

TRANSFORMATIONS OF THE 19th CENTURY

TRANSFORMATIONS OF EUROPEAN CITIES AND SOCIO-ECONOMIC CHANGES IN THE NEW WORLD

THIS COLLECTION IS MADE UP OF TWO PARTS.

THE FIRST PART FOCUSES ON AN OVERVIEW OF BARON HAUSSMANN'S RENOVATIONS OF PARIS AND HOW THIS PARISIAN SYSTEM IS SEEN IN THE CONTEMPORARY EXAMPLE OF THE NEIGHBOURHOOD OF NORQUAY VILLAGE IN VANCOUVER, CANADA.

THE SECOND PART OF THE COLLECTION IS AN ANALYSIS OF THE KEY DESIGN PRINCIPLES OF SAVANNAH, GEORGIA WITH THE MAIN FOCUS ON THE PHYSICAL, SOCIAL, ECONOMIC, AND CULTURAL FACTORS THAT IMPACTED THE URBAN DESIGN OF THE CITY.



URBAN RENEWAL
PARIS, FRANCE

CITY OF PARIS STATE | 19th CENTURY

France's own industrial and financial revolution lasted from the 1830s with Paris becoming the centre of a railway system (Girouard, 1985). As a result, an effervescence of manufacturing activity resulted making Paris the world's greatest manufacturing city employing more than 400 thousand workers in the industry (ibid.). All the manufacturing activity and similar activities all over France needed financing which resulted in Paris developing into a great money market (ibid.). A new kind of bank to supplement old private banks began developing from the 1850s (ibid.). Napoleon III and his ministers went under the assumption that in a city as rich and on the upbringing as Paris, work on the big scale would in the end pay for itself (ibid.). The expenditure was in the form of an investment that would be recoverable from increasing tax revenues and property values (ibid.).

The mission of redeveloping Paris was simplified due to having a solitary administrative unit with an antique tradition of strong local government conquered by the state (Girouard, 1985). In 1841 a law had legalized required acquisition of property if Parliament stated work as public service which superseded the property ownership as one of the human rights (ibid.).

The redevelopment schemes that arose were put to works due to the support of money and power behind them, which wouldn't of been as successful if there was a stronger spoken displeasure among the population of Paris (Girouard, 1985). The poor suffered in the 19th century leaving non-lease holding inhabitants of destroyed properties evicted with little compensation and no rights to re-housing, which was a standard procedure of the 19th century for obligatory purchases in Europe (ibid.).



Fig. 2 | 19th century Paris (Unknown, n .d.)

HAUSSMANN PARIS | PARIS RENOVATIONS

The remodelling of Paris was executed by Napoleon III and Baron Haussmann between 1853 and 1870 which gave the city scale and airiness that no other city owned at the time (Girouard, 1985). Medieval neighbourhoods that were considered overpopulated and unhealthy were destroyed, construction of wider avenues and new parks and squares were all part of Haussmann's work (ibid.).

HAUSSMANN'S MAJOR RENOVATIONS

- Creation of new boulevards
- Circulation within the city and regional
- Retail development
- New squares and parks



Fig. 3 | Haussmann Paris (Pissarro, 1880)

BOULEVARDS | HAUSSMANN PARIS

The new boulevards in Paris are one of the best examples of Haussmann's work (Girouard, 1985). Old roads were expanded or adjusted, and new roads were built, including an extension of the Rue de Rivoli (fig. 5) (ibid.). The orbital Parisian grande boulevards of the 17th and 18th centuries were extended into the boulevards and avenues (ibid.). The newly developed boulevards quickly became crowded with traffic which started flooding into the old boulevards as well resulting in losing their original leisure character (ibid.). The crowds of people that walked up and down the streets whether for leisure or business remained as the main feature (fig. 4) (ibid.). The treatment of the boulevards varied although most had a planted strip down the street or on either side (ibid.). In Haussmann Paris, the streets became wider and facades were organized around regulations projected by Haussmann such as continual horizontal lines leading from one building to another, balconies and cornices aligned without any projects at the risk of the uniformity of certain areas (fig. 4) (ibid.).



Fig. 4 | Boulevard Haussmann (Pissarro, 1897)

CITY & REGIONAL CIRCULATION | HAUSSMANN PARIS

Circulation within the city and also regionally was also part of Haussmann's renovations. The first phase of renovations anticipated by Napoleon III was the completion of the Grande Croisee de Paris (De Moncan, 2002). East to west communication would be improved through the great cross of Paris that would run along the Rue de Rivoli and Rue Saint-Antoine and the two new boulevards, Strasbourg and Sebastopol for north-south communication (ibid.). The second phase of the renovations focused on the construction of wide boulevards linking internal Paris with the ring of grand boulevards built by Louis XVIII and the new railroad stations that were the gates to the city (ibid.). Although this second phase was welcomed, it was also highly criticized by the public (ibid.). The growing costs of Haussmann's projects were being criticized with estimated costs of 180 million francs but grew up to 410 million (ibid.). Legal cases were brought up by property owners demanding larger payments and charging the city for lost revenues for expropriated properties (ibid.).

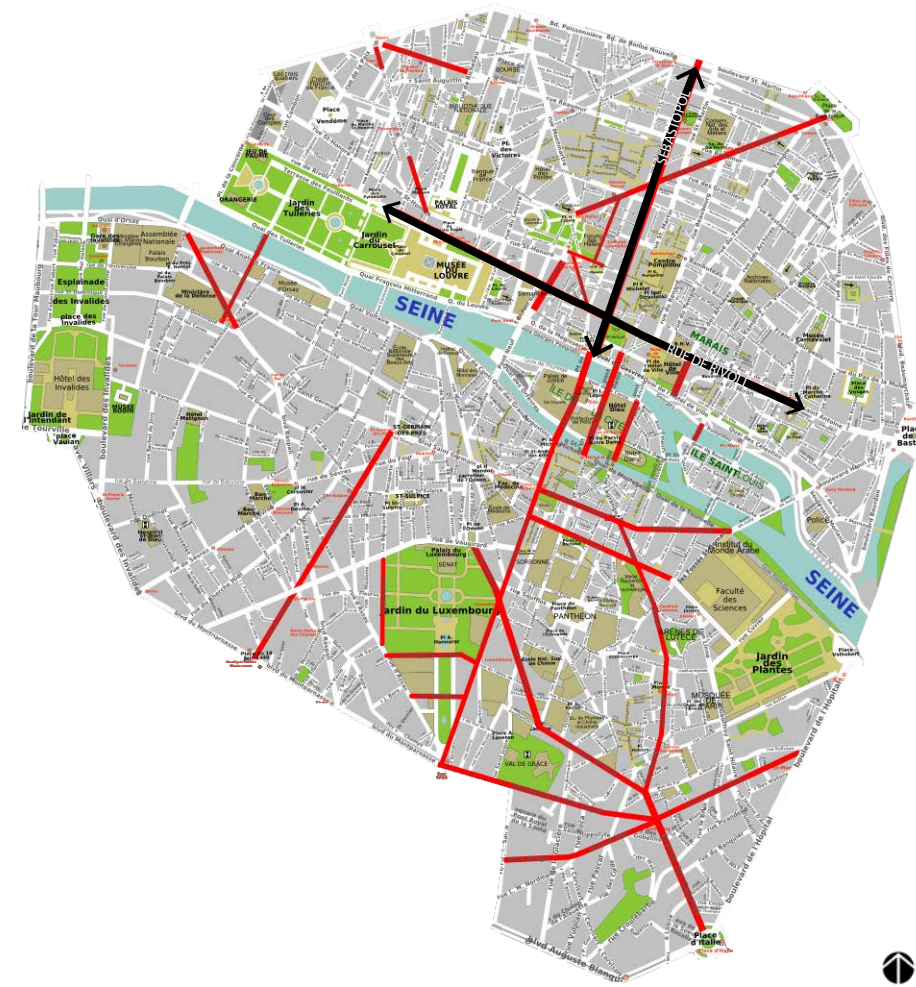


Fig. 5 | Haussmann Paris Street Renovations (Unknown, n.d., annotated by author)

RETAIL | HAUSSMANN PARIS

Retail connection with Haussmann's boulevards were also part of the renovations. Large market halls such as Les Halles (fig. 6) were built which played a part in Paris becoming the shoppers' Mecca (Girouard, 1985). Due to the narrow streets with no sidewalks, pedestrians weren't motivated for window shopping (ibid.). The best shops became off the streets, such as Galerie Lafayette (fig. 7) (ibid.). The developing wealth and population of France and Paris offered the clientele and the store grew into great department stores (ibid.).

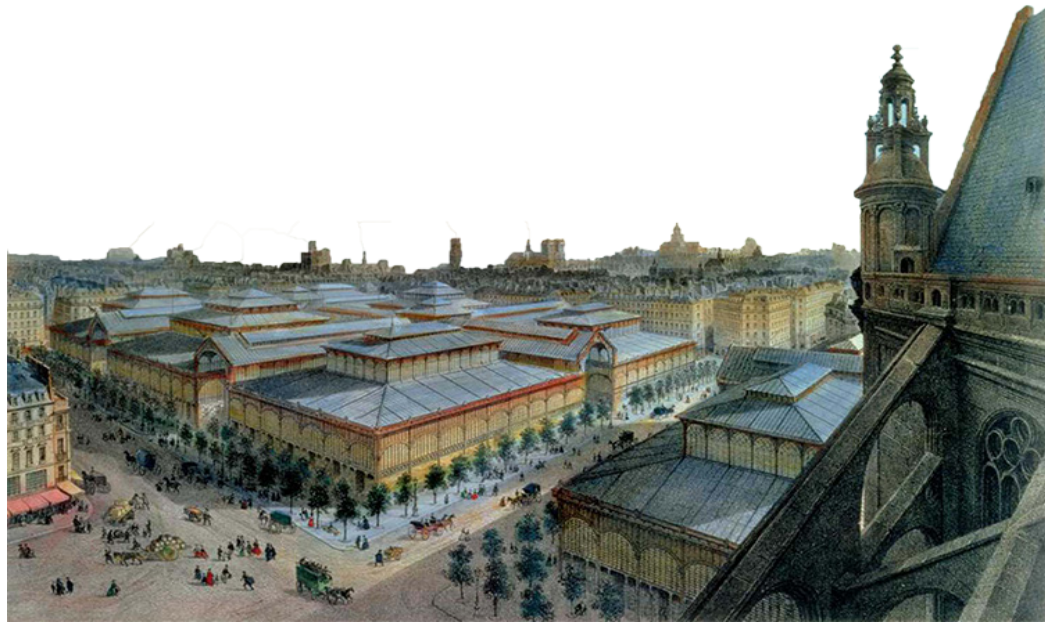


Fig. 6 | Les Halles, circa 1870 (Unknown, n.d.)



Fig. 7 | Haussmann Galerie Lafayette (Unknown, n.d.)

RETAIL | HAUSSMANN PARIS

Haussmann creation of new squares were English inspired although were designed more to the public places rather than thickly planted greenery surrounded by terraces of buildings (Girouard, 1985). The four major parks (Bois de Boulogne (fig. 8), Bois de Vincennes (fig. 9), Parc des Buttes-Chaumont and Parc Montsouris) acted as cardinal points around the city (ibid.). Having a park in each of the 80 neighbourhoods of Paris was Haussmann's goal so that no one was more than a ten-minute walk from a park (ibid.). The squares and parks became a success with all classes of Parisians (ibid.).



Fig. 8 | Bois de Boulogne (Unknown, n.d.)



Fig. 9 | Bois de Vincennes (Unknown, n.d.)

Vancouver Harbour

HAUSSMAN PARIS
CONTEMPORARY APPLICATION



Fig. 10 | Metro Vancouver (SnazzyMaps, 2020)

KINGSWAY | OVERVIEW

Kingsway is a main street that crosses through the cities of Vancouver and Burnaby in British Columbia, Canada. The road runs transversely from northwest to southeast, emerging from Vancouver's Main Street and transitioning into 12th Street at the Burnaby–New Westminister border (fig. 11 & fig. 14) (Beasley, 1976).

Historically, Kingsway used to be an Indigenous trail that was used for hundreds of years by the Canada's first peoples (Beasley, 1976). Kingsway was originally a wagon road (fig. 12) , built by the Royal Engineers between historic Gastown waterfront and what used to be the capital of British Columbia, New Westminister. The route was to accelerate the movement of troops between these two points (ibid.).

Kingsway was eventually widened in 1872 through a stretch in Burnaby and ultimately became Vancouver Road (Beasley, 1976). Burnaby's municipal incorporation improved the section of the road in 1892, connecting Vancouver and New Westminister which became an area that was favourable for settlement (ibid).

Kingsway became the official name after the road was reopened on September 30, 1913 after a year of road improvements as a result from the provincial and municipal governments joining forces (Beasley, 1976). Kingsway became a component of the Trans-Canada Highway being numbered provincially Highway 1 and Highway 99, until the title was assigned as Highway 401 in 1964 (ibid.).

Just as the boulevards in Haussmann's Paris played roles of connectivity both in the city and regionally, Kingsway follows the same aspects. Kingsway creates connectivity to the immediate city borders and also regionally, both through ground services and elevated public transportation.

Another aspect of Kingsway that is comparable to Haussmann Paris renovations is due to the street being one of Metropolitan Vancouver's longest roads that has a variety of varied family-owned and cultural shopping spots and restaurants. There are numerous supermarkets, hotels, fast-food chains and other services along its route. Kingsway acts as the spine to Burnaby's Metrotown business district and also is the major road that connects Downtown Vancouver with Metrotown. Kingsway and the neighbourhoods line up on the street are mostly all undergoing improvements as part of the developments in Metro Vancouver due to population and design growth.

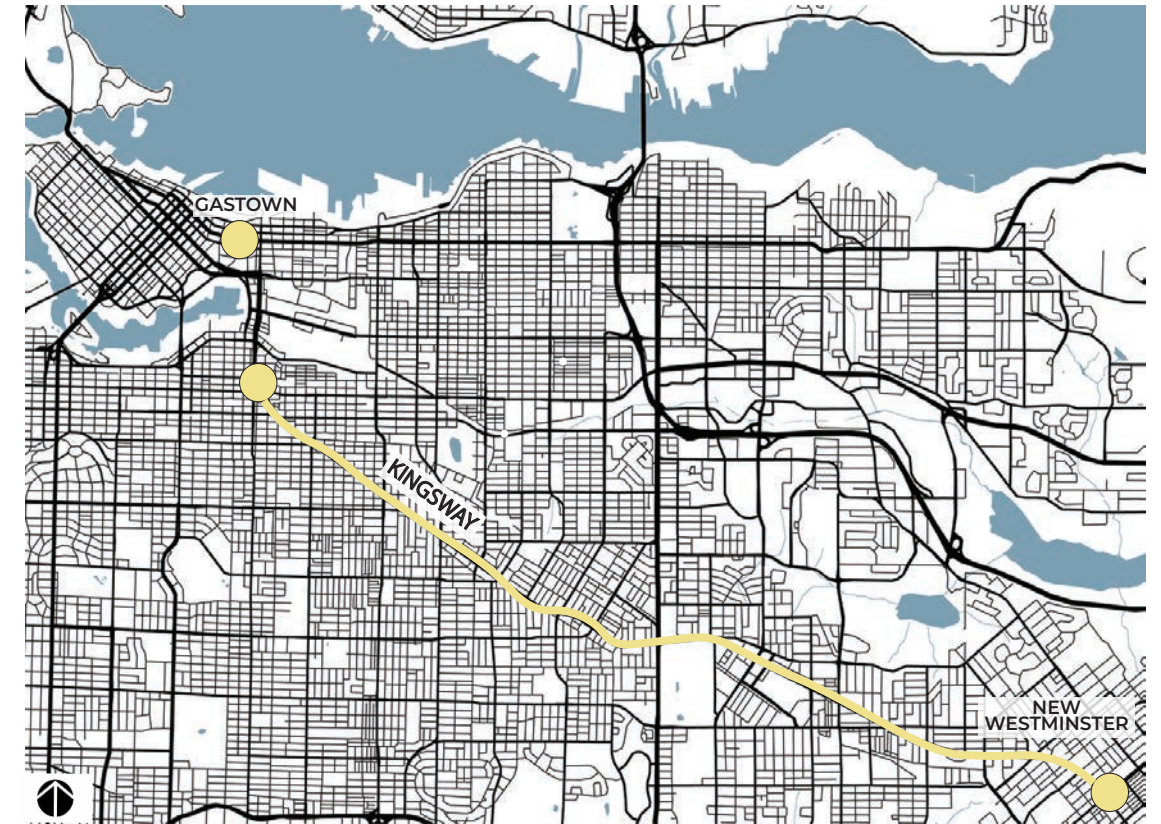


Fig. 11 | Kingsway on current Vancouver Map (SnazzyMaps, 2020, annotated by author)



Fig. 14 |Kingsway on Vancouver map, circa. 1925 (Unknown, 1925, edited by author)



Fig. 12 |Northwest view of Westminister Road (Kingsway) between 7th and 10th Aves (Unknown, n.d.)



Fig. 13 |Kingsway at Metrotown (Unknown, n.d.)

NORQUAY VILLAGE NEIGHBORHOOD | OVERVIEW

One of the newer neighbourhoods along the stretch of Kingsway is the Norquay Neighbourhood, centered on Kingsway and bound by Gladstone Street, 41st Avenue, Killarney Street and 29th Avenue (fig. 15). The Norquay Neighbourhood is an integral part of the Renfrew-Collingwood Community and a model example of a neighbourhood centre (City of Vancouver, 2013). In 2010, the Norquay Neighbourhood Centre Plan (fig. 16) was approved by City Council as an aid to help the city grow and develop throughout the years (ibid.).

Similar to that of Haussmann’s Plans for Paris, this neighbourhood plan has its own set of guidelines which are in line of the contemporary needs and opportunities given by the context it lays in. Through the already realized improvements in this neighbourhood there is evidence of traces similar to that of the Parisian plans.

Likewise, to the aftermath of the new boulevards that arose in Paris which became heavy crowded with traffic and lost much of their leisure character (Girouard, 1985), Kingsway has had the similar history which has affected the neighbourhoods that lay on the street. In this case study of the Norquay Neighbourhood there are aspects of the development of this area in particular on the Kingsway strip that resemble the solutions used in the crowded boulevards of Paris.



Fig. 15 | Norquay Neighbourhood Boundry (SnazzyMaps, 2020, annotated by author)

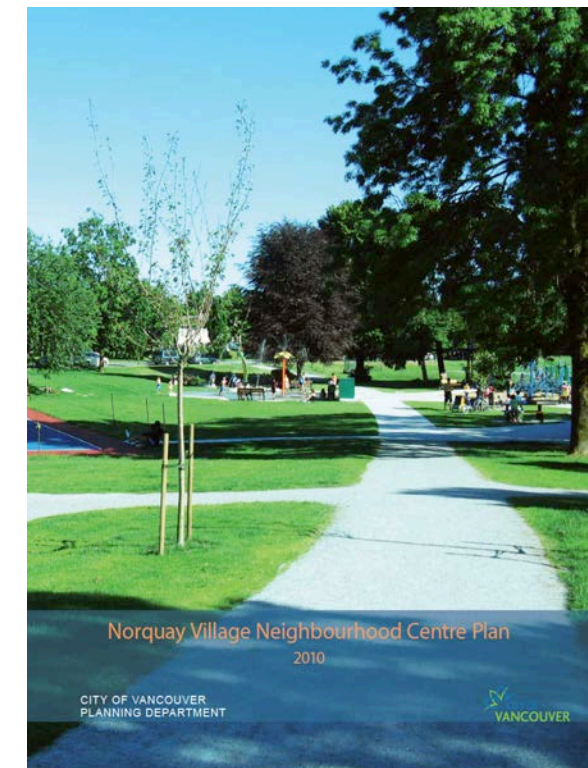


Fig. 16 | Norquay Village Neighbourhood Centre Plan (City of Vancouver, 2013)

KINGSWAY REVITALIZATION | OVERVIEW

Kingsway (which can be considered as one of Vancouver's own 'boulevards') is the main commercial 'high street' in the neighbourhood with its heavy presence and being a main auto-oriented commercial strip (City of Vancouver, 2013). Due to the regional access and location favourite of commercial businesses, Kingsway has lost its appearance and retail vitality. There is a high presence of narrow sidewalks on the long blocks due to the character of the street being mainly automobile which acts as an obstruction to pedestrians (City of Vancouver, 2013).

As part of the Norquay Neighbourhood Centre Plan, an outline to revitalize Kingsway is provided for the growth of both the neighbourhood and Kingsway streetscape (fig. 17) (City of Vancouver Planning Department, 2010). As part of the solution to renew Kingsway streetscape there is a plan of expanding the variety of local shops and services, support for higher density housing and fund social interaction in a lively way in the neighbourhood that the residents can walk to (ibid). Just like in Paris with residential units above the ground floor commercial units (Girouard, 1985), the buildings along Kingsway (and in many parts of Metro Vancouver), follow the same building typology. This type of building typology is also part of the city's vision for the growth of the city and creating a more walkable neighbourhood (City of Vancouver Planning Department, 2010).

In Haussmann's Paris as mentioned, retail was a big component of the city upgrades, in particular creating more pedestrian friendly sidewalks that would encourage foot traffic and produce more revenue for the shop keepers (Girouard, 1985). The upgrades seen on Kingsway resembles Haussmann's Paris plans in this regard as well. Similar to the use of retail shops in Paris as an opportunity to bring people in through window shopping or simply through the ease of accessibility for a pedestrian, the Norquay Park is a strategic shopping zone that includes a variety of retail stores along Kingsway as well as additional housing types, amenities and facilities (City of Vancouver Planning Department, 2010).



Fig. 17 | Rendered future Kingsway Streetscape (Brown, n.d.)

OVERVIEW OF KEY CONTEMPORARY DEVELOPMENT EXAMPLES RELATING TO HAUSSMANN PARIS' RENOVATION

Cautious consideration to **urban design** and **building quality** as well as **wider sidewalks** (through increased building setbacks) and **pedestrian-oriented** design features (City of Vancouver, 2013).

Haussmann was known to pay attention to the details of architecture on a street human scale and implemented the 'Haussmann Building' typology (Girouard, 1985)



Fig. 18 | Example of Stacked Townhouses in Norquay Village Neighbourhood (City of Vancouver, 2013)



Fig. 19 | Typical Haussmann Building lined along Boulevard Haussmann (Bézécourt, 2005)

Public investments in **street** and **public realm enhancements** such as street trees, furniture, and artistic elements to strengthen the distinctive character of this specific area of Kingsway (City of Vancouver, 2013).

As part of Haussmann's upgrades, street human scale was vital with the implementation of garden fences, kiosks, public toilets and other important small structures (Girouard, 1985)



Fig. 20 | Street Furniture and public art found in Norquay Neighbourhood (City of Vancouver, 2013)



Fig. 21 | Haussmann Street Furniture (Jacobs, 2016)

Strengthening Kingsway's role as the **main retail commercial heart** of the Neighbourhood Centre with prospects for main **retail 'anchors'** on larger sites (City of Vancouver, 2013)

There were many evolutions of retail under Haussmann's renovations ranging from arcades, bazaars and full-scale department stores which were formed as part of the economic growth for the city (Girouard, 1985)



Fig. 22 | Major retail centre Metrotown located along Kingsway (Unknown, n.d.)



Fig. 23 | Haussmann Galerie Lafayette (Unknown, n.d.)

NORQUAY NEIGHBOURHOOD RESIDENTIAL BUILDING REGULATIONS

Similar concept to that of the Haussmann Building regulations (Girouard, 1985) in almost every city in Metro Vancouver there are regulations to how building elevations and facades should be designed to a certain extent. In the example of the Norquay Neighbourhood, there are specific development characteristics that are advised by the city:

- Ground-focused with entry door onto the street (fig. 25)
- Common exterior space and appearance of 'home' on street with front porches (fig. 25)
- Direct entry to shared or priced exterior space and garden areas (fig. 26)

(City of Vancouver, 2013)

In addition to the required appearances of the residential buildings within the city, the Norquay Neighbourhood Plan also implements 'good neighbours' to all new developments such as:

- Developments of small scale are encouraged to adapt securely into a single-family context
- Pedestrian access from street and vehicular entry from lane

Another part of the Haussmann Building regulations related to the strict enforcement of building size, in particular to height (De Moncan, 2002). As to the appearance of buildings that are regulated by the city in contemporary times, the size of buildings are also regulated (City of Vancouver, 2013). In the case of the Norquay Neighbourhood there are regulations for different types of residential buildings zones with their own unique size regulations (fig. 27 & 28).

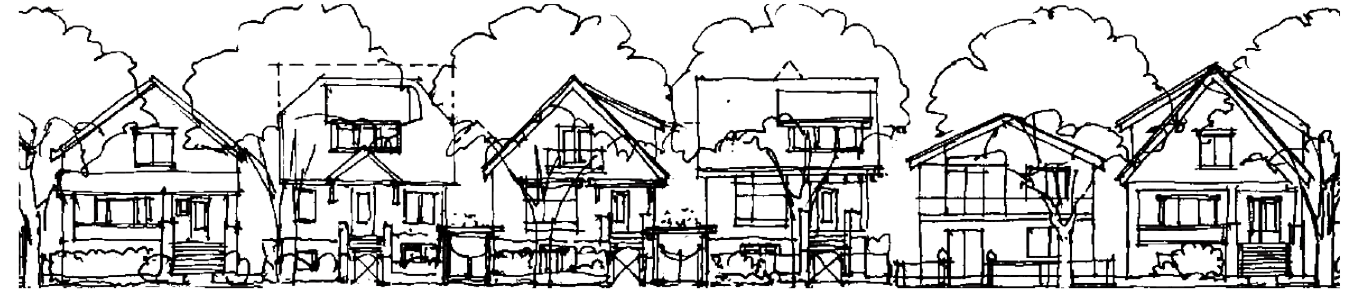


Fig. 24 | Norquay Neighbourhood Plan recommended streetscape of residential area(City of Vancouver, 2013)



Fig. 25 | Example of house expressing 'appearance of home' as recommended by neighbourhood plan(City of Vancouver, 2013)



Fig. 26 | Example of house expressing 'direct entry to shared exterior space' as recommended by neighbourhood plan(City of Vancouver, 2013)



Fig. 27 |Example of duplex building size restrictions (dashed) (City of Vancouver, 2013)

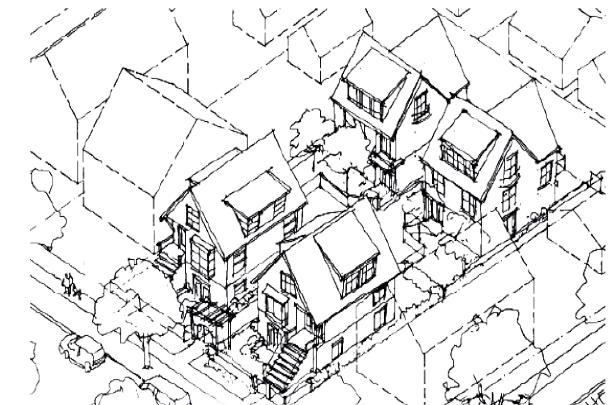


Fig. 28 |Example of four small houses on lot restrictions (City of Vancouver, 2013)

PUBLIC & OPEN SPACES

Just as part of Haussmann Paris plans was the incorporation of public squares, gardens and parks were being required (with economy building facilities incorporated such as restaurants) (Girouard, 1985), contemporary regulations are implementing more parks and open spaces as well.

In the Norquay neighbourhood there are currently three neighbourhood parks already implemented (General Brock, Norquay and Earles) but there are still plans for improvements of existing parks as well as opportunities for extensions and connections to and from the parks (City of Vancouver, 2013).

There are some key items that are being required for the development of the area in terms of green space:

Extension of green areas throughout the neighbourhood and to create natural and green corridors

Additional park space in creative ways are being required especially areas close to schools for public use, corner parks or creating multiple uses on streets to slow down movement to further improve pedestrian traffic

Enhancements of existing parks in the neighbourhood to make them more useful through additions of recreational space, accessibility and equipment

Include more public washrooms for the parks in the neighbourhood

CIRCULATION WITHIN NEIGHBOURHOOD

Similar to Haussmann's implementation of circulation within the city and regionally (Girouard, 1985) in addition to Kingsway acting as a major thorough way, the Norquay neighbourhood also has implemented plans to further support circulation within the neighbourhood and beyond. Focusing on the small scale, inter-neighbourhood transportation and circulation is just as comparable as the main thoroughfare (Kingsway) to Haussmann Paris plans.

The Norquay Village is well-supported with transit with the major mode of transportation being the SkyTrain Expo Line service having access at two main stations that are accessible by foot or by bus routes (City of Vancouver, 2013). The implementation of continued support of transit within the community is for the benefit of the residents, visitors and workers within Norquay:

Local population growth will benefit from the rising services and extended hours of transit

Weather protection, lighting, liter receptacles and benches are all part of the amenity improvements at transit stops and shelters


Transit security in order to prevent crime and indorse security



Fig. 29 | Vision of Norquay Neighbourhood Public Space (City of Vancouver, 2013)



Fig. 30 | Improvements of Public Transit in Norquay (City of Vancouver, 2013)

A long, straight road lined with large, mature trees in Savannah, Georgia, with Spanish moss hanging from the branches. The road is paved and stretches into the distance, flanked by rows of trees that create a canopy overhead. The scene is bathed in soft, natural light, highlighting the textures of the tree bark and the delicate strands of moss.

THE NEW WORLD
SAVANNAH, GEORGIA

TRUSTEES FOR THE ESTABLISHMENT OF THE COLONY OF GEORGIA

In July of 1732, chartered by King George II, the Georgia colony was conceived, designed and governed as an utopian charity colony by a group of London-based philanthropists under the name of Trustees for the Establishment of the Colony of Georgia (Gobel, 2016, p. 113).

The land was under the authority of the trustees for twenty-one years to raise finances to support the colony in founding towns and plantations (Gobel, 2016, p. 113). The land would after being returned to direct governance of the crown (ibid.)

There were several goals of the Georgia colony, but the main objectives were to offer land ownership and opportunity for Protestant refugees from Europe (Gobel, 2016, p. 113). An additional advantage of the project would strengthen Britain's colonial presence in the south of South Carolina of educating land (ibid.). A society of families cultivating the rich and hopeful land of what at the time was a neglected wilderness was the vision of the Trustees (ibid.).

The Trustees core concept was the Agrarian Law implementing egalitarian land division in the early days of the colony (Gobel, 2016, p. 114). Traditional republican values were embodied in the colony and it was to be a civilisation of honourable farmers that would be equally distributed across the land (ibid.).



Fig. 32 |European Emigration to Georgia Colony (SnazzyMaps, 2020, annotated by author)

JAMES OGLETHORPE

While numerous of the Trustees participated in significant positions in the development and administration of the Georgia colony, the contributions by James Oglethorpe was pivotal (Gobel, 2016, p. 114). A leading prison reformer and member of parliament, Oglethorpe commenced the first settlements and along with a team of 114 colonists sailed in November 1732 (Morris, 1994, p. 346).

Oglethorpe was born after the Glorious Revolution which was a significant milestone for British history that marked the beginning of the Enlightenment (Wilson, 2015). New material progressions and how those effected social stability were components in Oglethorpe's plan by including features of the new age (ibid.). Oglethorpe believed that it was necessary to resuscitate Britain's rural values and he did this through the establishment of the new colony (ibid.). Being brought up in a *gentry*, Oglethorpe's family values were replicated in the town planning (ibid.). Oglethorpe believed that it was their responsibility to aid the nation's royalty and also to encourage and exemplify the working-class who depended on them for income (ibid.).

Oglethorpe's city plans for Savannah was a broad plan for a model colony in which the specific financial and communal goals were supported by the physical design (Wilson, 2014). The Oglethorpe Plan can be said to be a representation of the Enlightenment (Wilson, 2015). The plan symbolised all the major themes of the age: humanism, science, diversity and secularism (ibid.). The Georgia colony was the first to incorporate the values that were later included by the Founders (ibid.).

Oglethorpe's design for the city was a dream of social fairness and civic benefit (Wilson, 2015). Reasonable land distribution, steady land tenancy, ban of slavery and secular management all supported Oglethorpe's vision for the city (ibid.).

The central determination of Oglethorpe's creation of the colony was to create an ideal agrarian civilisation that would reserve and feed Britain's nation (Wilson, 2015). The design of the Oglethorpe was aimed at economic, social and national security tests and policies for a better society in the New World (ibid.). Similarly, to a modern plan, Oglethorpe proposed the Georgia Colony into a singular framework (ibid.). A vision, goals, principles and application of policies and devices were put in place (ibid.).

SAVANNAH CITY PLANNING | INTRODUCTION

Savannah, Georgia is located on the south side of the Savannah River, about seventeen miles from the connection with the Atlantic Ocean (fig. 33).

The clearings for the first houses of the future town of Savannah were under way in February 1833 (Morris, 1994).

The city planning of Savannah has been appreciated and studied due to its intertwining garden spaces into the urban fabric (Gobel, 2016, p. 111). The city is one of the strongest examples of city growth by design and of a reorganization following a phase of growth by mass (Bacon, 1976).

Relating the city planning of Savannah to contemporary cities, there is a need of a new phase of restructuring in order to adapt to the new extents of regional scale (Bacon, 1976). Applying existing principles of growth to new designs as successfully as the planners of Savannah managed to in the 19th century is challenging, but necessary (ibid.).

Although only a number of American cities used the gridiron system Savannah is the most significant exclusion and the orthogonal geometry of the urban mid-west (Morris, 1994, p. 347).



Fig. 33 |Savannah, Georgia (SnazzyMaps, 2020, annotated by author)

OGLETHORPE CITY PLANNING | CITY ORGANIZATION

In 1757, William Gerard de Brahm, Surveyor General for the Southern District of North America prepared a plan for the city showing its full coverage as laid out by James Oglethorpe (fig. 34) (Bannister, 1961). The original plan for Savannah by Oglethorpe covered only 60 acres (Wilson, 2014). The city gradually expanded to what now is nearly a square mile, still based on the original plans of Oglethorpe (ibid.). The changing economic and social conditions were still able to be adapted by the original design (ibid.).

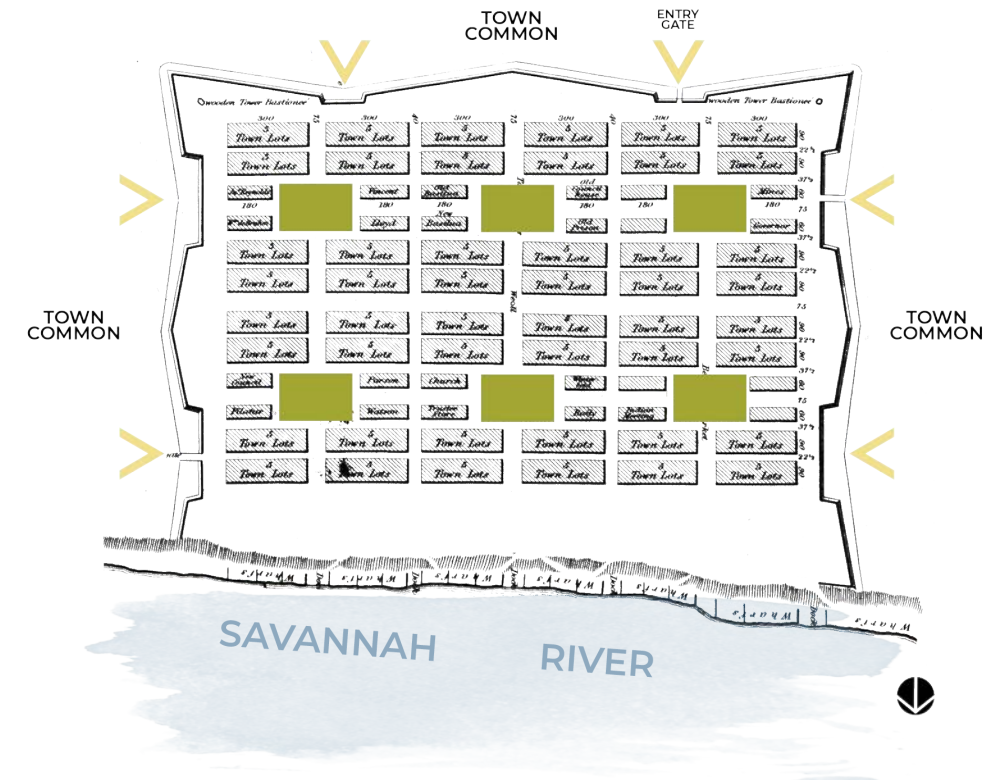


Fig. 34 |William Gerard De Brahm map of Savannah circa. 1757 (De Brahm, 1757, annotated by author)

OGLETHORPE CITY PLANNING | THE WARDS

The basic unit was called a *ward* and was repeated six times (fig. 35) (Bannister, 1961). Each *ward's* corner was called a *tything* block that was made up of two rows of residential units of five lots each (ibid.). Each *tything* comprised of ten homes, bringing to a total of 240 lots in the city. A 22.5-foot lane separated the two rows of residential units, which was one of the original examples of alley (ibid.). The ten lots was the standard organization for administration, defense, and farming and each *tything* worked together for military duty (Wilson, 2015). Outside of the town, each *tything* was given a square mile of land for farming with each family having a 45-acre plot of farmland (ibid.). The Trustees vision of the agrarian equality was imitated in this ordered partition of land (Gobel, 2016).

At the center of each ward were public squares of areas less than two acres with Trustee lots on both the east and west sides of the square (Bannister, 1961). The Trustee lots were comprised of public structures and official residences on all 24 Trustee lots (ibid.). The squares played an important role, creating a 'sense of being' within a complete unit which made them so successful (Bacon, 1976). The location of the squares entirely removed the visitor from the busy traffic of the nearby streets (ibid.). The planners of Savannah deliberately prohibited any traffic to go through the green spaces to execute this experience (ibid.).

The original function of the square as noted by Francis Moore (Moore, 1744, p. 30) was for the settlers outside the borders of the town when they came into town with their families and livestock for refuge and needed a big enough space to settle on (Bannister, 1961). Furthermore, the wide space that the square created were large enough for markets and the distances between the houses were large enough in case of fires (ibid.).

The six-ward city came to an overall dimension of 1425X2105' (ibid.).

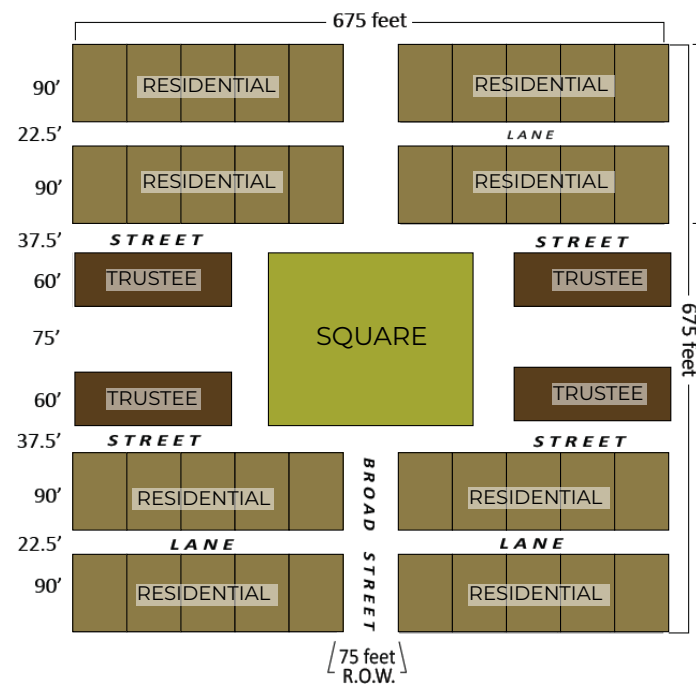


Fig. 35 | Typical Ward Unit (Sotomski, 2020)

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CIRCULATION | OGLETHORPE PLANS

The organization of the streets, in particular their widths also played a significant role in the original city plans (Morris, 1994). The major streets were 75-feet in width that connected the central squares (ibid.). The minor streets were 40-feet in width and divided the wards (fig. 36) (ibid.). The residential lots in the tythings were separated by two lanes 23-feet in width, which are considered the earliest example of alleys (Bannister, 1961). The diverse kinds of traffic were clearly distinguished through this organization of road structure (Morris, 1994). Parallel to the river were tree lined boulevards at intervals which substituted plain streets (ibid.). In the late 19th century a large park was introduced certifying that the growing city by cellular replication did not lose consistency with dimension (ibid.).

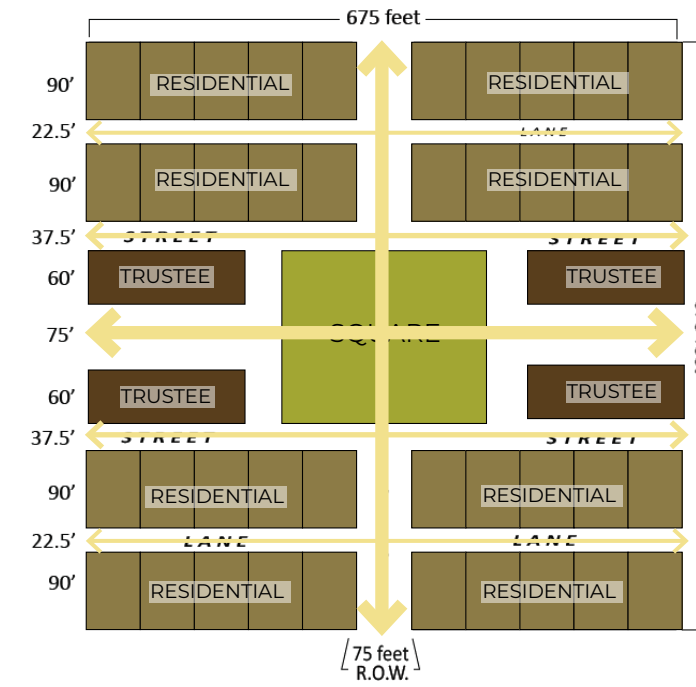


Fig. 36 | Circulation & Street Axis (Sotomski, 2020)

The original design principles of the Trustees were cautiously designed in order to govern nature through the use of geometry with the use of order of scales going from smaller to larger outward from the center of town into the wilderness (Gobel, 2016). As the city grew, Oglethorpe's design proved to be adaptable and city officials used the same rudimentary model for more than a century (Wilson, 2015). Eventually the city grew to 24 wards with the design in accordance to the original design (ibid.).

TOWN COMMON | EXPANSION

The first indication of a necessity to expand the town was in 1756 when Surveyor General, Henry Yonge, announced to the Commons House of Assembly of Georgia that it might be required to establish the limits of Savannah's town common as there might be an inclination of population (Gobel, 2016).

Following Yonge's comments, the colonial legislature in 1761 approved 'An Act for the Better Regulating the Town of Savannah and for Ascertaining the Common Thereunto Belonging' which caused the expansion of the common by the gaining of the adjoining garden lots (Gobel, 2016). To accommodate the growing town, the common was also expanded, extending south as far as to the farm lots as seen in Thomas Shruder's 1770 map (fig. 37) (ibid.). Following the expansion of the town common, in the years directly after, new town lots were added outside of the common to the east and west to support the growing town (ibid.).

As early as 1762 a burying ground was planned on the common land but not established till 1813 (Candler, n.d.). A cemetery for strangers was also founded around the same time (ibid.). In order to make room for another ward, in 1844 there were plans to move these cemeteries but did not happen until 1855 (ibid.). An academy and poor house were built on the common land in 1788 and in 1794 a city jail was built (ibid.). The original of golf in America and other athletic competitions were hosted on the common lot in 1795 and in 1815 a game of 'crickets' (ibid.). By the middle of the century the common lot disappeared (Gobel, 2016, p. 128).

In 1856, an anonymous writer wrote in the Daily Morning News (Daily Morning News, 1856) upon returning to Savannah 10 years later:

When we entered the newly built sections, and looked about us for the old South Common, the cheerful playground and the merry haunts of childhood 's sunny hours, like the well beloved of other days, who lent their smiles to gild these scenes of youth and gladness, all seemed as if fled. In the place of sandy mounds and grass covered hillocks, on which we were wont in early days to build our fort, and for whole Saturdays bid defiance to truant playmates, we find elaborate structures, alike distinguished for usefulness, strength and beauty.

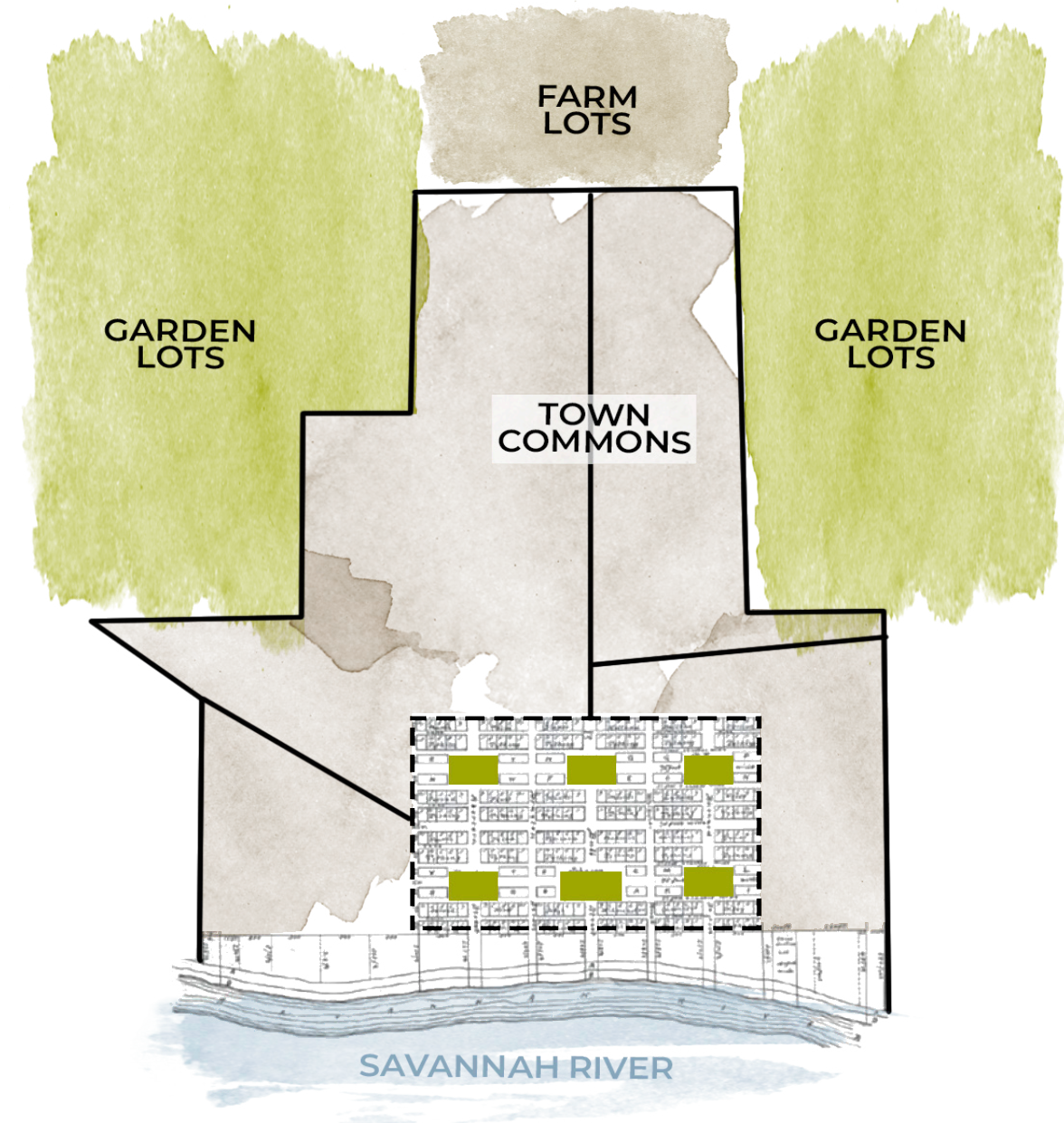


Fig. 37 | Thomas Shruder 1770 Map of Expanded Town Commons with Surrounding Garden Lots (Shruder, 1770, annotated by author)

TOWN WARDS | EXPANSION

In addition to the expanding town commons to support the growing colony there was also the replication of additional wards being implemented into the town. Three new Oglethorpe-style wards and squares were to be on either side of the common as ordered in May of 1770 by the newly formed council (Gobel, 2016). The purpose of this order was to increase revenue for the city through the trade of land (ibid.). The permitted plans of 1791 were essential to the revolution of the fixed six ward plan into an expandable, cellular recipe (ibid.). In addition to the three new wards and squares spreading into the east and west commons, three more wards were added in 1799, one in 1801, and two in 1815 (ibid.). By 1851 most of the common space was filled with wards and squares, accounting to a total of 24 (fig. 38) (ibid.).

THE CROWN | LAND OWNERSHIP

Two years before the Trustees charter was to terminate, the Trustees surrendered the Georgia colony back to the crown in 1752 (Gobel, 2016). The idealistic values that were advocated by the Trustees were not being as valued by the royal governors (ibid.). Slavery which was already permitted by 1750 became essential to the economic and social life of the colony (ibid.). The Savannah colony was converted into a practical administrative hub and commercial harbour supplementing and benefitting from the regional economy, which was founded on large scale, slave-based rice plantations (ibid.).

Although the Trustees had given up their ownership, the agrarian and egalitarian ideals weren't completely diminished (Gobel, 2016). The continuation of Savannah still replicated the principles of the founders in the form of a hybrid urbanism which reintegrated the city and country in line with the altering needs and interests of inhabitants and civic leaders (ibid.).

The geometric structure of the Savannah plan still had traces of the Trustees and would continue to be reinforced by the following generations (ibid.). The original six wards would eventually be reproduced to 24 following three main strategies in undertaking the transformations of the Savannah plan:

1. Utilization of town commons as an enlargement zone
 2. Replication of wards and squares
 3. Methodical tree-planting program
- (ibid.).



Fig. 38 | 24 Oglethorpe Style Wards, circa. 1856 (Gobel, 2016, annotated by author)

PUBLIC SQUARE LANDSCAPING | EXPANSION & EVOLUTION

Following the growing number of wards in the city, at around 1800 Savannah also started experiencing an evolution of its public squares (Bannister, 1961). The original open, unplanted squares were transformed into neighbourhood parks (ibid.). At the same time, the function of the squares was distinguished by planted areas that were secured and extenuated by barrier chains (ibid.). The anticipation for romantic taste for landscaped suburban parks and habituation to civic openness were strong driving factors during the first part of the 19th century of Savannah’s growth (ibid.).

The new style of sizable municipal parks was first seen in the Forsyth Park (fig. 41) by landscape architect William Bischoff and revised by city engineer and architect John B. Hogg (Gobel, 2016).

Accounting to more than 14,000 inhabitants in 1851, the city council permitted the ten-acre public park to be in the remainder of the town common with a supersized ward (Bannister, 1961). The park was already partly established as a public park by William B. Hodgson in 1846 which preserved many of the older pine trees (fig. 39) (ibid.). The park was titled Hodgson Park and became a shared place for leisure and exercise and transformed in a permanent park which has been strongly supported by the citizens (ibid.). By this time there was also an active concern about appropriate environmental conservation (Constructing Savannah’s Cityscape, 1851). The park in addition to its recreational uses would partly act as a nature sanctuary (ibid.).



Fig. 39 |Pine-trees at Forsyth Park (Dennis, n.d., edited by author)



Fig. 40 | Water fountain at Forsyth Place (Park), circa. 1868 (Unknown, n.d., edited by author)

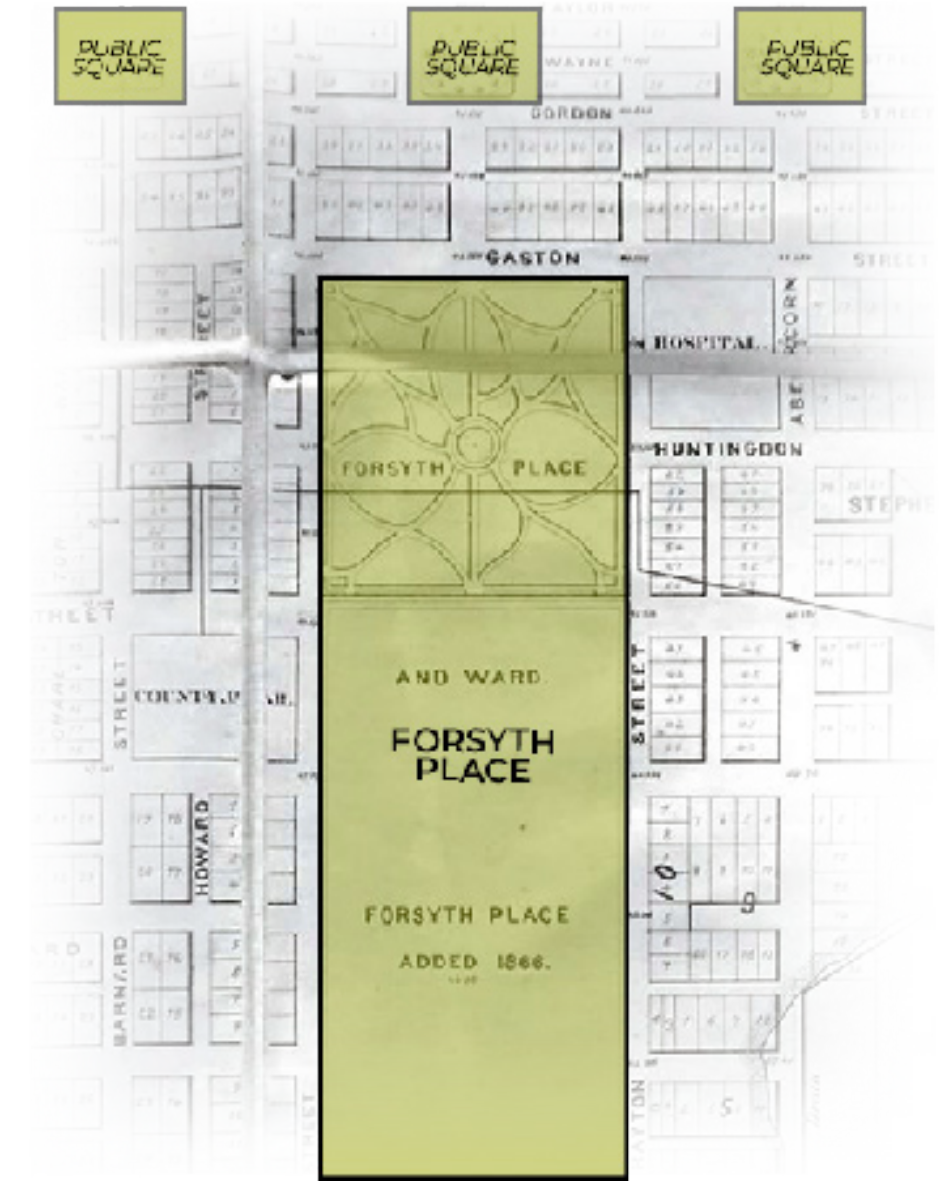


Fig. 41 | Forsyth Place (Park), circa. 1868 (Hogg, 1868, annotated by author)

STREET LANDSCAPING

The landscaping of Savannah extended beyond its neighbourhood squares. Tree planting along the streets of the town were implemented in 1817 when the city created a nursery in the common for chinaberry trees (Candler, n.d.). Oaks, magnolias and palmettos eventually replaced the chinaberry due to the storms that would damage and destroy the chinaberries (Gobel, 2016). The town grew to be covered with evergreen oaks and other picturesque trees giving an illusion as being built in a grove (fig. 44) (ibid.).

The western border line of the old city to the Fort was lined with double rows of trees at the Bay to create an enjoyable stroll in the summers, adding to the beauty and healthiness of the city (White, 1806). Due to the many intersections created by the squares and wards and the geometry of the new wards flooding the old town common there was enough space made by the east and west streets to allow for tree-lined boulevards that were inspired by the promenade on the Bay (Gobel, 2016).

In addition to physical attributes of the planted trees, shading, health & safety were also benefitting from the trees (Gobel, 2016). Furthermore, to the tree's function, a 1793 ordinance (City of Savannah, 1793) states the tree's other purpose:

It would contribute to the ornament of the city as well as its safety in case of fire by preventing the spreading of the same, that trees should be planted at regular distances and in a straight line on each side of the streets and squares

In order to integrate the county and the city in Savannah the planting of urban trees played a fundamental role (ibid).



Fig. 42 | Bull Street from Madison Square, circa. 1872 (Wilson & Havens, 1872, edited by author)

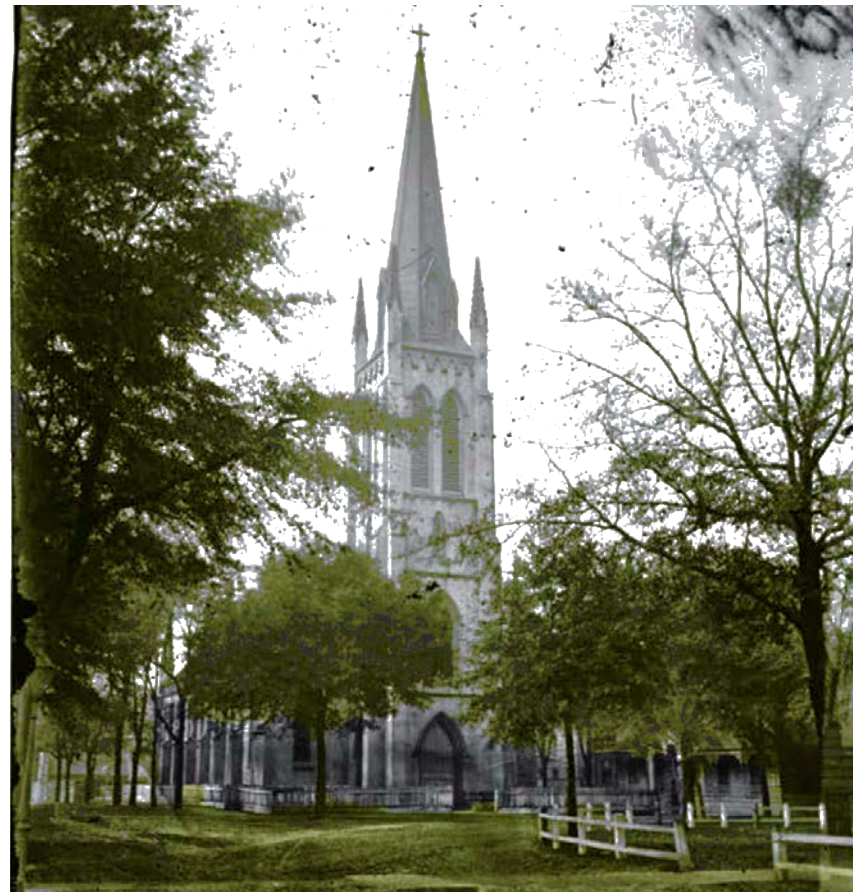


Fig. 43 | St. John's Church on Madison Square, circa. 1865 (Cooley, 1865, edited by author)

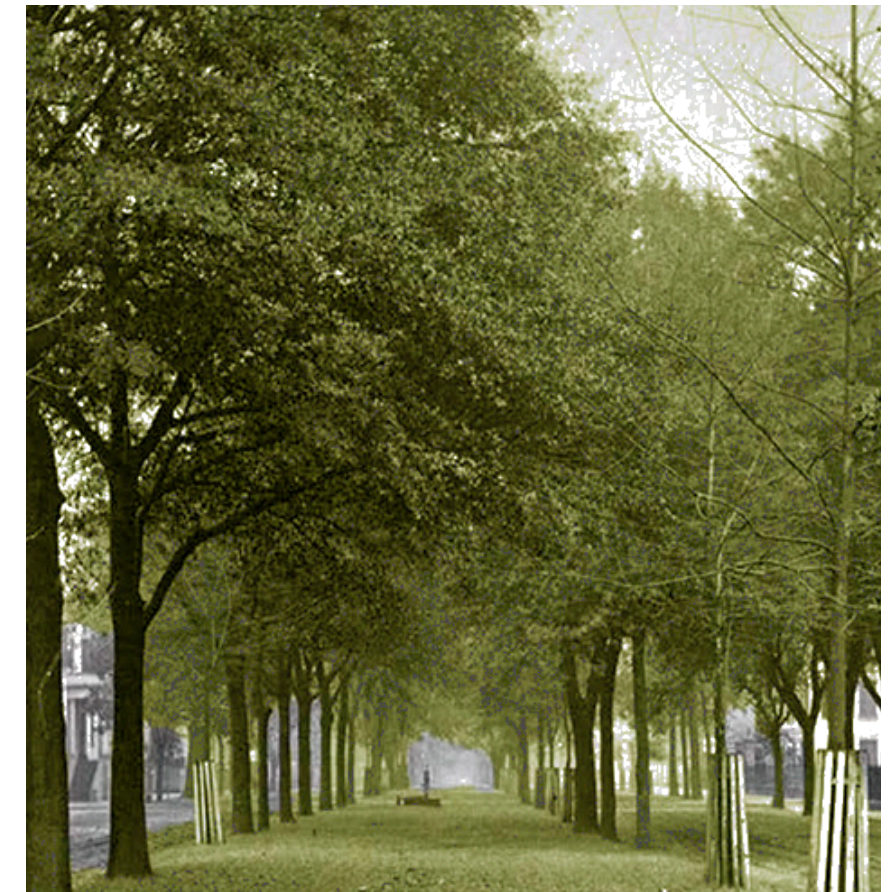


Fig. 44 | South Broad Street (Oglethorpe Avenue), circa. 1872 (Havens, 1872, edited by author)

CONCLUSION

The design growth of Savannah with its build-up of repeated units lasted up until 1856 where the extent of the city had reached its maximum and constraints of the city was necessary (Bacon, 1976). A major central axis line that encompassed the city in its entirety was created in the last half of the 19th century (fig. 45) (ibid.). On the waterfront came the city hall which extended on either side as an official park and the Factor's Walk and warehouses on the bank of the river were built (ibid.).

It's been nearly three centuries since Savannah was planned as part of a utopian dream that would reunite the country and the city. It was an effort to resolve several social, religious, economic, political and ethical problems that were conducted through the Agrarian Law where farmers in the city would work on their own fields and live in their own residences in an equal community. The land was divided into parcels by Oglethorpe which were to be for a mixture of rural, urban, public and private uses which unfortunately did not last for long.

Throughout all the challenges that Savannah faced, the city was an outstanding example of the combination of urban and rural and country and town. Urban and rural changes were reflected in the changes that the structure of the town experienced. Planters, merchants, and industrialists replaced the citizen farmers (Gobel, 2016). The evolution of the town reflected these changes and as the population grew. The town still maintained a garden-like experience with a growing rural city. Public squares replaced the original town commons which replaced public wells and livestock with benches but the function still remains and public space.

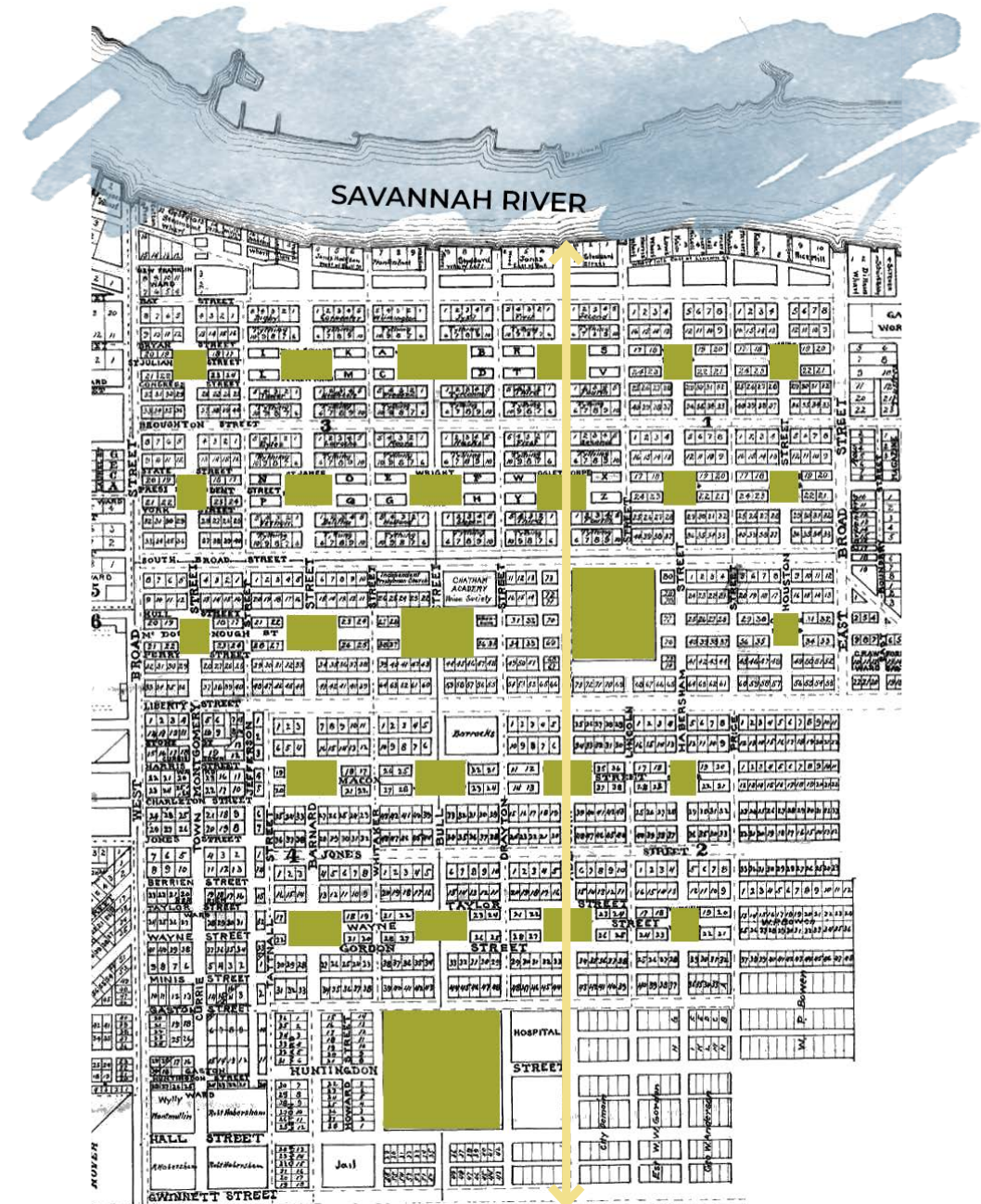


Fig. 45 |Savannah Map, circa. 1856 with main axis (Cooper, 1856, annotated by author)

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