also to the subliminal division between different races. For a greater understanding of how Darwinism has been misrepresented to justify the division of men into races and to justify racial inequality scientifically, see Schwarcz, 1993: 54-57.

6 It is important to note that Bartholomew defended the comprehensive plan, unlike his rival Robert Moses, who practiced localized and partial plans. However, both agreed on the solution largely based on motor vehicles on tires for the problems of urban circulation.

against disputes. Undoubtedly, this legislation was widely supported by the sectors of society that wielded greater political weight in the city. The blacks, who for the most part were neither homeowners nor real estate investors, were not subject to the law. The effect of zoning was unclear to the group that did not deal directly with the interests of construction and the sale of real estate. Tenants presented no interest. It would be difficult, therefore, for blacks to mobilize politically against the new legislation, since, although it affected them negatively, it did not explicitly mention racial segregation.

In 1917, one year after the legislation on residential segregation was declared unconstitutional in the US, the city of St. Louis brought to public the first product of the studies led by Harland Bartholomew, still in a diagnostic form. The Commission believed that the plan would only be feasible on the basis of a "broad understanding and appreciation of its necessity and great advantage" (ST. LOUIS CITY PLAN COMMISSION: 1917, xi, Foreword). The report was therefore a document of clarification and conviction. However, if the plan was in fact adopted by the Commission, then who exactly needed to be convinced of its necessity? In the quest to unravel this question, we may perceive that, although undeclared, racial issues had been introduced into the plan in favor of whites, protecting their properties, and against blacks, reducing their housing opportunities.

The presentation structure of the report began with an analysis of the city's growth pattern and its main problems. It then dealt with the road system, traffic issues, transport services, subdivision of the city into districts, recreation and housing issues, public buildings and the city's appearance.

The problems identified in the city were traffic and transportation, and then secondly, the places where property value was on the decline. Following the general orientation of North American urban planning at that time, the issues of traffic and of moving people and cargoes from one place to another were to be treated in the work with absolute priority. Three chapters out of a total of eight were devoted to roadway issues, urban transport lines, and the flow of products, a central problem for urbanism in that period both in and outside the US, summarized around the issue of "congestion". In relation to the problem of declining property values, Bartholomew proposed the application of a zoning regulation aimed at protecting them.

Immediately in the introduction, the "restoration of districts in which values and occupations are declining to a higher degree of utilization and productivity" appears as the first priority of the plan. The urban planner sought to anchor the need for restrictive regulation of real estate occupation to international experience. "Zoning is not a completely new practice. It involves establishing restrictions to regulate the height, occupation and lot area covered by buildings" (idem: 66-7).

Here, evidence emerged regarding the group that needed to be "convinced" of the importance of the plan: Bartholomew and the Commission felt the necessity to justify the restrictions imposed by zoning to property owners in the city. Thus, they considered the restrictions as a valid exercise of police power in favor of the health, safety and general well-being of the community (idem: 69). It starts to become apparent from analyzing the argument that compensation in terms of health generated by the control of light and air in single-family homes was an argument based on the "collective", "general" or "community" welfare, although the convincing justification in favor of the benefits that the plan would bring were centered on its

7 While the issues connected to roadways were totally relevant within the context of the planning system created and adhered to by Bartholomew, they will not be addressed herein, due to the research setting that guides this article. For the roadway conceptions of Bartholomew. see Brown, 2005. For an analysis on the social construction of the issue of urban congestion as the central justification for urbanism in the early twentieth century, see Topalov, 1990.

private scope in guaranteeing to preserve the value of real estate through adopting measures to homogenize the occupation of the districts.

In 1920, the argument that defended planning as a strategy to protect the value of property was reasonably consolidated and consensual amongst the advocates of zoning. On June 30 of that same year, the American Civic Association published a bulletin entitled *Zoning as an Element in City Planning, for Protection of Property Values, Public Safety and Public Health.* Among the authors were Andrew Crawford, Edward Basset, Herbert Swan and Harland Bartholomew. In the very title of the publication, it is explained that the importance and the major interest of defending zoning were to protect the value of urban properties. Bartholomew then published an article entitled "How City Planning Increases Property Values", introducing concrete examples of cities that had adopted zoning, such as Chicago and St. Louis (Bartholomew, 1930).

It was not by chance that protecting the value of real estate was precisely the argument of those who defended the laws of racial segregation in Southern cities during the 1910s. They argued that blacks caused the "deterioration" of property value (RICE 1968: 184). At the origin of US urban planning, the argument expressed in defense of zoning based on protecting values and the segregation of residential standards, affecting the undesirable classes in favor of the most affluent, clearly explains the distance that the tool assumed in the US, from the original German experience, where zoning was rarely used for the purpose of promoting residential single-family neighborhoods (SILVER, 2016).

Furthermore, comprehensive planning also served a new purpose: the control of land occupation. In Bartholomew's 1928 lecture on comprehensive zoning, one of the central aspects was to bring to public discussion his findings on the proportionality between the areas of use in the District of Columbia (D.C.) in Washington. In 1927, 12.1% of the city's population occupied an area of 243.5 acres of collective housing, at a density of 275 people per acre, much higher than the density of single-family neighborhoods. From these calculations, Bartholomew presented a critique of the proposed densification in urban plans that envisaged large areas for multifamily buildings, arguing that these areas were oversized because they were being proposed on a one-to-one basis with single-family districts.⁸

He then presented data suggesting that the housing solution for US cities was horizontal, especially with terraced houses for lower-income classes and detached houses for the higher classes. He also indicated the growing trend amongst wealthier groups of preferring detached houses and an increase in the lower-income group of opting for apartments rather than terraced houses. Their conclusion was that the space provided in the zoning laws for collective housing should decrease (BARTHOLOMEW, 1928: 13). To endorse his argument, he also compared the levels of tax collection in each type of area, evidently higher in the higher income, justifying the option of public policy to favor detached houses. With this argument, Bartholomew thereby seemed to refute the priority of an urban policy, which protected the less advantaged classes, of which the African-Americans were a major part.

Expanding his practice in city planning provided him with access to an unusually large amount of data on land use patterns, enabling groundbreaking analyzes with surprising revelations for the period. The proportionality studies

8 The example used by Bartholomew for this demonstration was the case of Los Angeles, the plan for which, he said, envisaged an area for multifamily districts with a capacity of 20 million people (BARTHOLOMEW, 1928:8).

9 As previously mentioned, a significant part of the literature on urban racial segregation focuses on the preponderance of the Federal Housing Administration. Although Bartholomew acted to consolidate the policies of this institution, with serious racial implications, this relation will not be examined in this article, due to the research setting prioritized herein. For an

analysis on the orientation of the early Housing

Acts, see Abrams, 1949 and

Gothan, 2000.

between areas of use gathered by Bartholomew for 22 cities were tabulated in 1932, giving rise to an unprecedented systematization of the pattern of land use in North American urbanization. Through this compilation, the author emphasized the importance of single-family suburbs as an urban solution throughout the country (BARTHOLOMEW, 1932). These studies served as a basis for formulating the guidelines of the Federal Housing Act, the first social housing production regulation law in the United States, in 1937, which was largely geared towards removing the slums. In 1955, the study was complemented, incorporating new data, reaching a total of 97 cities (BARTHOLOMEW, 1955). Through these studies, it was also becoming evident how the compilation of data was both a privileged source and a useful tool in the hands of the planner for swaying public opinion.

A RACIALLY INFORMED PLAN: THE ZONING OF ST. LOUIS AND THE PRODUCTION OF RACIAL INEQUALITY

The creation of the first zoning law in St. Louis was achieved through mapped data on a land use survey of 1918 ((CITY PLAN COMMISSION, 1917; BARTHOLOMEW, 1918; Ordinance n. 30.199 of July 15 1918). Basically, the law regulated the adoption of a system of comprehensive zoning, subdividing the territorial integrity of the urban area into five classes of use: (a) first residence (single-family homes); (b) second residence (including rented homes, collective housing, hotels, churches, clubs, hospitals, sanatoriums, institutions, offices and garages); (c) commercial; (d) industrial; (e) unrestricted.

Throughout the 1920s, in the US, from amongst all aspects of the plan, zoning acquired central importance. Legally validating the instrument demanded a major part of the efforts by the movement of planners, since it was this very element that guaranteed benefits such as stability and segregation for urban property owners, the main political allies of the movement. The plan became, therefore, a legitimizing part of zoning. At the same time, it was the very stabilization of real estate values through the homogenization of districts that made the price of urban land increase in a secure and continuous manner.

On the other hand, comprehensive zoning also sought to ensure control over the entire area of the city, in order to produce differential income. The general coverage of the city made it possible to create, in areas marked for unrestricted uses, land inventories for future plans and projects, soon termed as such by the jargon of "urban renewal".

From immediately after the end of World War I, the country wagered on investing in public works as a way to rebuild the country's economy with a guaranteed return (CITY PLAN COMMISSION, 1918: 14). Since the late 1910s, urban renewal was already a well-known method of reinvesting capital in the city. In St. Louis, the 1918 plan explored this path with improvements along the rivers banks between the two bridges over the Mississippi River, including the redesigning of the central area. Through amplifying the industrial and unrestricted zones, zoning also reserved large stocks of area that could be subject to urban renewal.

10 It is also interesting to note how urban planning was one of the rare activities of the bureaucracy, which was not impacted by the crisis of the late 1920s that afflicted the US economy. On the contrary, cities formed Plan Commissions and sought technical support for their planning, linked to the programming of public works throughout the country.

The plans below (CITY PLAN COMMISSION: 1919) demonstrate the reasoning used by Bartholomew to formulate the general zoning plan approved in 1918. In the first, a map of the city appears portraying the "predominant" types of use, indicating a tendency or "vocation", for each district, determined by the classification adopted by the team. On analysis, the tendency may be perceived to generalize the residential "vocation" in certain areas and the manner in which the "industrial" use is strewn across others.

MAP RESIDENCE DISTRICT COMMERCIAL DISTRIC INDUSTRIAL DISTRIC CITY OF STLOUIS
UNDER THE ZONE LAW

Figure 1: Zoning in St. Louis

Source: St. Louis City Plan Commission, 1919

Map 2 offers a breakdown of how the area considered as "industrial" was conceived. There, the precise location of all the existing industries in the city appears with a projection of areas contiguous to them, thereby describing an industrial zone that has absorbed its potential growth. In technical terms, there is no indication that the colored areas of the map should be considered industrial.

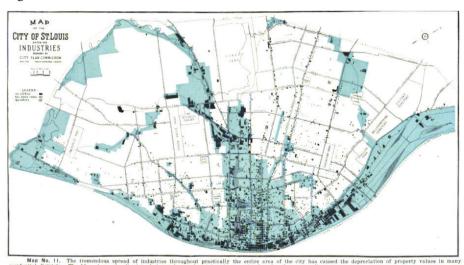
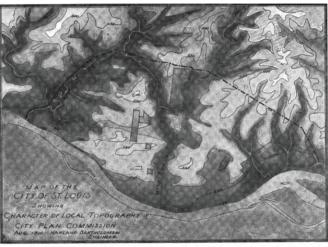


Figure 2: Industrial areas of St. Louis

Source: St. Louis City Plan Commission, 1919

A third "technical" reasoning, as evidenced by Map 3, was also added to this information. Based on topographic data, this map indicates the low areas on the urban territory. Generally speaking, these areas coincide with the zone legislated as being industrial.

Figure 3: Topography of St. Louis

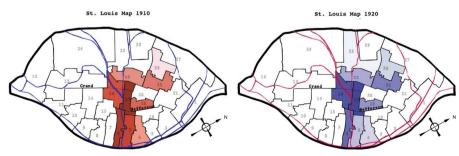


Map No. 17. The darker shading shows low ground. Note the Mississippi River front and the Mill Creek and River des Peres valleys which, under the zone plan, are restricted for industrial development. High land shown in white is generally restricted for residential development. Compare this map with Map No. 1.

Source: St. Louis City Plan Commission, 1919

The land regulation of St. Louis made no mention of racial segregation. However, racial considerations were extremely relevant in defining the limits of each type of use in the city (FLINT, 1977: 136). As previously mentioned, racial segregation in St. Louis was marked by a strong color line. The African-American group was concentrated, from an early date, along the edges of the Mississippi river, spreading north of the railroad.¹¹ From census data on demographic concentration by color in urban districts, Christensen (1972) illustrated that, since 1850, blacks in St. Louis had been concentrated into the central districts. In the 1910s, when Bartholomew settled there and began his studies on urban planning, the districts in which there was a greater concentration of the black population formed a continuous pattern out from the center and penetrating towards the west.

Figure 4: The concentration of African-Americans in the neighborhoods of St. Louis in 1910 and 1920.



Source: Christensen, 1972

11 Silver & Moses (1995: 04-07) formed a distinction between the ghetto, found in Northern cities such as New York, Chicago and Philadelphia, and segregation by color lines in the South. Despite not being a typical Southern city, St. Louis followed a racial pattern of segregation that was scattered around the old center, in neighborhoods of racially mixed occupation, and not that of ghetto formation exclusively occupied by blacks. as in cities of the North.

Christensen further described the black settlements of St. Louis with several force fields altering and intensifying their occupancy patterns. The first force identified by the historian was the accelerated movement of whites towards the west, which opened a new real estate dynamic within the most desirable neighborhoods of that region. As whites moved from the western sector of the central region to increasingly distant neighborhoods, stimulated by the actions of real estate agents, the value of the more central neighborhoods went into decline, and the blacks began to occupy what had previously been considered desirable districts.

On the other hand, the establishment of industries in the black neighborhoods provoked a wave of expulsion of the resident population, which caused a different impact on blacks and whites. It was not uncommon for whites to abandon their old homes at the point of their complete degradation. Attempts to install blacks into neighboring white districts were followed by protests and complaints. Examples of public expressions of displeasure were multiplied with the sale of real estate previously occupied by white families to blacks. Thus, by virtue of actions aimed at expelling blacks from the more targeted areas considered as being more desirable, the city assumed an increasingly fierce pattern of racial segregation (idem: 135-147). Seeing themselves expelled by the industrial uses in their neighborhoods of origin and unwanted across the new frontiers of expansion, designed preferentially for the whites, the blacks now faced problems in finding somewhere to live. There were also frequent reports of paying rents higher than whites. Throughout the 1910s, it became increasingly common for black families to occupy homes abandoned by whites who had moved to the western sector. The condition of these residences was precarious and often posed risks to the residents.

Comparing the maps that locate the areas of black concentration and the proposed zoning solution in 1918, it is hard to doubt the subliminal racial criterion that informed the plan, but that remained unspoken. It may be observed, for example, how the industrial area spread exactly across the neighborhoods occupied by the blacks, indicating a legislative tendency not to protect these areas, which thereby exacerbated the pressure by industries to expel the blacks, which had already been substantiated. At the same time, demarcating black neighborhoods as an industrial area, in the long term, enabled the possibility of urban renewal within these areas.

However, the generalization and spread of land use "tendencies" as the main parameters for the design of zoning would prove problematic due to non-conforming uses. As they arose, nonconformities reverberated as cases of previously acquired legal rights from the courts, which put the legitimacy of the instrument at risk. This matter was resolved at a later date however, through a new political agreement with the local public authority itself.

The conflicts that emerged with the publication of the 1918 zoning revolved mainly around the problem of restrictions imposed on construction throughout the urban territory, whether in terms of new buildings or in relation to a broader use of the already built-up lots. Thus, the requirements for reformulations were not delayed, which resulted in a revision of the law in 1926. The main change in the new zoning regulation was the sharp expansion of areas to accommodate apartment buildings. In terms of denominations, the so-called "first residence" areas were now referred to more broadly as "residential", with both one or two-family homes. "Second residence" zones were now called "multifamily" and covered a significantly larger area, making

the transition between the center and the river banks of industrial uses and more desirable residential areas to the west (GORDON, 2014: 120-5). Therefore, the black neighborhoods remained unprotected, centered around legislated areas as industrial or unrestricted. In the now flexibilized areas of multifamily housing, "covenants" emerged amongst white property owners, constraining real estate sales transactions to black families.

As we have observed, the city of St. Louis had witnessed the abandonment of real estate in the oldest areas since the turn of the twentieth century. Concern over obsolete and abandoned areas of the city appeared from the time of Bartholomew's early interventions, associated with a loss in the value of real estate, whether through industrial and commercial occupation or residential uses considered "inferior." In 1926, the question of the "blighted" districts gained new significance with the resolution of a case in the US Supreme Court that allowed the extension of local police powers to regulate nuisances. This court decision allowed areas considered as abandoned, mostly occupied by blacks, to be considered as neighborhood nuisances (RABIN, 1989: 103-7). However, the racial question in formal terms appeared neither in speech nor legislation. Therefore, since it went uncontested, racial inequality in access to housing conditions and protective legislation tended to escalate.

In 1947, a new land-use planning law was passed in St. Louis, aimed at creating opportunities for urban renewal, stimulating the local economy through civil construction. The plan presented a more sophisticated type of zoning, with a strategy to reduce the industrial areas (whilst maintaining and expanding the unrestricted areas) and to incorporate new categories for residential use: single-family, two-family, four-family and multifamily. The biggest innovation of this plan, however, was the demarcation of "obsolete" and "blighted" districts in the city, corresponding to the older districts and their surroundings where the black population was concentrated (GORDON, 2014: 161-4)

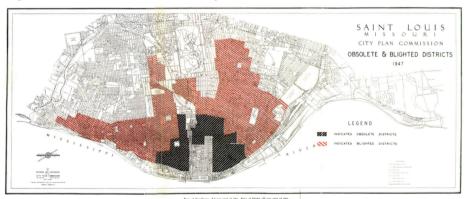


Figure 5: St. Louis – Obsolete and blighted districts

Source: City Plan Commission, 1947

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The displayed material does not represent a complete sweep of Bartholomew's works in St. Louis, but it is sufficient to express some of the important questions. The first is that the basis for the movement surrounding the comprehensive planning and zoning was structured on the argument of protecting property values and the spread of single-family zones, summarily excluding all layers of the population that lived

from rent. Through this strategy, the plan was created thanks to strong political links between planners, local power and groups of urban property owners, amongst whom blacks did not figure.

Moreover, as it gained political space, the zoning movement, exemplified here in the St. Louis case, was threatened by the only power that could actually bar its expectations of legitimacy and perpetuation: the courts. The threat of cases such as those involving the laws of racial segregation highlighted the risk of zoning being declared unconstitutional. Therefore, one of the central concerns of zoning advocates, developers, and implementers was that racial differentiation should not be characterized. The adopted strategy was to construct a means of justified segregation based on the principle of stabilizing the value of urban property. Segregation through the homogenization of uses in the districts was as effective as that produced by racialized laws. By adopting this strategy, it was possible to conduct the whole solution towards stabilizing urban land values, while completely omitting the racial aspect from its statement, and still obtaining the results desired by the groups of political partners.

ZONING AND FEAR OF THE COURTS: WHY BARTHOLOMEW'S URBAN PLANNING DOES NOT MENTION THE RACIAL ASPECT

In this article, we have sought to discuss the racial foundations that helped shape the comprehensive zoning proposals developed by Harland Bartholomew for the city of St. Louis, Missouri, between 1916 and 1947. The relevance of the theme spans across different dimensions. Bartholomew was one of the urban planners, who produced most of the plans and proposals for zoning in the US. In addition, the case of St. Louis proved to be effective for our purpose, since part of the group that gave political support to its urban plans advocated the adoption of legal norms for regulating residential segregation in the city, within a context of considerable racial segregation.

The contribution of comprehensive zoning in stabilizing the value of urban properties was the central argument of the zoning movement in the US. Bartholomew was joined by other prominent urban planners such as George Ford and Edward Bassett in defense of applying the instrument as a mechanism for protecting the value of real estate. On the one hand, it should be acknowledged that the standardization of land use and occupation created an advantageous situation that was favorable to stabilizing the US housing market at a time of immense economic instability during the interwar period. The stabilization of real estate that was generated in the US favored the expansion of the urban planning model adopted and the implementation of plans in numerous other cities. Due to this stabilization, Bartholomew himself saw his professional activity grow in the context of crisis. In economic terms, the stabilization of real estate favored the internal market equilibrium at a moment of widespread international turbulence.

The success of the St. Louis example was replicated in countless other American cities, providing Bartholomew with an experience and an accumulation of data that enabled him to conduct analyzes and evaluations of the cities in which he acted,

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adjusting his zoning proposals to oblige the political aspirations of the groups that supported him, as well as creating an efficient methodology for defining zones of use that were legally accepted by the courts.

On the other hand, however, the economic stability engendered by zoning did not solve the urban racial problem. In truth, the instrument did not even confront the racial issue. On the contrary, it contributed to its aggravation: it fostered residential segregation, excluded blacks from the benefits generated by stability, since there were far fewer blacks amongst the real estate owners, and helped to consolidate the obstacles for blacks to access urban housing.

Thus, applying a technique that began by identifying a generalized "tendency" for using and occupying land for a neighborhood or district, zoning became an instrument that promoted spatial segregation, including racial segregation, but without directly mentioning the question of races. It is curious that the strategy used to legally legitimize zoning, particularly in relation to urban residential segregation, was to omit the racial question, an unusual social mechanism in the US, although quite efficient in Brazil, where it has helped to promote the ideology of racial fraternity. This subterfuge has proved totally efficient in promoting the approval of the instrument in the North American Courts, a major concern amongst the supporters of the zoning movement.

SOURCES AND BIBLIOGRAPHY

ABRAMS, C. The Segregation Threat in Housing. Commentary, v. 07, n. 02, February 1949.

AMERICAN CIVIC ASSOCIATION. Zoning as an element in City Planning, for Protection of Property Values, Public Safety and Public Health. American Civic Association, series II, n. 15, Washington DC, 1920.

AMERICAN NATIONAL BIOGRAPHY. Available at: http://www.anb.org.ezp-prod1.hul.harvard.edu/articles/06/06-00136.html (viewed on July 10 2017).

Angotti-Salgueiro, H. "Pensamento e leituras de Luiz de Anhaia Mello—das propostas de uma arte urbana ao planejamento de um urbanismo humanista". *Anais do III Enanparq. São Paulo: Anparq*, 2014. Available at: http://www.anparq.org.br/dvd-enanparq-3/htm/Artigos/ST/ST-CDR-017-2_ANGOTTI-SALGUEIRO.pdf, viewed in July 2017.

Architectural Forum. "The city plans of Harland Bartholomew". *Architectural Forum*, February 1958, 88-91.

Baltimore. Or	dinance no.	654, April	17	1911.
---------------	-------------	------------	----	-------

BARTHOLOMEW, H. St. Louis Zoning Ordinance. The American City, V. XIX, n. 2, 1918.

Principles of city planning. The American City, V. XXVI, n. 5, 1922.

_____. What is Comprehensive Zoning? National Conference on City Planning, 1928.

______. "How City Planning Increases Property Values". *National Real Estate Journal*, March 17 1930, 41-3.

_____. *Urban land uses*. Harvard University Press, 1932.

. Land uses in American cities. Harvard University Press, 1955.

Benton, M. "Just the Way Things Are Around Here: Racial Segregation, Critical Junctures, and Path Dependence in Saint Louis". *Journal of Urban History*, 2017, 1-18. DOI: 10.1177/0096144217696988

Brown, J. "A Tale of Two Visions: Harland Bartholomew, Robert Moses, and the

- Development of the American Freeway". *Journal of Planning History*, v. 04, n. 01, February 2005, 03-32. DOI: 10.1177/1538513204272856
- CITY PLAN COMMISSION. Problems of St. Louis. St. Louis: City Plan Commission, 1917.
- _____. St. Louis After the War. St. Louis: City Plan Commission, 1918.
- _____. The Zone Plan. St. Louis: City Plan Commission, 1919.
- CHRISTENSEN, L. O. *Black St. Louis*: A Study In Race Relations, 1865-1916. University Of Missouri, Doctorate, 1972.
- FLINT, B. Zoning and Residential Segregation: A Social and Physical History, 1910-1940. The University of Chicago, Doctorate, 1977.
- GORDON, C. Mapping Decline: St. Louis and the Fate of the American City. Philadelphia: University of Pennsylvania Press, 2014.
- GOTHAN, K. F. "Racialization and the State: The Housing Act of 1934 and the Creation of the Federal Housing Administration". *Sociological Perspectives*, v. 43, n. 2, summer 2000, 291-317. DOI: 10.2307/1389798
- GROSSMAN, J. R. Land of Hope: Chicago, Black Southerners and the Great Migration, Chicago: University of Chicago Press, 1989.
- HEATHCOTT, J. "The Whole City is Our Laboratory: Harland Bartholomew and the Production of Urban Knowledge". *Journal of Planning History*, n. 4, 2005, 337-342. DOI: 10.1177/1538513205282131
- Johnston, N. "Harland Bartholomew: Precedent for the profession". *Journal of the American Institute of Planners*, v. 39, 1973, 115-124. DOI: 10.1080/01944367308977665
- Kelleher, D. T. "St. Louis' 1916 residential segregation ordinance". *Bulletin*, April 1970. 239-248.
- Logan, T. H. "The Americanization of German Zoning". *Journal of the American Institute of Planners*, n. 42, October 1976, 377-385.
- LOVELACE, E. Harland Bartholomew, his contributions to American Urban Planning. University of Illinois, 1993.
- Mancuso, F. Las experiencias del zoning. Barcelona: Gustavo Gili, 1978.
- MASSEY, D. S. e DENTON, N. A. American Apartheid: Segregation and the Making of the Underclass. Cambridge: Harvard University Press, 1993.
- MELLO, L. I. R. A. "Problemas de urbanismo: mais uma contribuição para o calçamento". *Revista Politécnica*, São Paulo, n.83, junho de 1927, 343-65.
- ______. "Urbanismo Regulamentação e Expropriação". *Boletim do Instituto de Engenharia*, São Paulo, nº 45, fevereiro de 1929a, 55-64.
- ______. "Bases para a resolução do problema técnico". *Problemas de Urbanismo*, São Paulo: Instituto de Engenharia/Escolas Profissionais Salesianas, 1929b.
- NIGHTINGALE, C. Segregation. A Global History of Divided Cities. Chicago and London: The University of Chicago Press, 2012.
- POWER, G. "Apartheid Baltimore Style: The Residential Segregation Ordinances of 1910-1913". *Maryland Law Review*, v. 42, n. 02, 1983. Available at: http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=2498&context=mlr, viewed in May 2017.
- RABIN, Y. "Expulsive Zoning: The Inequitable Legacy of Euclid". HAAR, C. e KAYDEN, J. Zoning and the American Dream: Promises Still to Keep, Chicago: American Planning Association, 1989, 103–7.
- RICE, Roger L. "Segregation by law, 1910-1917". *The Journal of Southern History*, v. 34, n. 2, May 1968, 179-199.
- Rumbold, C. Housing Conditions in St. Louis. Report of the Housing Committee of the St. Louis Civic League, 1908.
- SANDWEISS, E. St. Louis: The Evolution of an American Urban Landscape. Philadelphia:

- Temple University Press, 2001.
- Schwarcz, L. M. O espetáculo das raças. Cientistas, instituições e questão racial no Brasil, 1870-1930. São Paulo: Companhia das Letras, 1993.
- SILVER, C. "The racial origins of zoning: Southern cities from 1910-1940". *Planning Perspectives*, 06, 1991, 189-205. DOI: 10.1080/02665439108725726
- pedia of American History, Oxford University Press, 2016. DOI: 10.1093/acrefore/9780199329175.013.209
- SILVER, C. & MOESER, J. *The Separate City. Black Communities in the Urban South*, 1940-1968. The University Press of Kentucky, 1995.
- SILVÉRIO, V. "Multiculturalismo e metamorfoses na racialização: notas preliminares sobre a experiência contemporânea brasileira". Sociologia e mudança social no Brasil e na Argentina. São Carlos: Compacta, 2013. Available at: http://web.fflch.usp.br/centro-dametropole/upload/aaa/616-SociologiaeMudancaSocialnoBrasilenaArgentina.pdf, viewed in January 2018.
- St. Louis Civic League. A City Plan for St. Louis. St. Louis, 1907.
- St. Louis. St. Louis Petition no. 1601, 1915.
- ______. Ordinance no. 30.199, July 15 1918.
- TAEUBER, K. E. e TAEUBER, A. F. Negroes in Cities: Residential Segregation and Neighborhood Change. Chicago: Aldine, 1965.
- Tolnay, S. E. e Beck E. M. "Racial violence and black migration in the South, 1910 to 1930". American Sociological Review, 57, 1992, 103-16. DOI: 10.2307/2096147
- TOPALOV, C. "La ville 'congestionnée': acteurs et langage de la reforme urbaine à New York au debut du XXe. Siècle". *Genèses*, n. 1, September 1990, 86-111. DOI: <u>10.3406/genes.1990.1015</u>
- WILSON, W. J., The *Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: The University of Chicago Press, 1978.