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THE PERFORMANCE OF HISTORY AND DESIGN IN PAUL CRET'S RITTENHOUSE SQUARE

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Introduction

From its creation in the late 17th century to the present day, Rittenhouse Square has undergone significant transformation in its design and use. From its early stages as an undeveloped forest to the west of the young city to Paul Philippe Cret's application of Beaux-Arts design principles in the early 20th century, the formal characteristics of Rittenhouse Square have changed with the social and aesthetic needs of the space. It continues to this day to host a variety of public activities and uses and is one of Philadelphia's most recognizable cultural features. At the center of this success lies Paul Philippe Cret's early twentieth century redesign of the square, executed during campaigns of work starting in 1913 and extending into the late 1930's and early 1940's. Cret's Beaux-Arts inspired design created a system of spaces and forms which gave the park the ability to host a variety of uses seemingly beyond the holding capacity of its scale as well as a visual appeal that remains strong to this day.

By all appearances, the present condition of Rittenhouse Square seems so well manicured that it might presuppose any question about the overall maintenance and design strategy guiding the park. Surprisingly, however, little work has actually been done to document the condition of the square with respect to its designed features and historic character. During the course of the twentieth century the square has been subject to continuous addition and removal of planting materials, paving and hardscape elements, lighting features, sculpture and other decorative features by the city and by various private groups, as well. Some of these changes have been substantial and obvious to the casual onlooker, such as the addition of the Victorian-era guardhouse in the center of the square, and some have happened more subtly and incrementally over a period of years as



is the case with the square's foundation plantings. The many changes have, for better or worse, altered the form, character and function of the square from its early 20th century design. Cret's image of the square crystallized the Beaux-Arts principles of public space design in balancing the physical attributes of design with clear hierarchical spatial organization, as well as his use of modern elements of design allowing multiple uses with continuous, empty surfaces. Over time, however, Cret's design has shifted, as all landscapes must, with the dynamic processes of natural weathering, organic growth, cultural use, aesthetic taste and economic and political expression. Cret's design has survived these processes, but its image has blurred in parts, shifted in focus—certainly recognizable and successful in its own manner, but offset from the clarity of its original image.

While much has changed in Rittenhouse Square in the past century or so, little has seemingly been done to record these changes. It is unclear at this time what plan exists to manage future changes and what plan is being used for the preservation of the existing design. Little also seems to have been done to understand Cret's design within the context of the square's pre-existing designs and within the typology of city residential squares in general, in Philadelphia and beyond.

In contrast to many similarly scaled and designed historic city squares in Philadelphia, Rittenhouse Square has benefited tangibly from its surrounding neighborhoods. The wealth and social stability of its surrounding neighborhood has, in good measure, helped conserve the historic features of Rittenhouse Square when city resources dwindled. Few, if any of the city's historic designed landscapes can compete with the attention Rittenhouse Square receives in maintenance, programming and money.



In this respect, there is some irony in the challenges faced by Rittenhouse Square. Overenthusiastic additions and changes made by groups and individuals with strong financial resources have led to numerous additions the park. Without a comprehensive plan guiding changes made to the park, the square risks losing both its historic features and character. This thesis will begin the process of examining Cret's design and evaluating the changes made since.



Chapter I-The Development of Rittenhouse Square

In examining the development of Rittenhouse Square's historic form, it will be useful to briefly survey some of the traditional residential typologies of western Europe. Residential squares, as opposed to the neoclassic and radial squares associated with major public commercial and government buildings or structures, gained widespread use in Western Europe and Great Britain starting in the seventeenth and eighteenth centuries. The seventeenth century Place des Voges in Paris is an example of an early residential square. In its original form, it was gravel covered and open in plan, as it served the domestic activities of the surrounding three-story residential buildings. The sole decoration of the square was a centrally located statue of Louis XIII. Open in form, the Place des Voges was not unlike the plazas of Rome and Florence in structure, but it lacked the typical anchoring church or other monumental structure.

In the second half of the 17th century, the Place des Voges, along with a number of other Parisian squares, developed the characteristics associated with the French formal garden, featuring planar arrangements of planted beds and lawn, borders of trees and orthogonal, geometric layouts of path circulation systems. The statue of Louis XIII remained in the center of the square, but now at the focal point of the parterres and path system. The function of the residential square had changed from a public dooryard to an entrance garden; in doing so, it changed the primary functional and visual relationships of building to square.

London's squares drew from French and Italian traditions in early examples such as St. James's Square, Grosvenor Square, Leicester Square and Bedford Square, all late

¹ French, Jere Stuart. *Urban Space: A Brief History of the City Square*, Second Edition. Dubuque, Iowa: Kendall/Hunt Publishing Company, 1983, pp. 90-91.



17th century designs. Jere Stuart French identifies several major early typologies which developed in France and England through the 17th and 18th centuries, (Fig. 1) including the centric square (an open space with a single monument in the center), the French Formal (a version of the centric with diagonal paths leading to the central monument and geometric assignments of planting features), the English open center (a single ring accessible by the corners and encircling lawn), and the pseudo-Romantic type from the 19th century.² If French's terminology may be vague in classifying the cultural references of square 'style', he builds a basic spatial and formal vocabulary that begins to define the major organizing systems of residential squares to develop in the 18th and 19th centuries in both Western Europe and the United States. Hybridization of features was common such as in London's Russell Square, which combines modes featuring the diagonal pathways of the "French Formal" with the curvilinear ring of the "English open."

While the early residential squares served almost as shared, semi-private spaces for surrounding residences³, the addition of walkways into the square did more than create a decorative, organizational structure. The pathways opened the squares from the corners, formalizing the public entry into the space and, in doing so, dissolving the sense of private access and spatial appropriation by adjacent buildings. In many cases, the residential square became an extension of the street and a genuine public space of the city, though with a smaller, more intimate scale when compared to the traditional squares accompanying major government or religious buildings.

² French, p. 91. French's terms are less useful than the graphic development of his general typologies. It is unclear what is gained by the addition of "pseudo" as a prefix to the already imprecise term 'Romantic.'

³ Some of London's early residential squares, such as the Kensington Squares, were and still are enclosed by locked gates, accessible only to key-holding neighborhood residents. Squares in name and form, their function was more that of a private garden than public open space.



The residential square was, according to French, an integration of the urban character of the city into the open space while at the same time meshing the square within the city fabric, itself. Circulation systems were designed to work within the organization of the preexisting neighborhood fabric, accentuating the ability to traverse the square efficiently as well as heighten the visual connections between major thoroughfares.⁴ As the Industrial Revolution changed the economics of urban centers, a resulting effect was happening in the composition of the physical fabric of cities, as "...manufacture became the raison d'etre of towns, involving the movement of people as well as goods." Public spaces reflected these changes in the organization and scale of transportation routes, market centers and even recreational spaces. Public squares soon became characterized by their capacity for movement rather than their association with specific cultural referents, whether these be people, events, or even a sense of locality or place. This is illustrated no more dramatically than Paris' Bastille, which was entirely subsumed by traffic systems with the changes made in the mid-nineteenth century.

The rise of the public square in America owes a significant debt to the models developed in France and England in the 17th and 18th centuries. Among them, the development of the Bloomsbury section of London is a significant example of early residential squares relating to surrounding city fabric.⁶ As for the planning of the city fabric itself, London is, again, a likely source for American town planners. Following the Great Fire of 1666, a number of proposals for the reconstruction of London were developed, most devising a town grid with wider streets and improved open space

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⁴ French, p. 95.

⁵ ibid

⁶ ibid, p.91.



amenities⁷. Many of these designs found their way beyond the plan for London to the design of new cities. Richard Newcourt's plan was among those which, at first glance might be mistaken for Penn's plan of 1682 (Fig. 2, 3). Like Newcourt's grid, Penn's Portraiture of Philadelphia depicts a rationalized street grid, wide, intersecting central streets for commercial and market use and four open spaces intentionally tucked within the residential core of the city's quadrants. According to Penn's map, the squares seem to be placed at the edge of the city's allocated parcels, perhaps indicating some incentive for further speculative development.

Not every new American city was planned with the orthogonal grid, though there were many other examples of planned open space within the limits of the newly defined cities. Varying from stretching Boston Common to the Oglethorpe plan of Savannah, Georgia, the urban space figured as a prominent element in the layout of many of the early American cities, varying in form and function. The squares of early American settlers played a critical role in the everyday life of the city, functioning as commercial, political, and military entities and also served a range of ecclesiastical and social purposes, as well.⁸

Most city squares performed several if not most of these functions in addition to other public functions. This is the case of Philadelphia's early squares whose activities included, in addition to aforementioned general uses, horse races, small game hunting,

⁷ Reps, John W. *The Making of Urban America. A History of City Planning in the United States.*, p. 163. Princeton, NJ: Princeton University Press, 1965.

⁸ Zucker, Paul. Ed. *Town and Square. From the Agora to the Village Green.*, Chapter 6. New York and London: Columbia University Press, 1959.



public hangings, burial grounds and the city's first water pump house⁹. Southwest Square, later named Rittenhouse Square, was the only one of Penn's five original squares to escape use as a cemetery at some point in its history.¹⁰

While European, particularly French, squares¹¹ had, by the late 18th century developed strong formal vocabularies to inspire the plans of Philadelphia's squares, the state of real estate development left both western squares on the outskirts of the city until several decades into the nineteenth century. Into the 1820's, absentee landlords owned the majority of the undeveloped land surrounding Rittenhouse Square and the primary occupants of the area were craft laborers and brickyards. 12 The square was a section of woods with "lofty" trees and "an abundance of game." So abundant was the hunting in The Governor's Woods that in 1720 an Act was passed forbidding the shooting of pigeons, doves and other fowl on the streets of Philadelphia. 13 The remoteness of Southwest Square in the first decades of the 19th century apparently led to social problems such as the deposition of 'night soil' and other waste in the square. 14 By 1816, the condition of the square had deteriorated to the extent that led City Council to erect a rough board fence around the square's perimeter that was purchased with an \$800 loan from local residents. The Councils also provided that, in Southwest Square "...those parts

⁹ Scharf, John Thomas and Wescott, Thompson. *History of Philadelphia*, *1609-1884*. Philadelphia: L.H. Everts, 1884., pp. 1842-3. Horse races were apparently common until the start of the Revolutionary War and public hangings continued beyond the war until the erection of the city's first waterworks in 1799. It is likely that the waterworks replaced the gallows in the center of the square.

¹⁰ Ibid. 1848.

¹¹ Perhaps more akin in scale to the American 'square' is the French 'place'. The French 'square' might better be illustrated by the shards of urban space designed by Alphand during Haussmann's reorganization of Paris in the 1850's and 1860's.

¹² Burke, pp. 6-7. The square itself was a source of clay for local brickyards until the second decade in the 19th century.

Rivinus, Marion. *The Story of Rittenhouse Square*, 1682-1951. Philadelphia: Private Publisher, 1951, p.
 According to Rivinus, the woods were part of a larger body of trees on land originally belonging to Penn and often referred to as "The Governor's Woods."
 Ibid, p.7.



not used for particular purposes, should be tilled to destroy the weeds with which it was overgrown, and laid down with grass as soon as possible". This seems to be the first mention of designed improvement to the square's appearance.

In 1825 Southwest Square was given its present name after David Rittenhouse. philosopher, mathematician, astronomer and Pennsylvania's first treasurer¹⁶. There is little documentation of the square's formal layout in the years up to 1852¹⁷ when the surrounding streets were widened and renamed, and the wooden fence removed and replaced by an iron fence. Trees, grass and walks were improved, as well. 18 As the surrounding neighborhood gained an increasingly urban character, the sylvan character of the square remained undisturbed. According to Clement Stocker Philips, resident of 1810 South Rittenhouse Square from 1850 to 1885, the park had retained some its earlier, "primeval" attributes into the 1850's having "some fine old forest trees; one great spreading willow grew at the southeast corner", 19. Mr. Philips recollection is supported by an 1855 bird's eye view of the city from the Schuylkill River, where the square is seen with a developed canopy and the impression of an existing path system where trees are missing (Fig. 4). The character of the park's surrounding neighborhood is urban, yet some sizeable, undeveloped tracts of land remain to the west of the square.

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¹⁵ Scharf and Wescott, 1849.

¹⁶ Ibid, 1845. In 1816, an ordinance proposing that the four original squares be named Washington, Franklin, Penn and Columbus Squares, with each square containing a bronze statue of the eponymous figure. This ordinance failed to pass through the Select Council, but nine years later Philadelphia's both councils approved the current names given to the four original Penn Squares.

¹⁷ In 1840 The American Philosophical Society proposed the erection of an observatory in the square but rescinded the offer when the City Councils reserved the right to remove the structure when they deemed appropriate. Rivinus, 10-11.

¹⁸ Scharf and Wescott, 1850.

¹⁹ Cohen, Charles J. Rittenhouse Square: Past and Present. Privately Printed, 1922. p. 31.



By 1858 a formal path system and general planting scheme is indicated on Hexamer and Locher's Atlas of the 7th and 8th Wards of Philadelphia (Fig. 5). In this map, two concentric circular paths with converging paths from the corners and sides divide the square into 13 sections. On the perimeter of the square is a straight walkway, while the interior paths curve, accentuating the bucolic character of the 'woods' within the park. Trees are indicated on this map as fairly evenly distributed and allude to the density depicted in the earlier 1855 bird's eye view. It is unclear whether this depiction of tree placement is accurate, but the suggestion of density and quantity supported by both this map and earlier descriptions creates a park whose function was that of passive recreation, and its quality even a bit escapist and remote. There are no straight lines through the square and no significant open spaces for large activity. Amidst the trees, however, the square was used between 1861-1865 for Union Army drills training recruits for the Army of the Potomac.²⁰

The 1862 Smedley Atlas (Fig. 6) and Jones Atlas of 1874 (Fig. 7) show a continuation of this plan into the 1870's. The Jones map of 1874 indicates gas lighting fixtures in the square as well as three fountains (Fig. 8) that were donated by private individuals in the 1860's and removed when they leaked and flooded the corners of the square. Figure 9 shows a corner view of the square with the iron fence (removed in 1885), gas lighting fixtures and a fairly dense canopy of trees. There is little planting evident besides trees and thinning lawn. By contrast, the surrounding architectural fabric

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²⁰ Cohen, 7.

²¹ Scharf and Wescott, 1850. The "tall, grotesque and fanciful" fountains were installed successively, with permission from City Council, by three different neighborhood residents, on the northwest, northeast and southeast corners.



grew in opulence, ordering the square's perimeter with the facades of late nineteenth century eclecticism (Fig. 10).

It might be useful, at this point, to survey the development of other Philadelphia city squares during this period to understand the context in which Rittenhouse Square was changing. Figure 11 depicts the five original squares as they were recorded in the 1862 Smedley Atlas. While they show a remarkable amount of variation, all but Franklin Square share similar organizing elements of ring paths intersected by orthogonal or diagonal pathways. Rittenhouse and Washington Squares are most similar, organized around two concentric circles with paths converging on the diagonals. Logan Square divides the main area into two symmetrical halves, each containing an arrangement with orthogonal paths centered by a circular bed. Like cells dividing, Center Square takes the repetition a step further as Broad and Market Streets (and their trolleys) slice the square's area into four parts, each a miniature version of the circle in the square arrangement. Franklin Square is the exception to the rules followed in the other squares, having a more elaborate, curvilinear, and somewhat asymmetrical path system entering from corners and sides²². Unlike the rest, Franklin Square has a central area around the pool, allowing a larger number of simultaneous users and greater possibility of social events in the square. The other four squares allow fewer simultaneous users, restrict movement to the geometric path system and allow a narrower range of activity.

Besides the five original Penn Squares, most of Philadelphia's city squares developed over a 75 year span, from the middle of the nineteenth century through the first two decades of the twentieth century, with the largest number added towards the latter

²² By the turn of the 20th century Franklin Square would lose its rococo curves to the radial/orthogonal configuration common throughout the city's squares.



stages of this period. That this was also the period of Philadelphia's industrial growth and population swell was no coincidence²³; the parks seem to have been created both as incentive for future growth and a means to alleviate the densification of city areas already inhabited. New squares were among the tools of speculative developers in making communities in the new blocks of neighborhoods on the city's expanding perimeter, as well as being a means of making already dense neighborhood more livable and healthy by clearing a space among the factories, mills and warehouses for a bit of air, a stroll and perhaps a picnic.

Outside of the squares designated in Holmes' 1680's plan²⁴, the oldest of Philadelphia's squares were located not far from the center of the city in South Philadelphia's Moyamensing and Southwark sections, and also just north of the center in the Kensington and Northern Liberties districts of the city²⁵. Among these squares are Passyunk Square in Moyamensing, Jefferson Square in Southwark, Fairhill Square and Norris Square in Kensington, and Shackamaxon Square in Northern Liberties. As a group, these sites show the range of development patterns characteristic of Philadelphia's city square in the development of their design as well as the neighborhood context that grew around them (Fig. 12).

²⁵ These districts were incorporated into the City of Philadelphia in the Consolidation Act of 1854.

²³ Burt, Nathaniel and Wallace E. Davies. "The Iron Age 1876-1905." *Philadelphia: A 300-year History*. Ed: Weigley, Russell F. New York: Norton and Company, 1982.

²⁴ Scharf, John Thomas and Wescott, Thompson. *History of Philadelphia*, *1609-1884*. Philadelphia: L.H. Everts, 1884, pp. 1840-1853. According to Scharf and Wescott, the original five square plot drawn and described in Holme's Portraiture of the City was never ratified by formal 'warrant or patent', but a Supreme Court decision confirmed the City's owner ship of the squares by 1888, guaranteeing public ownership of the spaces. A guarantee of the parks' integrity in themselves seems to have been a different issue, considering the current state of Franklin, Logan and Center Squares.



Following Holmes' plan and the accompanying description, which in their brevity were surprisingly effective in establishing the original squares, the next significant mandate for public recreation space came with the Consolidation Act of 1854, Section 39,

That it shall be the duty of the city councils to obtain by dedication or purchase, within the limits of the said city, an adequate number of squares or other areas of ground, convenient of access to all its inhabitants, and lay out and maintain such squares and areas of ground as open public places for the health and enjoyment of the people forever.²⁶

This Act specifies not only that it is the responsibility of the city to create open public spaces and maintain them, but also that the squares should be accessible to all inhabitants, meaning, presumably, that they would be within walking distance from most neighborhood centers. This led to an increase of public open spaces throughout the existing city and in the regions yet to be developed.

In the decades following the 1854 consolidation, the city's boundaries expanded in all directions but east. Swampy South Philadelphia grew in from the north and from the ports on its edges. West Philadelphia developed as large estates and suburban retreats and then filled in along major trade corridors and secondary streets with twins and row developments. Expansion north was first concentrated along the Delaware River and continued northward and westward until it reached the Schuylkill River and beyond, eventually bringing in the existing towns of Manayunk and Germantown.

By the end of the 19th century, few of the large estates in the perimeter areas remained, as Philadelphia's industries grew in number and size, drawing a larger and more diverse population into the city's existing fabric and pushing the borders of the dense neighborhood fabric outward. Once located on the suburban outskirts of the city, the estates of north, south and west Philadelphia were sold or transformed into city lots packed with factories, warehouses and the rowhouses of new neighborhoods. Large

²⁶ City of Philadelphia, "An Act to Incorporate the City of Philadelphia," 1854, Section 39.



populations of workers crammed into the new developed areas of the expanding city, and the square, particularly valuable in its industrial setting, played an important part in the recreational day-to-day activities of the new neighborhoods.

Norris Square (Fig. 13-15) and Fairhill Square (Fig. 16) in the Kensington District of Philadelphia were created in the early 1860's in anticipation of industrial growth northward. Figure 13 shows Norris Square amidst relatively sparse neighborhood development, and its curvilinear path layout sets a 'rococo' mode of design, with curving entrances at corners and straight entrances from the sides²⁷. By 1888 the plan in Figure 14 shows a well-developed surrounding neighborhood and two large churches placed on the square's periphery. This plan straightened out the path system, making movement more efficient, and also removed the beds from within the path system, changing the decorative scheme of the park and the amount maintenance required, as well. Figures 17 and 18 show the same changes being made to Jefferson Square in South Philadelphia in the late 1880's. Figure 19 shows a generous use of the circle paths in Passyunk Square, which was simplified in the mid-1880's (Fig. 20). Tiny Shackamaxon Square (Fig. 21) and 22), originally laid out as an extension of an outdoor market in 1819, was an early example of the diagonal and circle path system, but by the end of the 19th century the industrial character of its surroundings overwhelmed its usefulness as an open space and it was replaced by a public bath house²⁸.

While the original Penn Squares (besides Franklin Square) shared a common set of geometric layouts from 1862, at the latest, some of the newer residential squares, through the first decades of the twentieth century, were originally set out with more

²⁷ Wescott and Scharf, p. 1852: "By ordinance of Nov. 21, 1859, the plan of Franklin Square was adopted as the plan for the improvement of Norris Square, excepting that the fountains were omitted. There is however, a handsome fountain the square, surrounded by flower-beds." Wescott and Sharfs' account is from 1884, leading one to believe that the rococo Franklin plan was still intact by that time.

²⁸ Wescott and Scharf, 1852.



elaborate features including beds of flowers, fountain pools²⁹ and the curvilinear path systems of larger parks, reflecting perhaps a more rural, suburban aesthetic. Others were created to entice prospective buyers with ornamental balustrades and tile-lined terraces, and were designed to fit into the tight urban fabric, building upward rather than outward (Figs. 23-25).

By the early part of the twentieth century, many of these new squares were used to site educational and religious institutions, such as Dickinson Square, in South Philadelphia (Fig.26), changing the relationship, in function and scale, of the square to its immediate surroundings. These new institutionalized squares, usually centered with a large flagpole and American flag, likely served as social and educational anchors for development of new, often immigrant industrial communities that were spread, by the early part of the 20th century, throughout the city's industrial core (Fig. 27). The small city park, and the residential square, in particular, continued to function as a place for recreational activities of individuals, but it also gained a wider, more institutional, if not municipal, character as the city began placing educational, recreational and utility service facilities on its perimeter. The residential square, formerly a place designed solely for the mostly passive, even escapist recreation of its adjacent communities became increasingly a working space in the establishment of educational, religious and even patriotic values.

The conversion of many Philadelphia squares to the radial path form may be emblematic of this new working character or it may well have been simply an attempt by the engineers at the Department of Public Works to increase the square's circulation efficiency and decrease the cost of upkeep. The straight paths replaced the gravel surface with concrete or asphalt, which simplified everyday path maintenance. Eliminated were many of the enclosed planting beds at the entrances and middle of the squares, paving over and often centering the square with a flagpole. The palate of planting materials was

²⁹ Scharf and Wescott, 1848.



simplified to a more elemental combination of lawn, shrub, tree, and occasionally bulb, plantings, which by the turn of the twentieth century was even more than the city was prepared to adequately maintain³⁰.

Not surprisingly, it was during this period in the 1880's that the next significant shift in Rittenhouse Square's form took place. The diagonal corner entrance paths which were slightly curvilinear in the 1875 Hopkins Map (Fig. 27) appear straight in the 1885 Bromley Map (Fig. 28), and now converted from gravel to asphalt³¹. Also new are secondary paths at each corner, converging upon the diagonal slightly less than halfway to the center of the square. While the Notre Dame Convent and the Holy Trinity Church are located on the western edge of the square and the Rittenhouse Club on the northeastern edge, the square is still predominantly surrounded by single-family houses, keeping the surrounding context largely residential in scale and use. Figure 29 shows the plan in 1887 with trees indicated as widely and fairly evenly distributed through the park. Also evident is the beginning of open spaces at the intersection of the four corner entrances and, significantly, at the center of the square, forming nodes of social potential within the realigned spatial configuration. Though understated in scale and proportion, the social value of these areas would be extruded and exploited in future development of the square.

The general plan of Rittenhouse Square remained in place (Figs. 30 & 31) until 1913, when the Rittenhouse Square Improvement Association, headed by Mrs. J. Willis Martin and Dr. J. William White, two Rittenhouse residents and prominent social figures.

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³⁰ Dept of Public Works, Annual Report, 1913. City of Philadelphia, p. 303.

³¹ Rittenhouse Square Improvement Association, p. 3. According to the report, a petition signed by some twelve hundred local residents protesting the conversion of the gravel to asphalt went unheeded by the city, as did their wishes to keep the iron fence surrounding the square. The same petitions were successful in stopping, at least for the time being, the widening of the streets surrounding the square which would have resulted in the loss of the perimeter street trees and shrubs.



formed the Rittenhouse Square Improvement Association (RSIA) to bring about wide-scale changes in the park.³² Among some 23 similar Associations formed by 1914³³, the RSIA was organized with many members whose Rittenhouse lineage started with the development of the area in the mid-1850's. Many of these families continued to participate in the social activities of the square following an upper-class exodus to the Main Line.³⁴ Despite its humble, democratic origins, by the late nineteenth century Rittenhouse Square was firmly associated with the class-conscious, old and new wealth gentry of its surrounding neighborhood (Fig. 32). The square was a parade ground for Philadelphia's society—a place to see and, more importantly, be seen, particularly during holiday seasons where

"...after church service parades of fashion around the Square were noted even in jealous Fifth Avenue, New York, especially the Easter Parade...It was a friendly neighborhood gathering, for in those days the neighbors all knew each other and most families were pretty well intermarried." ³⁵

The square's popularity was, in many ways, its biggest problem as generations of toddlers and small children, (Fig. 33) as well as students from adjacent and nearby schools used it as a playground, trampling lawn, path and plantings alike.³⁶ Funds for square and park maintenance became increasingly scarce, citywide, as many more small parks and squares were constructed in the first decade of the 20th century spreading

³² Cohen, 7.

³³ City Parks Association, p. 10. While the final decade of the nineteenth century and first two decades of the twentieth century saw a proliferation of new parks and squares added to the city's property, the Department of Public Works was unprepared or unwilling to allocate sufficient resources for the maintenance of the new open spaces. The various square associations were formed by local residents as a means of advocacy and fundraising to fill in where city funds and efforts fell short. As they were then, the maintenance and health of today's squares in Philadelphia are directly related to the organizational and financial capacity of its related association or friends group.

³⁴ Burke, p. 30.

³⁵ Rivinius, p. 15.

³⁶ Ibid.



thinner the staff of city laborers and gardeners.³⁷ Rittenhouse Square was wearing down—its pathways were deteriorating, its forest of trees in decline and its once spacious lawn receding (Fig. 34).

The decision to pursue the redesign of Rittenhouse Square came not from a city agency, but rather from two Rittenhouse residents vacationing on Lake Como, in Magaggio, Italy³⁸. While conversing at their lakeside hotel, Mrs. J. Willis Martin and Dr. J. William White discussed the benefits in health and beauty that European public parks gave to their native populations, finding Philadelphia's parks, and, in particular, their own Rittenhouse Square, deficient when seen against European counterparts.

Deciding that Paris' Parc Monceau was an appropriate comparison³⁹, Mrs. Martin traveled to France in 1912 and photographed the park with the assistance of Jacques Greber. She then returned to Philadelphia, photographed Rittenhouse Square and used the uneven comparison in a meeting of fellow Rittenhouse residents to provide the impetus for the formation of the Rittenhouse Square Improvement Association⁴⁰. The meeting resulted in the publication of a pamphlet distributed throughout the neighborhood, which set out the argument for wide-scale changes to the square. The pamphlet gives a brief historical overview of the square, chronicling previous changes made in the square's development and listing the aesthetic changes to be made in plantings, tree and shrub maintenance and lawn improvement. The Association made the argument that the improvement of Rittenhouse Square, if 'conspicuously successful,' could serve as a

³⁷ Dept of Public Works, Annual Report, 1913. City of Philadelphia, p. 302. This report cites the general decline of trees in city parks due to inadequate personnel: "The condition of the trees within the squares and small parks was a discredit to the city. No competent force of pruners is provided by ordinance for such special work, but we have been able, with our laborers, under the careful instruction of the landscape gardener, to correct most of the evils which existed, because of improper use of the saw during previous years."

³⁸ Rivinus, p.p. 17-18.

³⁹ The choice for Monceau is somewhat puzzling, given its significantly larger scale and predominantly picturesque' layout. The park was popular social space of the surrounding upper-middle class residential neighborhood and was famed for it's collection of sculpture and horticultural specimens, all of which may have played a larger role in its potential comparison than the particularities of its size or layout.

⁴⁰ Rivinius, p. 16-18.



model for other city squares and parks facing similar design and maintenance challenges, which there were many. The Association finishes its argument by the suggestion that improvements to the square might assist not only in providing improved use for recreational activity, but it would address the overall decline in the Rittenhouse neighborhood, symbolic in property values:

"But it is making this request for aid only to those who may be supposed particularly to profit from the projected improvements in two ways: increased pleasure in the use of the square by their children and their families; advance in the property values of the general neighborhood."

Through the pamphlet, the RSIA made an attempt to appeal to the widest possible audience in proposing wide-scale changes to the square's design, using aesthetic, recreational and even financial incentives for support. They did this by placing the square in historical context within Philadelphia, and then broadened the scope with comparisons between Rittenhouse Square and examples of successful urban parks in London and Paris, focusing particular attention on Parc Monceau, a Parisian park with ostensibly similar cultural context, uses and values. Parc Monceau was redesigned in the mid-1850's by Alphand, who inserted the strong, axial French pavilions and promenades within a greater picturesque landscape of undulating topography, curvilinear paths and sculptural curiosities. Parc Monceau provided an ideal example of a small urban park which combined elements of the playground, park, garden and museum enrobed in a landscape with formal variety and classical, if not sentimental, historical referent. The appeal of Parc Monceau was seemingly so strong that they would look to their own local French architect, Paul Philippe Cret, to bring about similar results in Rittenhouse Square.

⁴¹ Rittenhouse Square Improvement Association, 5.



Chapter II-Compositional Principles of Cret's Landscapes

The 1913 "Improvements for Rittenhouse Square" design was among Paul Cret's early projects in landscape architecture, but it was not the only venture into public open space design taken on by Cret. With a landscape portfolio that included several major Philadelphia public plazas and parks, early designs for the Philadelphia Parkway, a plan for the Sesquicentennial Exposition, the Pan American Union and Rodin Museum gardens, many memorials and a suburban cemetery, Cret's projects in the landscape were both varied and substantial. In some of his projects, Cret collaborated with landscape architects such as Jacques Greber on the Rodin Museum garden, the Olmsted Firm on Broad Street's Southern Plaza⁴² (now Marconi Plaza) and Paul Oglesby on Rittenhouse Square. Other projects leave the landscape design credit with Cret, who seemed to think little of it. Landscape architecture, to Cret, was part of a "thorough and well rounded architectural education," which, along with planning and engineering, was among allied skills to be employed by the practicing architect. Looking at these landscape projects as a group, it seems that Cret approached the design of exterior spaces much the same as he did buildings—by developing forms "by the process of analyzing programs and

⁴² In the case of Southern Plaza, Cret conceived the design later to be worked out by the Olmsted Firm, according to the City Parks Association of Philadelphia's 1913 annual report.

⁴³ Vincent, Marc. "Natura Non Facit Saltus": The Evolution of Paul Cret's Architectural Theory. University of Pennsylvania: Doctoral Dissertation in History of Art, 1994.

⁴⁴ At the University of Pennsylvania's School of Architecture, Cret resisted the removal of traditional landscape gardening from the curriculum of architectural schools, favoring instead "a specialization at a certain stage of the [landscape architecture] curriculum into two groups—one giving more importance to the land development, to city problems, to financing and housing, while the other would keep closer to the old curriculum,; that is, the horticultural knowledge, the use of plant materials to produce certain pictorial results, and so forth." Vincent, pp. 248-249. Cret's division apportions landscape architecture between the traditional role of the landscape *gardener* and the emergent role of the city *planner*, leaving the ground in between—the spatial and material design of the site—to the architect. This seems not so much a slight against the growing field of landscape architecture, but more an unwillingness to limit the scope of architectural education and practice. The design of landscapes, particularly urban landscapes, differed more in materials than process, as many Beaux-Arts trained architects such as Cret, Greber, and Zantzinger, worked on landscape projects at a variety of scales.



conditions and then working out solutions."⁴⁵ This meant organizing site features and program through well-defined hierarchies of spatial organization in plan, physical massing of built and planted features for site structure, and the creation of a strong sense of volumetric definition resulting from the composition of site features and surrounding contextual features.

Starting the Beaux-Arts design process was the defining of the 'character' of the building or design. By this, Cret explains there is a "special character proper for each kind of building[design]...The interior and the exterior should express firmly, clearly, without embarrassment, the purpose of a building [design]...[the] rhythm of the whole an expression of its inherent purpose."⁴⁶ The composition of physical features were an expression of purpose, and for a public building or a public open space, the purpose was both clear and multifaceted.

With one foot in the Modernist camp, Cret's sense of character allowed him to express the qualities of the building or project's function through built form, directly relating architectural form to function. But character was also guided by "a sense of form and good taste." This included, but was not limited by, the use of historical referent in "achieving beauty through good proportions rather than through the picturesque..." Cret's approach highlights the differences between the 'classicists' and the modernists—the former bound by pictorial, often archeological representation and the latter forbidden from citing past design vocabularies in the hopes of creating a new, 'functionalist' architecture representative of the modern technological, political and social age. Cret

⁴⁸ Ibid, p. 92.

⁴⁵ Brownlee, David. *Building the City Beautiful. The Benjamin Franklin Parkway and the Philadelphia Museum of Art.* Philadelphia Museum of Art, University of Pennsylvania Press, 1989, p. 10.

⁴⁶ McMichael, Carol. Paul Cret at Texas: Architectural Drawing and the Image of the University in the 1930s. Austin, Texas: Archer M. Huntington Art Gallery, College of Fine Arts, University of Texas at Austin, 1983, p. 43.

⁴⁷ Cret, Paul Philippe. "Ten Years of Modernism" *The Architectural Forum.* August, 1933, p. 94.



faults the classicists as being surface decorators and the modernists for failing to live up to their own dogmatic rules in striving for originality:

Above all, we must no more be hypnotized by the desire to be original than by the complex to be archaeologically correct... the modernist trend (shall I say revolution?) has been useful. It has helped all of us. It has forcefully focused our attention on some principles of composition, not new to be sure, but somewhat neglected during the past hundred years, such as the value of restraint, the value of designing volumes instead of merely decorating surfaces and the value of empty surfaces as elements of composition.⁴⁹

Evidenced in the designs of many of Cret's public buildings, such as the Folger Shakespeare Library, Detroit Institute of Arts, and Indianapolis Public Library, Cret's methodology, a dialogue between the 'modern' and the 'classic,' energized space into well-defined volumetric form. Derived from the *parti*, the conceptual framework "which will give the best solution of the problem" the design assembled interior spaces around the *point* (the dominant element) and the *marche* (the route through the building to the point). The *parti*, in moving from plan to section and then elevation, established the *composition*, the end product of the Beaux-Arts design process in which the hierarchical and sequential organizing schemes proves so recognizable. 51

In many respects, the programmatic requirements of the public buildings often associated with Beaux-Arts design were more analogous to the designed urban landscape than many other architectural types. The difference between the Beaux-Arts approach to landscape and building might well have been mostly a shift in the materials of composition, as well as the acknowledgement of the site's relationship to its surrounding architectural and city fabric. Cret used the same compositional principles for the design of an intimate courtyard patio at the Pan American Union in Washington, DC (Fig.35) to city-planning scales such as the Benjamin Franklin Parkway (Fig.36). The Pan American

⁴⁹ Ibid, p. 94.

⁵⁰ Van Zanten, David. "Paul Philippe Cret and Beaux-Arts Architecture in Philadelphia," p.2.

⁵¹ McMichael, Carol. Paul Cret at Texas, p. 44.



Union's patio courtyard served as an element around which the programmatic interior spaces were organized, capitalizing on the enclosure of the open space, and creating an articulated moment within the *marche* through a space which is experientially analogous with the building's inward-looking program⁵². By contrast, Parkway's monumental axis revealed infinite possibilities of disclosure, connecting figuratively and literally, town, park, science, art, and politics in a shared space of civic unity and cultural accomplishment. Unlike many buildings, where the seam between interior and exterior defines the limits of architectural space. Cret used the architecture of landscape to connect multiple spatial, cultural and architectural entities, telescoping between the enclosure of time, place and cultural referent and the disclosure created by vista and the movement through space. It is in this tension between the cultural and spatial enclosure of the traditional Philadelphia residential square and the disclosure of Beaux Arts design that Cret used to form the sophisticated complexity of scale, use and materials of his 1913 redesign of Rittenhouse Square.

Upon arriving in Philadelphia in 1903,⁵³ Cret came to a city that was approaching the crest of its industrial power and racing to build city infrastructure to keep up with a booming worker population and the growing demands created by technological advances in production and transportation. Within a few years after his entrance on the Philadelphia scene, through his teaching at the University of Pennsylvania and his patronage at the T-Square Club Atelier, Cret had become a prominent figure in the city's design community. In 1905 he developed a plan for the embankments for the Schuylkill River in collaboration with architects Zantzinger and Borie. With collaborator Albert Kelsey, he won the 1907 competition for the Pan American Union building, in Washington, DC. During this same year, Cret was named to a select group of architects

53 White, Paul Philippe Cret. P. 31.

⁵² Cret, Paul. "Design." Book of the School [of Architecture, University of Pennsylvania]. Philadelphia: University of Pennsylvania, 1934, p. 29.



to oversee the development of the Parkway.⁵⁴ This position eventually led to an appointment to the newly created Philadelphia Art Jury (now the Philadelphia Art Commission) in 1913⁵⁵. Cret served on the Jury from its creation in 1913 to his death in 1945, at which time he had held the position of President for seven years. Among Art Jury members were architects, artists, educators, park commissioners, and various representatives of city agencies. The jury had review power over all works of art within the city's public spaces and buildings⁵⁶, including not only the construction of new public works, but also required approval in cases of alteration, removal and demolition. During the course of his tenure at the Art Jury, Cret's position would be mutually beneficial to both the city and his practice, with the city benefiting from his famed critical skills and Cret's firm picking up a number of significant City public works projects. It was also in 1913 that Cret also developed ties to the Fairmount Park Art Association and the City Parks Association of Philadelphia, both of which advocated the use of parkland in response to the declining living conditions resulting from rapid industrial growth.⁵⁷

During the first year of his tenure on the Art Jury, Cret is credited with the conception of the Southern Plaza (now Marconi Plaza) between Oregon Avenue and Bigler Street on South Broad Street. The original designs for the plaza formed by the engineers at the city's Department of Public Works were based on the radial formulae used starting in the last decade of the nineteenth century in the majority of Philadelphia's city squares. The original plan (Fig.37) was created sometime prior to 1913 and featured two separate park spaces on either side of Broad Street. Each park was divided with

⁵⁴ Brownlee, David B. Building the City Beautiful. Philadelphia: Philadelphia Museum of Art, 1989, p. 27.

⁵⁵ Cret was appointed by Mayor John E. Reyburn. Brownlee, pp. 21-22.

⁵⁶ City of Philadelphia. The Charter of the City of Philadelphia, Act of June 25, 1919. "The term 'work of art' as used in this act shall include all paintings, mural decorations, inscriptions, stained glass, statues, reliefs or other sculptures, monuments, fountains, arches or other structures, intended for ornament or commemoration."

⁵⁷ Among the City Parks Associations members in 1913 were the recognizable and influential Philadelphian names of Eli Kirk Price, president, John Cadwalader, Jr., treasurer, Andrew Wright Crawford, secretary, as well as members with such prominent Philadelphia society names as Chew, Cope, Etting, Coxe, Clark, and Fisher.



radial paths converging on a central fountain or monument. The center, north/south portions are further splintered into three sections and have a secondary fountain or monument at their center. The geometries were reinforced by tree plantings set at regular intervals at the edge of each path. The plaza is bisected by Broad Street, which passes through the space unimpeded and cushioned by two traffic islands, effectually dividing the park into two separate spaces. The Art Jury denied approval to this plan.

A revised plan was submitted by the Olmsted Brothers' firm⁵⁸, but this was also denied approval by the Art Jury (Fig.38). This plan diffused some of the heavy-handed geometries and responded to the spatial separation of the first plan. The second plan retained the radial geometries common to the municipal square, but began to define the plaza as a cohesive space. The traffic islands were removed from Broad Street and a monument was placed at the center of the plaza, directing traffic around a center monument. Each half of the plaza was divided by a series of circular planted beds with radiating and orthogonal paths. These beds relate to each other by a rectangular arrangement of secondary paths, discreet from the radial paths, and forming an interior space in the park akin to the use of the stroll circle in city squares. On both sides of these paths are shrubs or planted beds. Trees are positioned at regular intervals along the larger paths as well as at the points of convergence.

The third, and approved, plan for the Plaza (Fig.39, 40) was conceived by Paul Cret, according the 1913 City Parks Association Annual Report. ⁵⁹ In this design, Cret moved the trolley lines to the sides of the plaza, which created a more subdued presence of Broad Street within the interior. Cret kept the second plan's basic division of park

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⁵⁸ City Parks Association of Philadelphia. Annual Report, 1913. Philadelphia: City Parks Association of Philadelphia, p. 67: "The Department of Public Works employed Olmsted Brothers, landscape architects, to prepare a new plan, which, however, did not receive the approval of the Art Jury."
⁵⁹ City Parks Association of Philadelphia. Annual Report, 1913. Philadelphia: City Parks Association of

⁵⁹ City Parks Association of Philadelphia. Annual Report, 1913. Philadelphia: City Parks Association of Philadelphia. Indicating the last proposal, "The final plan, for the fundamental conception of which Paul Philippe Cret, a member of the Jury, is entitled to the credit, is herewith reproduced…" referring to the plan in Fig. . The Olmsted Brothers, who were designing the larger League Island Park to the south, were retained to "work out the details" of the Cret plan.



monument, and dividing its remaining area into a geometric arrangement of flower beds, lawn and basins. A parapet wall and a balustrade similar to the one in Rittenhouse Square designed earlier that year by Cret, define the edges of this terrace. The outer portion of the plaza was set out with curvilinear paths connecting the outside corners and the corners to the center terrace. Two straight paths project from the center point through these outer areas to create direct pedestrian access along Johnston Street. With subtle efficiency, the arrangement linked all of the plaza's adjacent streets, and kept movement across the site direct, reflecting the traditional circulation pattern of the city square, but softening its presentation with curving lines and picturesque tree clusters. At the convergence of the curving outer paths upon the corners of the terrace are steps leading to the inner portion of the plaza, with this transition point marked by secondary monumental structures. These monuments, as well as those placed at the south entrance of the Plaza highlight entry points and mark transitional zones through the site and reinforce the plaza's connection with South Boulevard leading to the larger League Island Park.

The Plaza was part of a larger city-wide planning project to redefine the city within system of radial avenues and centers, facilitating easier travel and centralizing public open spaces and buildings. Similar to McMillen Plan of Washington, DC (Fig. 41) and the earlier reorganization of Paris in the 1850's, the early City Beautiful plan was created to remediate the congestion and inefficiencies of Philadelphia's street grid system⁶⁰, particularly in the context of the increasing use of motor vehicles. The plan was far-reaching, spanning from the southern edge of South Philadelphia to the limits of West Philadelphia and the undeveloped far Northeast with a web of diagonal avenues and where the avenues converged, some fifty new "radial centers" which would form an

61 Ibid.

⁶⁰ City of Philadelphia. Philadelphia. Volume IV, Number 1. January, 1911, p. 42.



integrated, regional network of trade, government and cultural centers within the districts of the city (Fig.42). These centers might take the form of a public plaza surrounded by institutional buildings or they might be designed as recreational plazas (Fig. 43), depending on local need and the function of other, nearby radial centers. On secondary points of convergence, there would be placed a "traffic center," usually dressed with planted islands of trees, lawn and shrubs.

More similar in scope to the Haussmann plan for Paris than Washington, DC's McMillan Plan, it took the political intrepidity and connection of Mayor John E. Reyburn, who saw first-hand as a US Representative the possibilities created by the McMillan Plan and was more than sympathetic to plans for a restructuring of Philadelphia which would eclipse that of the Capitol City⁶². Meeting widespread political resistance, the citywide plan was not fully implemented, and was realized only in fragmentally in the Parkway and in the Boulevards of various new city sections of North and Northeast Philadelphia.

That the Philadelphia engineers and planners were aware of Alphand's plans is all but certain; the Philadelphia proposals were loaded with the components to those devised a half century for Haussmann's redesign of Paris (Figs. 43, 44). Similar to the French plans, the Philadelphia engineers handled the residual spaces created by angular boulevards with a combination of geometrically aligned and irregularly clumped groups of trees, though they lack the oppositional balance which define the Parisian squares⁶³. Though clearly imitative of the French originals, the Philadelphia designs lack the precision, proportion and rhythm basic in Alphand's plans⁶⁴. Where recreational activity

⁶² Brownlee, p. 28.

⁶³ Grumbach, Antoine. "The Promenades of Paris," *Oppositions* Spring, 1977, p. 56: Describing the Square des Invalides, west (Fig. , upper right corner), "Thus, the juxtaposition and opposition of these two treatments on either side of the planted diagonal shows that Alphand's public spaces are, in fact, the product of the overlay of two systems."

⁶⁴ Ibid. Grumbach likens Alphand's measuring of design elements in the cityscape to that of a recipe for urban beauty, i.e., "The Art of Urban Cuisine."



was explicitly called for in the program of the Philadelphian radial centers, as in the variant proposals of Fig. 45, the resulting plans were accommodating, if somewhat generically defined.

The first and second plans for the Southern Plaza utilize the basic elements of the radial design with heavy geometries and mechanical layouts that prioritize fast, efficient movement through the plaza above all other uses. Cret's conceptualization, on the other hand, defines the major movement patterns within an overall spatial arrangement allowing multiplicity of use and spatial perception in a single design. Through well-proportioned balance of features, Cret was careful to separate the modes of park usage by calculated differences in the formal construction of paths, pavilions and gardens, linking disparate elements with transitional features. In this respect Cret moves beyond the formal, if not formulaic design of Alphand's public spaces. Where Alphand creates discordant unity through an oppositional tension by "the overlay of two systems" in designing Parisian squares, Cret harmonizes discordant base elements in unifying the composition into a whole which serves as an independent park in itself and, at the same time, a gateway to the League Island Park to the south.

Also establishing a major gate of entry was Cret's 1921 design for the plaza at the foot of the Delaware River Bridge⁶⁶ (Fig 46.) Created by three islands at the terminus of the bridge, the plaza provided visual orientation leading to and from the bridge. It also engaged Franklin Square, an early residential square, as part of the monumental approach to the bridge, using a wide promenade and steps to visually connect Franklin Square's central path and fountain to the line of the bridge. Symmetrical arcades framed the central plaza space and linear tree plantings were used to establish enclosure around the plaza and also to reverberate the curbside plantings on the east edge of Franklin Square.

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⁶⁶ Now the Benjamin Franklin Bridge

⁶⁵ Grumbach, p. 56. Alphand used a combination of geometrically rigid and curvilinear path and bed systems to create a tension between the formal energies of each system.



Lawn was used as a unifying plane between the three islands, with the two north/south islands projecting from municipal buildings at the base of the bridge rampart. The scale of this design is monumental; its road surfaces compete in significance with the plaza islands, as Cret acknowledges the automotive significance of the bridge linking two major urban centers. The addition of the plaza and the bridge drew the residential Franklin Square into a larger complex whose orientation was outward looking(Fig.47), significantly changing the character of the square, possibly helping precipitate its decline as a pedestrian space. As depicted in Figure 47, few changes were made to Franklin Square to integrate it within this new scheme, as the existing features appear fragile next to the monstrous scale of the new construction. The redesign of Paris some fifty years prior became not only an example, but a mantra for Philadelphia's early 20th century planners and, as it was in France, the effect on the existing surrounding city fabric was enormous (Fig.48).

Four years later in 1924, Cret would be asked by Edward Bok to devise a plan to restore Penn Square as open space (Figs., 48, 49, 50). Cret did so, leaving only a modified form of the City Hall Tower as a centripetal organizing element in the new, imperialistic open space. Rather than recreate a revival version of the square's former seventeenth or eighteenth century pedestrian form, Cret integrated the space within the Parkway with the imposing tower set upon a subordinate central oval plaza and diminutive islands wedged in the square's corners. Even more than the Delaware River Bridge Plaza, the design for Penn Square created a space which was as autocentric as it was monumental, with fast, efficient movement being the predominant function and mode of experience⁶⁷. Exaggerated by the expanse of flat area surrounding it, the tower

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⁶⁷ In his notes on the City Hall Square design, Cret notes "The placing of City Hall in the center of a square of inadequate size has resulted, among other disadvantages, in the congestion of traffic at this vital point...Needless to say, the tremendous increase in automobile traffic makes the congestion around City Hall worse every day..." Van Pelt Library, UPENN. Cret Papers: "Report on Improvement of City Hall Square-Philadelphia, Pennsylvania" p. 2. [1924]



provided a strong vertical counterbalance to the horizontal massing of the Philadelphia Art Museum at the opposite end of the Parkway⁶⁸.

Contrasting the gargantuan scale of the Center Square design were Cret's rather intimate proposals for the extension of Independence Square on the north side of Independence Hall. Proportionally scaled and reflectively oriented, 'Scheme A' (Fig.51) provides a public plaza within a semicircular arcade deflecting back towards the façade of Independence Hall. The plaza is several feet lower than the adjacent Chestnut street, creating a stronger feeling of enclosure, while at the same time diminishing the impact of street traffic. Simultaneously, it enhanced the scale and perspective of the somewhat undersized colonial capital from the plaza and through the various points within the arcade. Providing further enclosure to the square and some separation from the surrounding industrial neighborhood is a fairly massive double-row of tree plantings. In the residual spaces at the corners, two smaller courts are created. The arcade serves as the backbone of the design—its neutral, classicizing elements providing a sober, yet not somber, backdrop for the activities of its enclosed public space. Its semicircular plan also enables it the ability of disclosing multiple views of the plaza and beyond, Independence Hall, from within the structure.

'Scheme B' (Fig. 52) is a rectilinear variant of Scheme A, with a smaller, straight arcade at its north edge reflecting directly back at the compositions *point*, Independence Hall. The rectangular open plaza is larger than the previous scheme and given strong architectural, if not explicitly French Baroque, form by sizeable, tightly-pruned hedges opening towards the south. Double rows of trees are planted around a path leading to the

⁶⁸ Cret's plan to use City Hall's tower was more an aspect of its size and location than design: "We have therefore based our scheme for a Civic Center on making the City Hall Tower the real focal point of the city; the central feature of a square which would again become a square, and rising from the soil like the Campanile of St. Mark's in Venice...marking the center of the city, and impressive in its loftiness" Van Pelt Library, UPENN. Cret Papers: "Report on Improvement of City Hall Square-Philadelphia, Pennsylvania" p. 7. [1924]



arcade from the sides, providing an alternate method of reaching the arcade from Chestnut Street with a strong reflective view back to Independence Hall. The orientation of both schemes, however, is one of a direct and patriotic reverence for the colonial monument, proportionally complementary and allowing a civic utility that the colonial revival square at the buildings rear would not.

Probably among the lesser known of Cret's landscape projects is his 1923 plan for Whitehall Commons, in the Frankford section of Philadelphia. The peculiar impetus behind Cret's commission for the plan resulted from inter-agency territoriality among three city departments. The three main parcels of land illustrated in Figure 53 were under the control of three separate city departments: the central section controlled by the Board of Education for the construction of a junior high school, the south section controlled by the Board of Recreation for a city recreational complex and the north section apportioned to the Bureau of City Property for use as a city park. Realizing the three city departments could, and probably would, build three adjacent independent and redundant facilities, the Playgrounds Association of Philadelphia, the Civic Club, the City Parks Association and a group of private citizens formed a coalition to hire Paul Cret to prepare a landscape plan to link the three blocks into one single design⁶⁹.

Cret's design for the commons fit within the irregularly shaped tracts of land, forming a central axis that linked the facilities along a north south orientation. The infant daycare center, separated from the older children in program and space was placed at the south end of the axis, which then lead through the Department of Recreation's playground area, continuing to the junior high school at the center of the axis, which by the time of Cret's commission was being constructed. Past the school at the center, the axis lead to a park pavilion complex on the north end of the commons. Unified by this central axis, each facility also had an entrance fronting Wakeling street to the East,

⁶⁹ City Parks Association, 1923.



creating a continuous urban edge along this public corridor, and had its main play space to the west of the axis, unifying the three playgrounds into a larger dominant surface plane. Cret also provided for passive recreation at the commons with a perimeter park wrapping the internal features in curvilinear paths and plantings. Functionally, the curvilinear paths connected the major internal facilities, as well as provided connections to adjacent city streets. At the same time, the perimeter park would help soften the soon to be well-worn appearance of the playground spaces from outside passersby, give a quality of enclosure to the fields, and help link the three municipal facilities into one unified design.

Despite the programmatic and contextual differences between Whitehall
Commons and Cret's public plaza designs, the general methodology of axial coherence
and legibility and volumetric dimension reveal several consistent principles. In Cret's
landscape designs, path and road systems and paved open spaces combine to form well
organized and hierarchically-delineated plans which provide a strong sense of spatial
definition on-site while at the same time connect with surrounding city elements. Tree
plantings bolster the definition of surface materials and provide a vertical dimension to
establish rhythm and volume. Accentuating both planometric and volumetric qualities of
space, the "empty surfaces" took the form of horizontal planes of paving, lawn and
reflecting pool, and vertical planes of pruned shrubs and trees. Whether they were for
buildings, bridges, monuments or plazas, the basic principles organizing the design were
the same, different only in materials and scales.



Chapter III-The "Improvements"

Through his appointment to the Art Jury⁷⁰, Paul Cret would meet many individuals well connected in Philadelphia's often intertwining political, artistic and social communities. One individual who had a prominence in all three was Eli Kirk Price, a fellow Art Jury appointee who was also President of the Fairmount Park Commission, President of the City Parks Association and a Director on the newly created Rittenhouse Square Improvement Association. Perhaps it was through Mr. Price that Cret was chosen to redesign the square in 1913, or perhaps the recommendation came from fellow Beaux-Arts architect Jacques Greber while helping RSIA co-founder Mrs. J. Willis Martin photograph Parc Monceau during the previous year. Regardless of how Cret was chosen, his work on the project found immediate success, with the majority of his design changes for Rittenhouse Square quickly installed by 1914, with additional improvements approved by the Art Jury and awaiting funds.

The speed at which the Improvements were installed was likely, at least in part, to the private source of funding for the project. The social and political influence of many of the founding Rittenhouse Square Improvement Association members certainly must have also assisted in expediting the city permits needed for construction. However, the clarity of Cret's design is sure to be the most influential reason for the immediate acceptance and success of the square, as Cret recognized the existing conditions which would serve in his design, and there were many, as well as those elements which would need to be removed or changed. The design was as precise in specifying what elements

⁷⁰ Cret was appointed to the Philadelphia Art Jury at its formation in 1907.



would be retained in the existing conditions of the square as it was in the design of new features. Cret's design takes into account the many uses and users of the square, anticipating the variety of both during different times of the day, week and year. It creates spaces for the activities of groups, both large and small, while at the same time allows places for individual recreation and relaxation. It is defined by what many people consider the formality of its intersecting plaza and promenade, yet its real success is proven in the extemporaneous social theatre of the diverse users of these spaces.

Considering Cret's work on other urban landscape projects such as Penn Square, the Plaza at the Delaware River Bridge terminus and the Parkway where the new design wholly replaced existing parts of the city, his design for Rittenhouse Square reflects a particularly site-sensitive approach that integrated his work within the context of the surrounding neighborhood as well as within the existing traditional vocabulary of the Philadelphia city square.

Paul Cret's involvement with Rittenhouse Square spanned more than three decades, from 1913 to 1944. Following his death in 1945, Rittenhouse Square remained a project associated with Cret's firm, which became H2L2,⁷¹ into the 1950's. Though the square is not often listed among Cret's most important architectural projects, his interest in the square's continued development is evidenced by his many subsequent additions and everyday maintenance recommendations in the years after the initial installation of his 1913 design, despite a busy professional practice, a professorship at the University of Pennsylvania, an appointment on the Art Jury, and doubtless many evenings as a critic at the T-Square Atelier. Located just three blocks from his Center City practice, Cret's

⁷¹ Harbeson, Hough, Livingston and Larson



knowledge of the square was intimate, and he made in Rittenhouse Square a small urban space recollecting those he left behind in Paris.

Following the immediate success of the "Improvements" of 1913, Cret became the defacto site architect for future changes made to the square, often being called upon by the Rittenhouse Square Improvement Association and its members to design new features as well as provide recommendations for the maintenance of existing features⁷². Considering the city ownership of the site, the dynamic growth in the adjacent architectural fabric surrounding the square, and the bureaucratic tangle of city administration related to park maintenance, the site design of Rittenhouse Square during this period represents a remarkable level of designer control. Cret used this control to accommodate the various social and physical demands that arose during the years, integrating each change carefully into the material, spatial and scalar composition of the original design. Among the few instances where significant changes were made to the square contrary to Cret's wishes, most were done while he was at war in France.⁷³

Cret's "Improvements for Rittenhouse Square" represented a series of projects completed in substantial intervals throughout his association with the Square. The first phase of work was by far the largest and would dictate the changes made during the ensuing three decades. Designed in 1913 for the Rittenhouse Square Improvement Association, this campaign of work included design of the plaza and its features, the main northeast/southwest path, or promenade, as well as changes in site planting, sculpture and

⁷² Many examples of Cret's involvement in the everyday maintenance of the square are recorded in the correspondences in the Paul P. Cret Collection, Athenaeum of Philadelphia.

⁷³ Another instance was that of a City Council Member who directed the Fairmount Park Commission to change the gravel paths to asphalt without consulting either the RSIA or Cret beforehand, as described in a letter in the Paul P. Cret Collection, Athenaeum of Philadelphia



lighting. This phase, while largest in scope, was quickly completed by 1914, the year that Cret was called into the service of the French Army in World War 1.74 The second campaign of work, spanning roughly from 1919 to 1923 was the addition of a memorial structure and drinking fountain on the back of the pool. This phase actually started in 1915 when Cret sketched several proposals while in the trenches, and was completed following his return to Philadelphia in 1919. The goat exedra at the southwest corner of the square was also added during this period, though it is not clear that the original design for the exedra can be attributed to Cret. The final phase of work began in 1934 when the north entrances were opened, repaved and framed with balustrades. Similar balustrades and paving were added to the south entrances in 1941, completing the major additions to the square made during Cret's lifetime. Small projects were completed by H2L2 during 1950-1951, but the construction of the south entrances represent the final significant changes made to the square by Cret's firm.

The early design

The original perspective of the 1913 design (Fig.54) indicates a design for the square larger and more complex than the one built. It explores a more even distribution of spaces within the circle path, as the promenade is broadened to a width apparently equal to that of the northwest/southeast aligned plaza and surrounded by an architecturally pruned hedge. At the northeast end of this axis is an expanded rectilinear terrace that extends beyond the width of the paths and faces inward towards the center of the square. In this rendering, the Bayre Lion sculpture is placed at the entrance of the

⁷⁴ White, p. 17.



northeast lawn bed, highlighting the formal entrance into the promenade. At both ends of the diagonal are entrances, framed with semi-circular balustrades.

Arguably the Parisian heart of the design was the plaza(Fig. 55), which occupied the center of the square on the northwest/southeast diagonal axis. Structuring the perimeter of the plaza was an integrated system of posts, balusters and engaged light standards similar to those illustrated in Alphand's Les Promenades de Paris (Fig. 56). In the interior of the plaza, Cret divided the space symmetrically with the intersecting promenade bisecting the plaza into two equal halves. On the north half, a large monument is indicated at the northwest end of the plaza, fronted by a simple plane of lawn. Opposite the sculpture, on the south half of the plaza is indicated a fountain connected to a reflecting pool. Within the plaza, the proportion and scale of these central features created a symmetrical spatial cohesion while at the same time varying the individual elements and materials to avoid mechanical repetition. The scale of the diagonals and central areas reflects Beaux-Arts organizing principles, assembling the entrances, paths and open spaces into strong, interrelated hierarchies. The impact of the design is significantly larger than the one built, creating a scale almost too powerful for the surrounding residential architectural fabric.

The planting design for the 1913 Improvements began with the assistance of Paul Oglesby, a local Philadelphia landscape architect. Oglesby's original 1913 planting plan for Rittenhouse Square (Fig.57) removed much of the existing stock of trees which were largely planted in allees at regular intervals along the path system (Fig.58) replacing them with broad swathes of lawn. Oglesby's plan featured tree and shrub massings in loosely symmetrical groupings, placed where the corner entrance paths converged upon the circle



path. Aside from these corner clusters, he retains a few of the existing trees as specimen trees in selected locations. The plans shrub massing is generic and large, perhaps scaled more appropriately for a rural park than an urban square and generally grouped around the balustrades of the plaza and filling in the lawn areas of the four corner entrances. Contrasting the picturesque character of the outside areas, Oglesby reinforces the constructed, urban nature of the plaza by planting a series of architecturally pruned trees, equally spaced along the perimeter of the plaza.

Although Cret's perspective rendering in Fig. 54 is not dated, its path system, tree locations and shrub massings are nearly identical to those indicated in Oglesby's 1913 planting plan, likely making it an exploration of the early design for the square's 'Improvements.' Cret precisely depicts Oglesby's planting plan in this drawing, but he also he makes some significant planting additions of his own, exploring more fully the contrast between Oglesby's fairly picturesque outer area groupings of planting material and the more architectonic plantings hinted at in the trees within the plaza. Cret expanded the use of artificial plantings by the insertion of cross-axial allees on the diagonal paths leading through the square. These heightened the rhythmic progression movement through the square and gave strong volumetric expression to the square's bisecting diagonal pathways. Where the path opened to the promenade on the northeast/southwest diagonal, Cret reinforced the structure and expanded the space with an additional row of trees on the outside of the paths. Within the plaza, he retained Oglesby's perimeter planting of trees, though they appear less diagrammatically sculpted in the perspective.



Cret revised this plan again in the perspective sketches illustrated in Figs 59 and 60. In these drawings, the path and paving layout remains the same, but the corner shrub massings that wandered through the lawn areas of Oglesby's plan have been pulled tightly back to frame the entrance balustrades. In this sketch, Cret further clarified Oglesby's arrangement of foundation plantings, which were reactive to the path design, by integrating the vegetation within the overall site composition as a structural component. Curiously, Paul Oglesby completed a site survey of existing trees a month after creating the planting plan, thus finishing his involvement with the project.

Although not implemented, the initial design proposal established the basic site structure, circulation patterns, and planting schemes that Cret would utilize in later stages of the square's design.

The development of the final design

It is unclear why the square was not developed according to the initial proposal for design, though the changes made in the revised plan indicate a general reduction in the scale of the new features, particularly the central promenade, as well as a greater utilization of the square's existing stand of trees. The central plaza, virtually unchanged in the revised design, remained the central organizing space in the design.

While Parc Monceau was the Parisian park that the Rittenhouse Square Improvement Association sought to emulate in the Improvements for Rittenhouse Square, Cret's plan for the square is perhaps more formally reminiscent of the central pavilion of Alphand's plan for the Luxembourg Gardens (Fig.61). Much larger in scale and layout than Rittenhouse Square, the orthogonal layout of Luxembourg's central plaza forms a



theatrical bowl of activity in well-defined geometries around which the parks other spaces are organized. Where Luxembourg's baroque central axis is generated from the rear façade of the accompanying palace, Cret assembles a more balanced central area, dispersing the baroque vista-axis equilaterally along the square's intersecting diagonals. In doing so, the baroque central vista is disassembled into multiple views, structuring the distribution of space into democratic proportions.⁷⁵

Cret also borrows, in technique rather than form, the placement of a curvilinear.
'naturalistic' border around this artificial, urban central space. Similar to his work on
Whitehall Commons (Fig. 53), the border demarcates the park from the surrounding city
fabric and at the same time provides a picturesque stage setting for views from within the
park's urbanized center. Where Luxembourg's naturalistic border is fractured into
disparate, often complicated sections, the small scale of Rittenhouse square allows Cret to
slide four paths under the existing canopy for the same effect. He punctuates the
difference between the 'natural' and urban systems with a shift in path surface materials,
using a darker asphalt surface to recede into the surrounding grass surface.

The design of the promenade was changed significantly in the revised proposal.

In the revised plan, Cret narrowed the gravel beds, lawn bed and paths, and almost entirely eliminated the widened terraced areas protruding beyond the circle path on the northeast and southwest corners. Gone too, were the structural perimeter shrub borders that heightened the promenade's enclosure and directional orientation. Though the

⁷⁵ Cret insisted that architecture must be prepared to accommodate "a new and constantly developing social system" which presented new problems and opportunities for the design of public design works. "Architecture is becoming less and less a personal affair, designed for a single client, and more and more a communal matter, designed for a building committee representing a large group of individuals…" *Architecture of the Future*. Essay, November 28, 1930. Cret Collection, UPENN Rare Books Collection.



promenade was still clearly a major axis within the design, it became secondary to the plaza.

While Cret's original perspective for the Improvements showed a design that seemed somewhat overwhelming within the square's residential context, it generally derived its basic circulation system from the pre-existing nineteenth century plan. The revised plan for the square, particularly the center areas, also reveals a strong acknowledgement, if not outright utilization of the preexisting design (Fig.62). The existing entrances are kept largely intact throughout the square, retained in the northwest, southwest and southeast corners. At the northeast entrance, the configuration was changed by eliminating the two side paths and adding, in their place, symmetrical curvilinear paths leading directly to the circle path. When it was discovered on site that the northern curving entrance path did not align with the street's curb opening, it was reset to meet with the existing curb opening on Walnut Street (Fig. 63). This disturbed the clean symmetry of the plan on paper, but it was imperceptible at ground level.

The most dominant element retained from the previous configuration was the circle path, left entirely intact in the new design (Fig. 62). Cret recognized in the circle path an alternate method of travel through the site, separate from the heavier traffic of the diagonal paths, though still integrated into the circulation system though its connection with the four areas connected to the corner entrances. Benches placed on the circle path would also provide a degree of privacy in contrast to those arranged on the perimeters of the promenade and plaza. In the northeast and southwest areas the circle path intersected and was subsumed by the promenade. The curvilinear paths that linked the northeast and southwest corners directly to the circle path bypassed the social ends of the promenade,



and created a more private entrance on to the circle path. The northwest and southeast corner points remained in the form of the previous design. Through the retention of existing features and the addition of a few new paths, the square's circulation system offered variety in travel speed and efficiency as well as a range of potential for social interaction. The new scheme devised in Cret's plan linked the proportion and structure of the park's form with the creation of corresponding functional uses. The precision in establishing the scale of the square's structural features was so important that Cret used full-scale shop drawings and construction documents in designing the profile of the pool walls, balusters, drinking fountain.⁷⁶

While the circle path and converging entrance paths were obvious elements that Cret found successful from the square's previous form, not so obvious, perhaps, is the retention of the diagonal paths linking the four corners of the square. Within the central area of the square, i.e., the area enclosed by the circle path, the diagonal paths have been split into sets of two smaller parallel paths, each adjacent to one of the four central bed planes(Fig. 62). By dividing the diagonal paths, Cret is able to steer movement more efficiently across the site using roughly the same surface area of hard paving, wrapping the continuous concrete surface around the softer planes of lawn and water. The diagonal paths retain their primacy in the hierarchy of the circulation system, proceeding uninterrupted through the plaza's gravel beds to the opposite side of the square. The

⁷⁶ Cret also used full-scale drawings for important decorative features, such as the drinking fountain's decorative details and the fountain wall's original design. Leaving little to the interpretation of the sculptor, the construction drawings were particularly valuable in the recent restoration of the fountain's original decorative scheme. These drawings are part of the Paul P. Cret Collection, Athenaeum of Philadelphia.



diagonal paths are further prioritized at night in Cret's scheme for the addition of lighting standards as seen in Fig. 64.⁷⁷

Although the pattern of materials is somewhat complicated at first glance, the central organization of the plaza and promenade is fairly elemental in materials and form, for the most part set along the traditional square diagonal pathways (Fig. 65). In the plaza, the groundplan of the central lawn and pool features are repeated and amplified by the concrete paths. The same plan is again repeated in the plan of the gravel bed, which forms the outer perimeter of the plaza. Through the repetition of the plan's formal qualities, Cret unifies the disparate surface materials into a cohesive space. The promenade is organized through a similar method of repetition. Cret also retains the scale of the open space in the preexisting center node at the axis point of the plaza and promenade paths, and is empty of features, its space thematically open and endowed with the potential for a wide range of activities, ranging from wide-scale, decentralized events such as flower and art shows to theatrical events requiring distinction between audience and performance space (Figs. 66, 67).

The central path was paved with concrete, and served as an extension of the circulation system into and through the plaza and promenade spaces. With the use of concrete, Cret linked the various path features into a unified circulation system that was, in turn, integrated into the greater urban context of the adjacent city blocks. While the plaza, and to a lesser extent, the revised promenade, retain their quality of unified space,

⁷⁷ Fig. 64 indicates that most of the electric lighting standards were placed along the diagonals, with additional units in the plaza promenade. Some are also placed along the circle path, but a note on the plan written by a member of the city's Forestry office cites Cret's permission to reduce the number of lights used along the circle path if stronger light sources are used.



they are in fact the assemblage of divergent material, social and aesthetic systems, working together in tandem.

In addition to the many improvements to the square that distinguished the park from its surrounding city fabric, at the heart of Cret's design for the square is an optimism for the possibilities of the urban open space in fostering multiplicity of use through plasticity of form. The use of concrete created a surface that was durable, flexible and provided spatial continuity throughout the site circulation system. 78 Cret was not only aware of the hardness of concrete, but used it to contrast the softer, loose gravel on the outer areas of the plaza and at the edges of the promenade. The concrete paths were integrated into the plaza's symmetrical design, while at the same time part of a continuous surface plane that provided flowing movement through the square. The paths are, in fact, compositionally analogous to Cret's use of the empty surface plane as a decorative and organizational element in the design of his architectural facades (Figs. 68, 69, 70) and other landscape projects such as his design for Independence Square. The smooth concrete paths heighten the planometric flow of movement through the square, connecting the various parts of the square—the paths, lawns, trees, sculpture, structure, etc.-- into a succession of interrelated volumes created by movement. Movement was, according to Cret, the organizer of architectural experience, and the architect must not "...confine his attention to any one view of his building, the façade for instance, but must

⁷⁸ Cret believed that modern materials would lead to new construction techniques. These would, in turn lead to modern design solutions: "...striking developments are taking place in architecture...due to new materials, particularly steel and reinforced concrete...Our architecture of the next hundred years will therefore be different in many ways, due to this mechanical and industrial progress" *Architecture of the Future*, p. 1.



constantly foresee the hundreds of successive aspects which will unfold themselves to the visitor from the outside as he makes his way through its rooms."⁷⁹.

In this Cret acknowledged the importance of pedestrian travel through the square as part of a larger urban fabric, but he also integrated the paths within the square's system of aesthetic and recreational features, making the plaza, and the square as a whole, as much a destination as a means of passage. The plaza is, in Beaux-Arts terms, both an element of the *marche* through the square, and the *point* in which the square's most concentrated activity and sculptural features are contained. With the multifaceted use of the square, however, the centralization of the *point* is defined not by any specific architectural program or problem, as is the case of Beaux Arts buildings, but rather in the plasticity of the plaza's open space. In program and form, the plaza becomes a tabula rasa defined by the ephemeral and transformational nature of cultural use.

Where concrete provided a continuous surface plane for the square's circulation system, gravel was used for areas of recreation and repose, as underscored by John Harbeson, who worked with Cret on the Square's improvements through the 1930's and 1940's:

We have always felt the graveled spaces added much to the appearance of the park by their contrast to the hard, citified, concreted areas necessary for the main thoroughfares. It is on these softer surfaces that many benches are located and babies and nurses congregate. There are such areas in practically every public garden in Europe, located in the center of large cities and yet having an informal, non-urban air.⁸⁰

⁸⁰ Paul P. Cret Collection, Athenaeum of Philadelphia. Letter of December 8, 1942 to Mrs. E.E.Graham.

⁷⁹ Cret, Paul. "Design." Book of the School [of Architecture, University of Pennsylvania]. Philadelphia: University of Pennsylvania, 1934, p. 29.



Cret's choice of materials, like his construction of forms, were precise in their simplicity, equating function with formal and material composition, and defined by the oppositional energy of the city/park dialectic. The choice for gravel was informed by its contrast with the concrete paths—in appearance, sound, and contact. If Cret's use of concrete was an acknowledgement of the *modernity* of Rittenhouse Square, the gravel beds were clear references to historic materials, recalling not only the traditional public gardens of Paris and throughout Europe, but also the paving used in Rittenhouse Square prior to its conversion to the radial configuration (Fig.71).

As seen in Fig. 72, the gravel bed created a transitional perimeter from concrete to the vegetation, bridging the urban and non-urban structure of the square with an intermediate surface delineated in the formality of its geometric plan with the informality of the texture and sound of gravel. Using its permeability and flexibility, Cret also chose gravel in consideration of the health of trees(Fig. 73) 81.

The gravel became problematic, however, when local children removed it from the ground surface and threw it into the pool⁸², clogging the fountain pumps. Other alternatives such as course sand were sought to replace the gravel, but the onset of the Second World War sidetracked these efforts before they could be implemented. Pressured by Rittenhouse Square Improvement Association to find a solution for the

Paul P. Cret Collection, Athenaeum of Philadelphia, Letter to Mrs. Eli Kirk Price, August 27, 1943

⁸² Paul P. Cret Collection, Athenaeum of Philadelphia. Letter of May 1, 1942. In a letter to Eli Kirk Price, Cret expresses frustration at the social behavior in the park, comparing it unfavorably with that common in Europe: "It seems that our problem at the pool is not yet solved... The children at the Square are anything but co-operative, and apparently it is impossible to enforce any decent behavior as would have been done in peace-times, in Paris, or any other city of the Old World. The children deliberately through handfuls of pebbles and any refused at hand into the pool-one child carried successive handfuls of pebbles and emptied them in to the scum gutter when its mother stood nearby giggling. When the caretaker expostulated, this mother flew into a temper and said she was a taxpayer and that the children could do what they wanted..."



gravel problem, Cret felt, according to Harbeson, "very strongly that if any hard surfacing is done it should be a continuation of the existing concrete paving," thereby retaining spatial and material continuity through the center area. However, The problem was not resolved before the gravel was removed and replaced with asphalt, against the wishes of Cret and the RSIA. 84

In the center of the plaza were placed the fountain (Fig. 74) on the east side and on the west, the Bayre Lion statue (Fig. 75), relocated from its former position along the north edge of the square (Fig. 76). A bed of lawn was placed in front of the lion statue, counterbalancing the horizontal plane of the reflecting pool on the southeast end of the plaza. The statue and the fountain anchor each end of the plaza with a vertical element, while the bed of lawn and the pool create "empty surfaces as elements of composition," leading focus to the statue and fountain while at the same time reinforcing the spatial and programmatic openness of the plaza.

Over the course of his work on the square, Cret proposed several locations for the placement of statuary as transitional markers into the square and also as focal points within the square. He used statuary to draw interest and movement into the square as in his undated proposal for the placement of Heracles facing the northeast entrance (Fig.77). Framed between a set of entrance pedestals, the dynamic, outward-facing statue beckons the passerby, drawing him into the square to a point where he is part of the movement within the promenade and is encouraged to continue on towards the plaza.

⁸³ Paul P. Cret Collection, Athenaeum of Philadelphia. Letter of December 8, 1942 to Mrs. E.E.Graham. ⁸⁴ Ibid. The order for the gravel replacement was given, without the previous consultation of Cret or the RSIA, in 1943 at the direction of a city councilman who believed the gravel created a dangerous walking surface, and subsequently ordered the Fairmount Park Commission to replace it.

⁸⁵ Cret, Paul Philippe. "Ten Years of Modernism" The Architectural Forum. August, 1933, p. 94



The placement of the hulking Barye lion serves as an anchoring device for the northwest end of the plaza, swinging movement around the semicircular space. Though visible from the northwest entrance (Fig. 78), it is inwardly oriented towards the plaza center and the fountain on the opposite side of the plaza. (Fig. 79) Cret's use of sculptural elements provided specific elements of visual interest, to stop and focus attention towards particular points in the composition and also as a means of encouraging movement into the various parts of the square. Perhaps more importantly, however, they were integral in establishing the overall relationships between scale, volume and movement in the site composition. Several years after Cret's death, the Evelyn Taylor Memorial (Fig. 80)was placed at the northeast entrance of the promenade, though its comparatively diminutive size lacked the impact of sculpture in Cret's original proposals. Ten years after the placement of the Taylor Memorial, the Giant Frog (Fig. 81) was installed within the northeast promenade grass bed with a flagstone-paving surround, disrupting the elemental simplicity evident prior to its installation (Fig.82).

Opposite the lion, Cret placed the fountain and pool on the southeast side of the plaza. In studies for the fountain and the pool (Figs.83, 84), Cret drew from the scale and form of the traditional Italian estate garden⁸⁶ in developing profiles for the pool walls and fountain back, updating their historic forms with modern materials of concrete and steel (Fig.85). Cret's sketches indicate not only precision in replicating the formal qualities of the historic models, but how these forms could be expressed in modern materials at a scale which was both visually and functionally appropriate.

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⁸⁶ Villa Borghese, Villa Medeci, and Villa Corsini were among the Italian garden sources Cret used to explore nuanced variations for the profile of the pool walls. He settled on one that most closely imitates a feature in Villa Borghese, now a public park in Rome.



As illustrated in the pool and fountain, Cret was not afraid to look to historic precedent in generating the formal and decorative modes of architectural features. However, his playful design for the tile mosaic on the back wall of the fountain seemed inspired more from a child's fantasy than architectural history (Fig. 86). Perhaps the most recognizable of Rittenhouse Square's features, the fountain is paradigm of the square itself, illustrating Cret's instinctual use of traditional architectural vocabulary in establishing scale and proportion, while at the same time allowing a sense of organic play to soften and humanize the geometries of historical referent. Cret's design was perhaps too playful for the members of the Rittenhouse Square Improvement Association, as the original tiles were removed and replaced with uniform geometric tiles while Cret was serving in the French military during World War I⁸⁷ (Fig. 87).

With the center path, gravel and lawn beds, lion statue and pool structure, Cret endowed the central plaza with a strong spatial organization that was both complicated and cohesive. The surrounding post and balustrade sections (Figs. 88, 89, 90) reinforced the plaza's plan, and gave volumetric depth to the center space. Surrounded by massed plantings of evergreen and flowering shrubs(Fig. 82, 91), the balustrade articulates the structural and cultural contrast between the urban plaza, a place of concentrated activity and cultural referent, and its immediate surrounding vegetative landscape, largely static in use and visually oriented. In a sense, this represents the dichotomous modes Cret uses in balancing the active, social uses of the square—structured by the movement and flow of the Beaux Arts composition--and the static,

⁸⁷ Rivinus, 35.



passive uses of the square, utilizing the framed views, curvilinear lines and asymmetrical massings common in the picturesque gardening tradition.

Cret's design for the square's new planting scheme also reflects a dichotomous approach to composition, combining strong linear plantings with irregular massings. Utilizing the preexisting stock to form the inner rows of trees, he structures the promenade with double allees of plane and horsechestnut⁸⁸ trees, both large species common to late nineteenth century Parisian parks and boulevards⁸⁹. Similar to his utilization of the existing diagonal path system, Cret capitalized the existing allees of trees in his restructuring of the square, removing only those directly in conflicting positions with the new features (Fig. 92). An inventory completed in 1965, however, indicates that all but two of the existing trees within the promenade's inner allee of planetrees were gone by the mid 1960's (Fig.93). The two that had survived were 3 inches in caliper in 1913, which probably allowed their limited root system to avoid the damage brought about by the conversion to the promenades new arrangement of surface planes. While his original perspective sketches showed a uniform planting of trees within the plaza, for budgetary reasons Cret likely chose to leave a selection of existing trees in the plaza⁹⁰, utilizing the impact of their size and the years of their maturity in the place of a newer planting. This did help to endow the new design with a sense of age and continuity, but it greatly reduced the rhythmic structure of plaza (Fig. 73). Neither the plan illustrated in Fig. 92 nor the design perspectives (Figs. 54, 59, 60) clearly indicates whether the trees surrounding the circle path should be removed or retained as part of the

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⁸⁸ Platanus x acerifolia/Platanus orientalis and Aesculus hippocastanum

⁸⁹ Cret's addition of planetrees supplemented those which were planted during the last decades of the nineteenth century.

⁹⁰ Catalpa speciosa and possibly other species.



new plans, indicating, perhaps, that they were outside of the scope of the project. The existing trees along the circle path were evidently left in place during the installation of the design.

Contrasting the linear arrangements of the diagonal allees, massings of shrubs and trees were concentrated at the corner entrances of the square and also at major points of intersection in the circulation system. Fig. 94 shows an undated plan⁹¹ completed by Cret's office featuring dense massings of English Yew, Japanese Yew, Mountain Laurel and Japanese Maple⁹² at "Area A" to frame the balustrades with year-round structure, fine texture and movement. Behind the corner plantings are transplanted and existing trees, expanding the scale of the corner masses. This same drawing indicates a planting of Japanese Yew along the path connecting the corner entrance and the entrance to the promenade, indicated as "Area B", guiding both movement and views towards the center of the square. At the meeting points of Areas B and C, another massing of shrubs is placed to mark the transition into the promenade and frame views into the promenade, similar to the view depicted in Fig. 77. The placement of planting materials is dense and confined to areas adjacent to the balustrade features and the path curb in Area B. Although Cret's use of planting material worked in conjunction with the hardscape elements of the plan to express the site's organization, Cret also understood the value of living, organic form in contrast to the geometries of built structure. Cret's use of planting followed its own poetic logic that was analogous to the structural rhythm and planar flow of the design's constructed features, though not simply an extension of them

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⁹¹ The presence of the balustrade suggests that the plan accompanied or followed the 1934 installation of the corner entrance at 18th and Walnut Streets.

⁹² Taxus baccata, Taxus cuspidata, Kalmia latifolia and Acer polymorphum



(Fig. 82). Cret uses a similar palate for features related to the center plaza, reinforcing their scale and rhythm with plantings. Fig. 91 shows the placement of horizontal masses of rhododendron on the outside of the balustrade and a vertical surround of evergreens at the rear of the fountain, increasing the stature of fountain and also visually drawing in the tower of the adjacent Trinity Church.

Cret's 1934 perspective in Fig. 95 shows a bird's eye view of a proposed design for the northeast entrance composed of dense shrub massings, rhythmic tree plantings and simple, clearly defined ground planes. Lacking the hedge border along the connecting path, the drawing shows the balanced relationship between the tightly bunched masses of shrubs adjacent to the entrance balustrades and promenade entrance, connected by highly structural allee planting which guides the approach to the statue and promenade.

In contrast to Cret's restrained planting scheme is a plan developed for the same corner entrance by the Fairmount Park Commission in 1934 (Fig. 96) The Commission's design is significantly larger than the study developed by Cret, expanding the species palate and the area covered. In addition to the English and Japanese Yew, The Commission added Japanese Holly, Inkberry and Yucca⁹³ to increase the variety of color, texture and structure of the shrub mass, backing each foundation bed with group of Magnolia trees.

The majority of Cret's plans for the square were implemented within a year of his proposal. Further work on the square was delayed by Cret's enlistment in the French military during World War I, in which he served until 1919. Though his work on Rittenhouse Square was delayed by the war, it was not altogether stopped. While still a

⁹³ Ilex Crenata, Ilex glabra and Yucca filamentosa



member of the Chasseur Alpine in 1915, he was asked to design a memorial for Dr. J. William White, one of the founding members of the Rittenhouse Square Improvement Association in a manner which would "inconspicuously, be a record of his connection with the Association and with the movement to beautify the square". A photograph of the fountain was sent to Cret to design the memorial, and he did so, producing the three sketches depicted in Fig. 97.95 None of these designs were developed beyond the preliminary sketches, and the memorial was put on hold until Cret's return from the war. On his return, he was again asked to create to the memorial additions, resulting in a design that would keep the basic profile of the fountain by adding a decorative stone cap, and an inscription and drinking fountain at the rear. Cret seemed to enjoy the decorative opportunity of the drinking fountain and developed a number of schemes exploring variations of decorative expression, scale and integration with plantings (Figs. 98-102). A final version (Figs. 103, 104) was settled upon and approved by Mrs. White, the Rittenhouse Square Improvement Association and the Art Jury, and was installed in 1921.⁹⁶ With the design, Cret successfully integrated the private memorial unobtrusively into the most public of the square's spaces, providing not only a respectful tribute to an influential member of the RSIA, but also improving the square for all of its users with an additional public amenity in the drinking fountain (Fig. 103).

The construction of the exedra and installation of the goat statue were also done during this period, in 1919, though it is unclear whether Cret's firm had any part of the design of these features. The southwest entrance of the square seems to be the only

⁹⁶ Rivinus, p. 36.

⁹⁴ Rivinus, p. 36.

⁹⁵ Adams, Rayne. "Paul Philippe Cret" Architecture. May, 1931: p. 263.



approach not to have been given a specific proposal in Cret's original plans, possibly precipitating its choice for the location of the goat exedra. Minor changes were proposed in 1939 by Cret's firm to the paving, plantings and fence surrounding the exedra and goat (Fig. 104). These changes were likely a response to the popularity of this area to small children, as the changes gave the exedra a stronger quality of enclosure with shrub plantings and the bollard and chain fence, while also accommodating the many small trampling feet with new flagstone walks. The changes were not implemented.

Though they were originally planned in 1913 (Fig. 54), the open balustrades at the north entrances were not built until 1934 and the south entrances until 1941. Fig. 105 shows the design of the northeastern entrance, typical for all four corners. In this design, the preexisting entrance is removed, widened and paved with concrete and a flagstone surround. The preexisting pedestal and vase units were removed from the area and relocated at the transitions into the promenade space. In these changes, Cret uses the flagstone surround to distinguish the entrance into the square, though he retains concrete as the center paying material as a bridge for continuity between the exterior concrete paving at the corner and the square's interior path pavement (Fig. 106). Though they were the last significant feature of the original design to be constructed, they were, in fact, the first major element experienced in the Beaux Arts composition, establishing a sense of scale and the orientation of movement flowing into the square. They were major gateways into the square and also important social spaces in their own right, providing an enclosed space that was oriented towards but spatially removed from the street. Visually, the open balustrades guided views into the square, heightening the perspectival qualities of the inward view with their arms extending slightly larger then right angles (Fig. 107).



As seen in Figs. 106 and 107, the buildings surrounding the square in 1934 gave the space strong volumetric definition, and continued the strong axial line of the paths into the vertical dimension. The broad scale of the entrances, promenade and plaza worked particularly well in relating to the multistory apartment buildings common on the square's 1935 perimeter.

In Cret's 1913 design for the square, the surrounding building context was composed largely of three to four story residential structures(Fig. 108). The Rittenhouse Apartments and tower of the Trinity Episcopal Church were the only buildings to rise above seven stories, or eighty-five feet, a height limit existing until at least 1921 (Fig. 109). Built in first decade of the twentieth century, the Rittenhouse Apartment building is curiously absent in Cret's original perspective (Fig. 54), though a revised perspective shows the building on the south edge of the square, though rendered much squatter than its actual height (Fig. 59). Even though his early perspectives didn't show it, Cret must have understood the effect of a building the size of the Rittenhouse Apartments⁹⁷ as both a compositional element affecting the volumetric perception of the square's design and also the effect such a building would have on the social life of the square (Fig. 72, 110). In his proposal for the redesign of Penn Square (Figs. 48-50), Cret notes the relationship between the public open space and the form and proportions of its surrounding architectural fabric:

...We have referred before to the all important value of the outline of surrounding buildings in the design of a plaza. This outline is the form of the Plaza itself, and if this form is unsuccessful, no amount of decoration on the Plaza will conceal this basic fault, ay more than beautiful clothes can conceal a distorted body. 98

⁹⁷ Known originally as the Weatherill Apartments

⁹⁸ Cret, Paul P. "Report on the Improvement of City Hall Square-Philadelphia, Pennsylvania," 1924, p. 9.



It is difficult to discern exactly how much Cret could have predicted the rapid growth of skyscrapers surrounding Rittenhouse Square during the 1920's and 1930's when he devised the original plan in 1913, though the broad scale and modern materials of his design accommodate the urban character of the larger-scaled buildings. By 1926 the presence of the adjacent high-rise structures was increasing, and buildings such as the Rittenhouse Plaza began to acknowledge views of both the square and the architecture on the opposite side of the square (Fig. 111).

Although it is unclear how much Cret could have anticipated the growth of the surrounding architectural context, his highly urban and highly social design may well have helped precipitate the development of the large-scale apartment buildings on the square's perimeter. Much as the original Penn Squares had served as anchors for real estate development in the early eighteenth century, as well as those built in the late nineteenth century to service new tracts of industrial housing, Cret's design changed the character of Rittenhouse Square from its inward-looking nineteenth century retreat, to a highly urbanized space that was implicitly social if not communal in character. The public scale and character of the square was well suited not only to the large size of the Rittenhouse Apartments, but to the public function of the buildings. The square became integrated within the identities of the apartment buildings, taking on the role of a shared. collective courtyard for them, as well, though not at the exclusion of its other functions(Fig.112). The large-scale apartment buildings, in turn, expanded the public scale and context of the square's already theatrical composition, enlarging the contextual frame of its setting and audience.



Cret's design for Rittenhouse Square represents a juncture between the organizational hierarchies, scalar precision and decorative modes of Beaux Arts design, and the progressive use of technology, empty surface planes and functional plasticity of modernism. The theoretical ambivalence of the design speaks to Cret's implicit understanding of the square's historical context in conjunction with the emerging cultural milieu of the early 20th century.



Chapter IV--Site Analysis and Recommendations

Site Analysis

Rittenhouse Square today represents nearly a century of use and changes made to Cret's original "Improvements" design. Like all landscapes must, particularly those in urban settings, the square and its surrounding context have changed over the course of time. The square's hardscape materials have weathered and worn down with use; many of its features have been replaced. The site's vegetation has experienced significant changes, as well, as the trees and shrubs of the early twentieth century have grown into their mature size or have since died and been removed. In the period since its installation, the 'Improvements' have housed countless events, from the large public flower shows, art sales and concerts (Figs. 113, 114) to the small, extemporaneous events of individuals that take place throughout the year at any given time of day(Fig. 115). The square is now as popular and populated as it ever has been, testifying to Cret's ability to design for the constants of human behavior with a compositional sensibility that remains as relevant and appealing as the day of its installation. To the present, the square remains as it was in 1961 when Jane Jacobs affectionately described it as "...a beloved, successful, much-used park, one of Philadelphia's greatest assets today..."99

Notwithstanding the continuity of the square's popularity and success of the past century, in which there were highs and lows, significant changes have been made to the compositional elements of Cret's design, and present a range of effects upon the formal qualities and experience of the site's design. The sources behind these changes are

⁹⁹ Jacobs, Jane. *The Death and Life of Great American Cities*. New York: Vintage Books, 1961, p. 92.



varied, though they predominantly fall into three main categories: the physical processes associated with the urban environment and organic life cycles; the efforts resulting from the administrative and maintenance structure of associated city agencies: and the various private constituencies, from individual park users to the well-organized Friends groups who have been, starting with the commission of Paul Cret, perhaps the most influential factor in the development of the square. Aside from the many physical issues associated with the preservation of Cret's design for Rittenhouse Square, there are an equal, if not greater, number of political, social and aesthetic factors that have and continue to influence the square's design. It is hoped that the general site recommendations in this chapter will be of assistance to as wide an audience of the site's constituencies as possible.

Rather than trace the countless incremental changes that have been made to Rittenhouse Square since Cret's death in 1945, it will be more useful to look at the state of Cret's design at present and identify those changes having the greatest impact on the preservation of the design. These changes can be generically divided into two main categories. The first category includes those changes occurring incidentally and apart from widescale or long-range planning, including the loss/replacement of individual trees, shrubs or plantings, changes made in the site's urban furniture, localized replacement of paving, turf or other surface materials and countless other changes made incrementally between 1945 and the present by the Fairmount Park Commission and other city agencies, and the many private stakeholders of the park.

The second category includes changes made within the designs of landscape architect George Patton in 1976 and again in the early 1980's. Patton's work was the



most comprehensive campaign of design work to take place in the square following the changes to the south corner balustrades in 1941. Focused primarily on the center features of the square—the plaza and promenade—Patton's design represents the single most dominant challenge towards the preservation of Cret's original composition.

Within the major elements of Patton's design were a series of proposals for the replacement of paving surfaces in the plaza and promenade (Figs. 116, 117). Among the various materials explored in the proposals were flagstone, brick, granite blocks and concrete used in unit pavers and as strips between panels of other surface materials. While Patton preserved the elemental forms of Cret's paving scheme, his designsincluding the final design—altered some of the basic compositional principles underlying Cret's design. The most readily evident is the banding pattern resulting from the strips used to separate panels of the primary surface material. Proposed as flagstone, slate, brick, granite and concrete, the strips replace the continuous planar flow of Cret's design with a rigid, geometric surface of individual panels, variously, if not arbitrarily aligned in the six proposed schemes. Figs. 118 and 119 illustrate the alteration of rhythm, flow and basic surface composition brought about by Patton's design. The addition of brick pavers and granite surrounds also disconnects the continuity of materials set forth in Cret's original design, diminishing the relationship between the individual components of the paving system.

The use of granite blocks set in concentric circular patterns, with large circular tree pits is a significant move away from the continuous soft planes of Cret's gravel



beds¹⁰⁰, as well as the feel and sound of gravel under foot. The granite blocks used as a replacement, while visually appealing in their own right, have changed the visual, textural and cultural values established by the original design.

Another significant change brought about by Patton's plan was the loss of what were originally two gravel beds in the center of the plaza, further diminishing the precise allocation of materials indicating spatial use (Fig. 120). The beds have been subsumed by the brick and concrete strip pattern, leaving no indication of the former design.

Design Recommendations

The following is a series of general recommendations for selected design issues relating to the preservation, rehabilitation and restoration of Paul Cret's design for Rittenhouse Square. Given the academic nature of this project, they are necessarily generalized, and do not take into consideration the immediate political and budgetary contexts currently associated with the square. Fig. 121 represents the scope of changes made within the following recommendations.

Planting

1. Replanting of the inner allees of plane tree within the promenade. While Cret's retention of existing trees saved a great deal of expense at the time, and gave the square's new design an instant look of maturity, the root system damage caused by the changes in surface materials surrounding the original plane trees likely caused a rapid decline and demise of all but a few of the existing trees. This left the promenade, and the square in general, without one of its major structural and

 $^{^{100}}$ The gravel beds were removed in 1941 and subsequently replaced by asphalt and other materials prior to Patton's design.



rhythmic features. It is recommended that these trees be replanted in the original positions established in Cret's drawings (Figs. 45, 59, 60, 92) as indicated in Figure 122. Plantings underneath the trees in the lawn sections currently embedded in the promenade can either be removed to restore the simple lawn planes as designed originally, or be planted with low-growing, shade-tolerant perennials, some of which currently exist in the beds. Existing plane trees in good condition should be left in place and integrated within the new allees.

2. Replanting of corner planting beds. Use the planting plan illustrated in Fig. 94 to establish Cret's structural planting for the corner entrances, including English Yew, Japanese Yew, Mountain Laurel and Japanese Maple. On the sections of path connecting the northeast corner and southwest corners of the square to the entrances of the promenade, replant the continuous hedge of Japanese Yew to structure these major entrances into the square and assist in controlling damage to turf caused by pedestrian shortcuts and erosion (Fig. 122).

Paving

1. Restoration of concrete paths as designed in original plan. The current design features brick panels and concrete strips, which significantly disrupt the continuity of material and spatial flow through the square (Figs. 123, 124). Cret's paving was intentionally simple and planar, connecting the various surface elements of the square through a continuous, light-colored plane. Concrete was also chosen as a *modern* material, offering a plasticity in appearance and structural use. Poured concrete offers superior strength and durability to most unit paving surfaces, as well.



Should poured concrete be unacceptable or impractical, unit pavers should chosen to align in color and texture to the existing concrete paths outside of the center areas. The banding pattern installed in the Patton design should be removed and replaced with the general field material to form a continuous surface plane(Fig. 125).

2. Restoration of gravel beds (Fig. 126). The gravel was selected by Cret to provide an alternative to the hard surface of the path system. It was a primary feature of his original design, a basic element of the plaza and promenade's physical and spatial arrangement and a reference to the square's Parisian inspiration. It was chosen for its softer feeling, its sound and the appearance of its fine texture. The current pattern of blocks, while visually appealing in their own right, is not an appropriate substitute for the original gravel. It is not visually similar to the soft planes of loose gravel and as a walking surface, it has a different feel from gravel, becoming slippery in wet weather and given its coarseness, creates a difficult surface on which to move for the very young, elderly and disabled square visitors.

Cret also used gravel for its benefits to the trees planted within it. Its permeability allows transmission of both moisture and air to tree root systems, integral requirements for tree health. If restoration of the gravel is considered undesirable or unaffordable, an alternative such as gray traprock screening (Fig. 127) with an underlayer of structural soil could be used for similar effect, offering increased stability and durability over traditional gravel. This has been used successfully in Europe and the United States, such as in Brooklyn's Metrotech Plaza, where it has weathered almost ten years in excellent condition (Fig.128).



Additionally, the center sections indicated in Fig.120 should be restored to reflect the original spatial pattern originally designed by Cret. Changes made by Patton's design have removed these sections altogether, significantly altering the carefully articulated proportions between the intersecting diagonal paths and perimeter gravel beds as designed in Cret's original plan.

If the replacement of the granite paving is considered impractical or undesirable, the two missing sections should be reintegrated with a similar patter of granite blocks to restore the original alignment, if not materials of Cret's design.

- 3. Removal of the asphalt path connecting the north and east sides of the square.

 Clearly done in response to shortcuts taken through the northeast corner of the square, this path is a crude and intrusive addition to the square's carefully designed circulation system. It should be removed, replanted with turf and preventive alternatives in planting, such as the previously suggested hedge should be explored to stop inappropriate crossing of the corner. (Fig. 129, 130)
- 4. Removal of granite block path in the lawn bed of the southwest portion of the promenade. Located so close to the pavement of the plaza, it is unclear why this path was installed other than to establish symmetry with the unfortunately placed frog statue on the opposite side of the promenade (Fig. 131).

Site Furnishings/Decoration

Discontinuation of Christmas light display on the square's trees. This practice
results in irreversible soil compaction that decreases the ability of water and air to



penetrate the soil, as well as resulting in structural damage to the roots, mechanical damage to turf, shrub and perennial plantings. Damage is also done to the bark and structure of the trees, many of which are mature specimens already struggling to retain good health in a challenging urban environment. It is highly recommended that this practice be stopped immediately (Figs. 132, 133).

2. Removal of gazebo from center point of the square. While the guardhouse has significant value in the security of the square, it is, in both appearance and location, a highly intrusive element within the square's designed spatial and decorative systems, filling the center of Cret's plan—specifically designed to be physically and programmatically open—with a single-purpose structure designed in a decorative mode with little relevance to its designed surroundings. The gazebo might be relocated outside of the plaza somewhere within the circle path, sited for maximum views of the square. While this recommendation may appear naïve of the practical value of the gazebo's central location, the effect that its current position has on the spatial, not to mention semiotic meaning of the composition is profound (Fig. 134, 135).



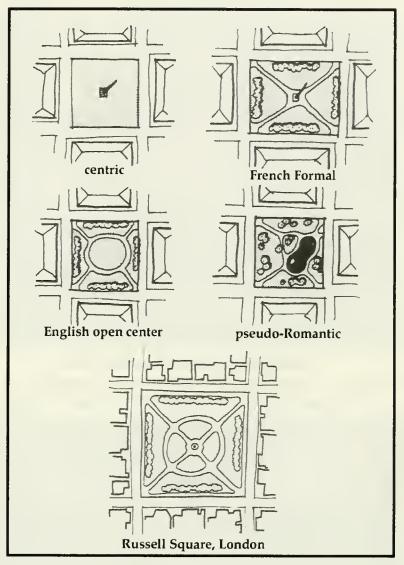
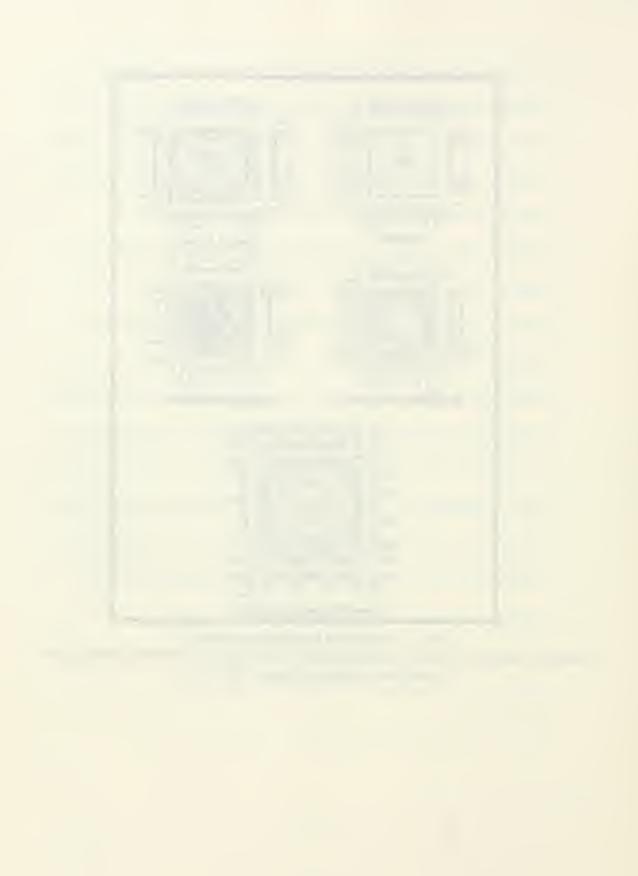


Fig. 1 French and English square types
French, Jere Stuart. *Urban Space: A Brief History of the City Square*, Second Edition. Dubuque, Iowa:
Kendall/Hunt Publishing Company, 1983, p.91.



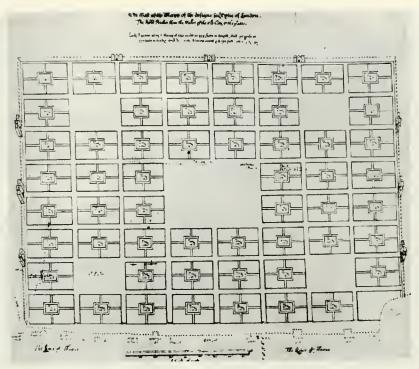


Fig.2 Newcourt Plan of London, 1666.

Reps, John W. *The Making of Urban America. A History of City Planning in the United States*. Princeton, NJ: Princeton University Press, 1965.

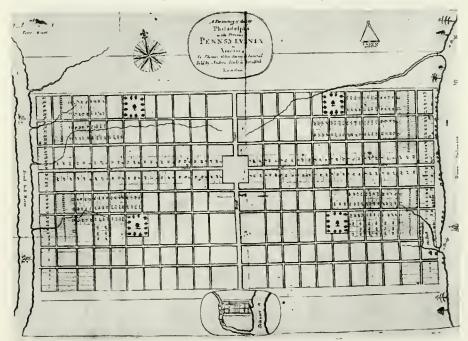


Fig. 3 Holme's Plan for Philadelphia, 1682.

Reps, John W. *The Making of Urban America. A History of City Planning in the United States.* Princeton, NJ: Princeton University Press, 1965.



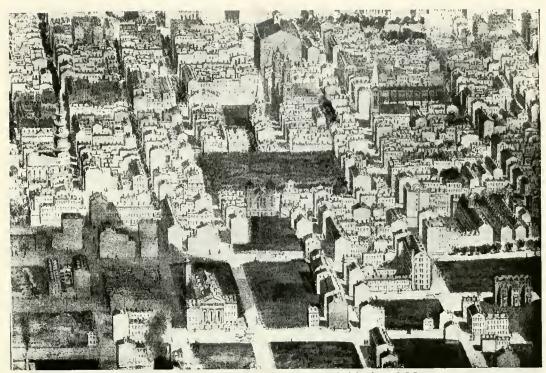


Fig. 4 Bird's Eye view of Philadelphia in 1855.
Originial lithograph by Asselineau,
printed originally in Paris by Lemercier, private collection.

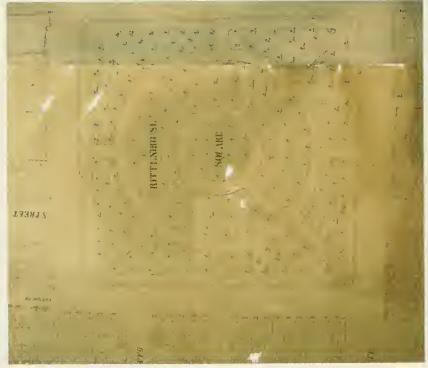


Fig. 5. 1858 Hexamer and Locher Ward Map Free Library of Philadelphia



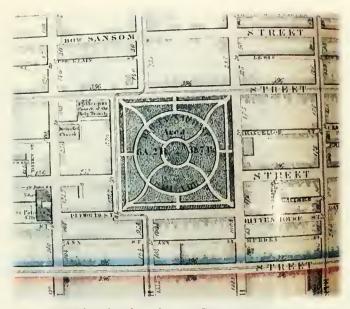


Fig. 6 Rittenhouse Square 1862 Smedley Atlas, Free Library of Philadelphia

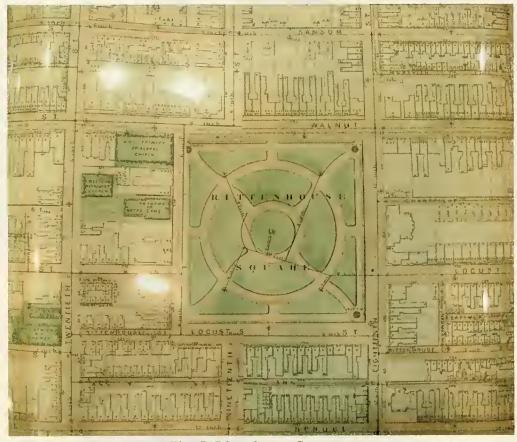


Fig. 7 Rittenhouse Square 1874 Jones Atlas of Philadelphia, Free Library of Philadelphia





Fig. 8 Rittenhouse Fountain, c. 1860's Scharf, John Thomas and Wescott, Thompson. *History of Philadelphia*, 1609-1884. Philadelphia: L.H. Everts, 1884, p. 1849.



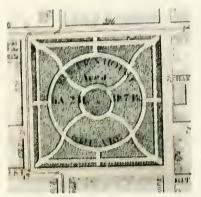
Fig. 9 Rittenhouse Square c. late 1870's-early 1880's Print and Picture Collection, Philadelphia Free Library



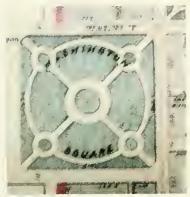


Fig. 10 South edge of Rittenhouse Square, c. 1872. Print and Picture Collection, Free Library of Philadelphia

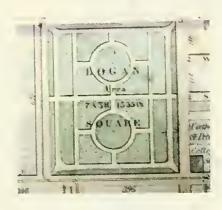




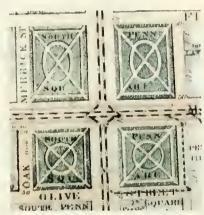
Rittenhouse Square, 1862



Washington Square, 1862



Logan Square, 1862



Center Square, 1862



Franklin Square, 1862

Fig. 11 Five "Penn Squares" 1862 Smedley Atlas of Philadelphia, Free Library of Philadelphia



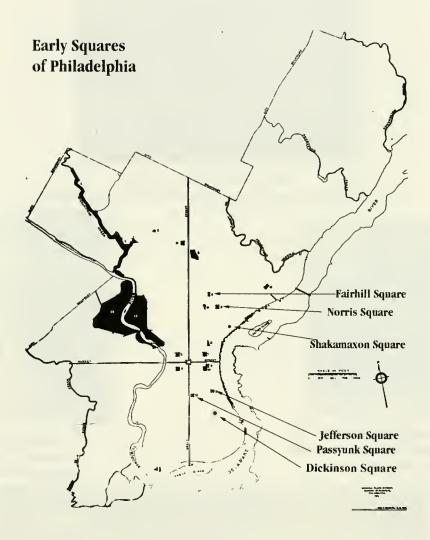


Fig. 12 Development of Philadelphia city squares Annual Report, Bureau of Public Works, 1915.



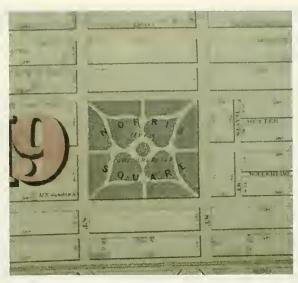


Fig. 13 Norris Square, 1862 Smedley Atlas of Philadelphia, Free Library of Philadelphia

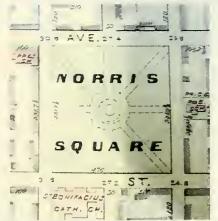


Fig. 14 Norris Square, 1888 Baist Atlas of Philadelphia, Free Library of Philadelphia

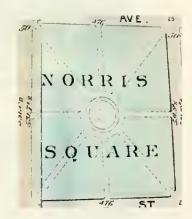


Fig. 15 Norris Square, 1910 Bromley Atlas of Philadelphia, Free Library of Philadelphia



Fig. 16 Fairhill Square, 1895 Bromley Atlas of Philadelphia, Free Library of Philadelphia



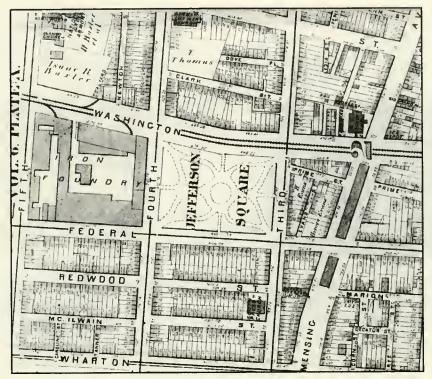


Fig. 17 Jefferson Square, 1862 Smedley Atlas of Philadelphia, Free Library of Philadelphia

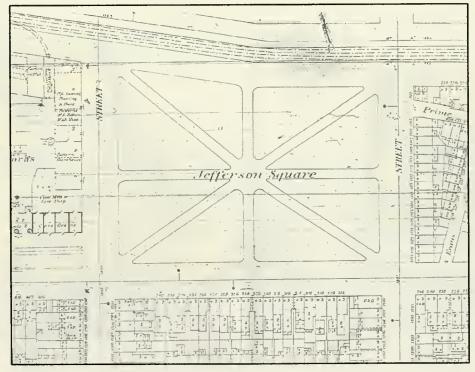


Fig. 18 Jefferson Square 1888 Baist Map of Philadelphia, Free Library of Philadelphia



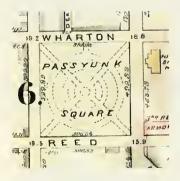


Fig. 19 Passyunk Square, 1888 Baist Map of Philadelphia, Free Library of Philadelphia



Fig. 20 Passyunk Square, 1910 Bromley Map of Philadelphia Free Library of Philadelphia

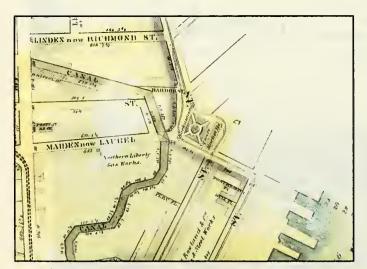


Fig. 21 Shackamaxon Square, 1862 Smedley Atlas of Philadelphia, Free Library of Philadelphia

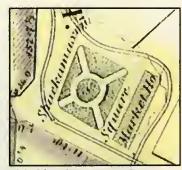


Fig. 22 Shackamaxon Square, 1862 detail Smedley Atlas of Philadelphia, Free Library of Philadelphia



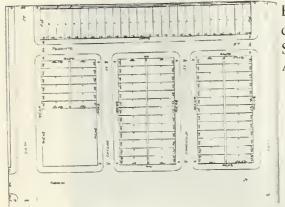


Fig. 23 Original neighborhood site plan for development at Elkhart and Reingold Streets in North Philadelphia.

Annual Report, City Parks Association, 1915.

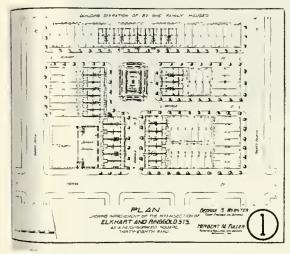


Fig. 24 1916 Revised site plan for development at Elkhart and Reingold Streets showing the addition of a small residential square.

Annual Report, City Parks Association, 1915.

Fig. 25 (below) 1916 photograph of residential square at Elkhart and Reingold Streets.

Annual Report, City Parks Association, 1915.

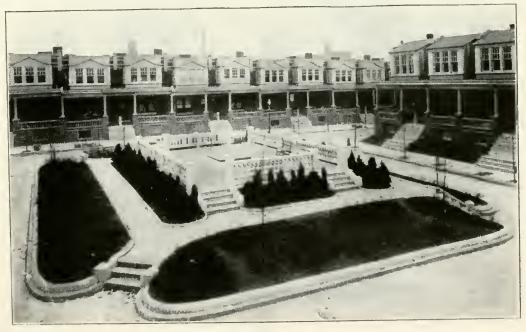






Fig. 26 Dickinson Square, 1910 Archives of the City of Philadelphia

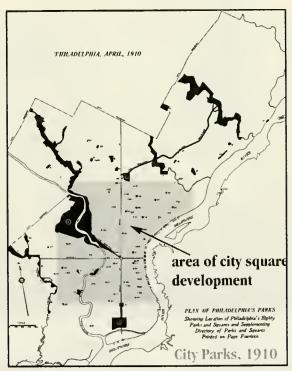


Fig. 27 Development of City Squares Annual Report, City Parks Association of Philadelphia, 1910.







Fig. 28
Rittenhouse Square, 1875 (top)

1875 Hopkins Map of Philadelphia, Free Library of Philadelphia Rittenhouse Square, 1885 (bottom) 1885 Bromley Atlas of Philadelphia, Free Library of Philadelphia



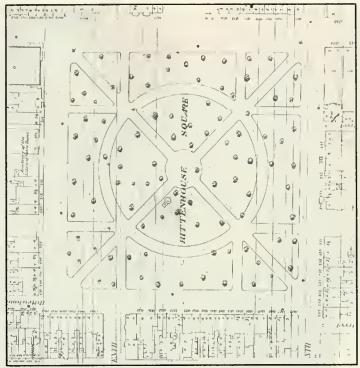


Fig. 29 Rittenhouse Square, 1887 1887 City Atlas, Free Library of Philadelphia

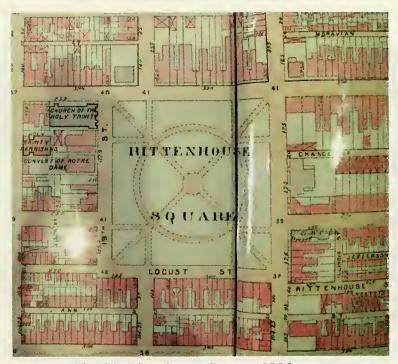


Fig. 30 Rittenhouse Square, 1895 1895 Baist Map of Philadelphia, Free Library of Philadelphia



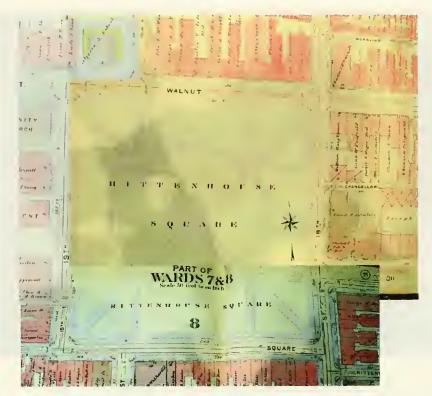


Fig. 31 Rittenhouse Square, 1908 1908 Smith Map of Philadelphia, Free Library of Philadelphia



Fig. 32 "Christmas Morning~Rittenhouse Square" From Supplement, Philadelphia Inquirer, Dec. 19, 1897. Print and Picture Collection, Free Library of Philadelphia





Fig. 33 Rittenhouse Square, c. 1890 Print and Picture Collection, Free Library of Philadelphia



Fig. 34 Rittenhouse Square, 1910 Archives of the City of Philadelphia



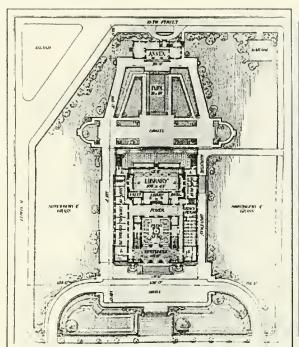




Fig. 35 Pan American Union, 1907-1910. White, Theophilus Ballou. *Paul Philippe Cret, Architect and Teacher*. Philadelphia: Art Alliance Press, 1973



Fig. 36 Parkway design by Cret, Borie and Zantzinger, 1907-1918. Cret Collection, Architectural Archives of the University of Pennsylvania



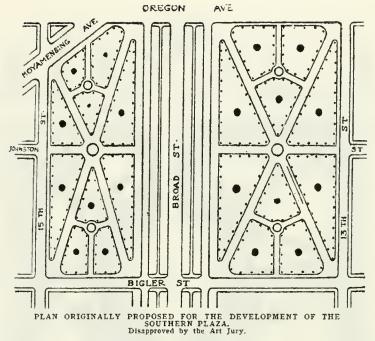


Fig. 37 Original Plan for Southern Plaza, developed by municipal engineers, submitted prior to 1913.

Philadelphia Dept. of Public Works Annual Record, 1913.

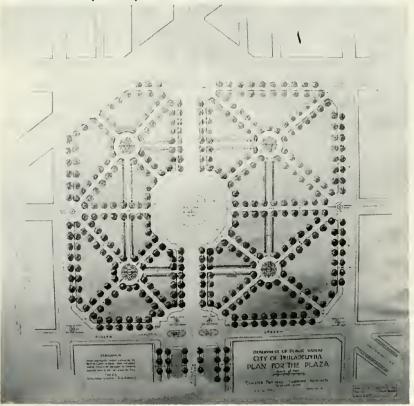
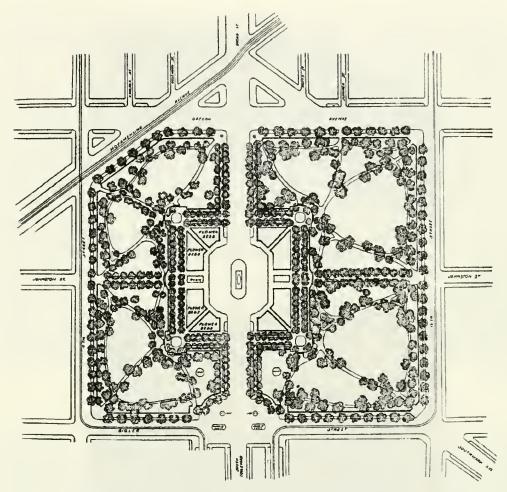


Fig. 38 Revised Plan for Southern Plaza submitted by Olmsted Firm, 1913. Philadelphia Dept. of Public Works Annual Record, 1913.





THE FINALLY APPROVED PLAN FOR THE SOUTHERN PLAZA.

Fig. 39 Final revised plan for Southern Plaza, Paul Cret, 1913. Philadelphia Dept. of Public Works *Annual Record*, 1913.

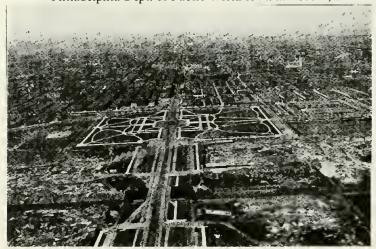


Fig. 40 Air photo of Southern Boulevard and Southern Plaza looking north, c. 1920. *Philadelphia City Parks Assn Annual Report*, 1921.



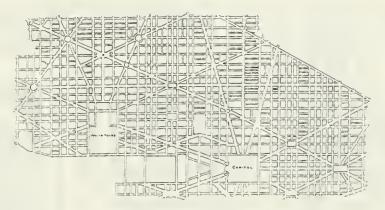
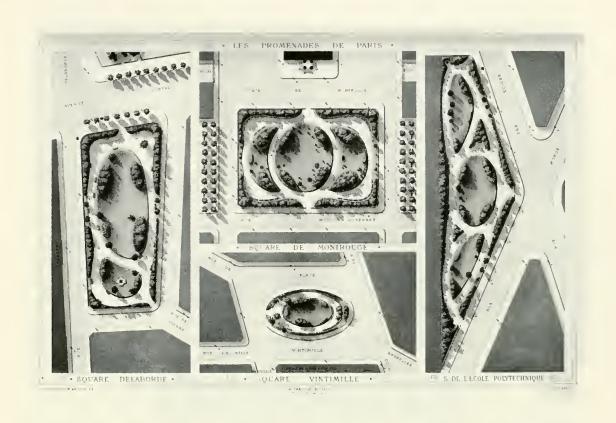


Fig. 41 Partial plan of Washington, D.C., c. 1902 From *Phila. City Parks Association Repor*t, 1902.



Fig. 42 Proposed plan for central Philadelphia, 1911. From *Philadelphia Dept. of Public Works Annual Report*, 1911.





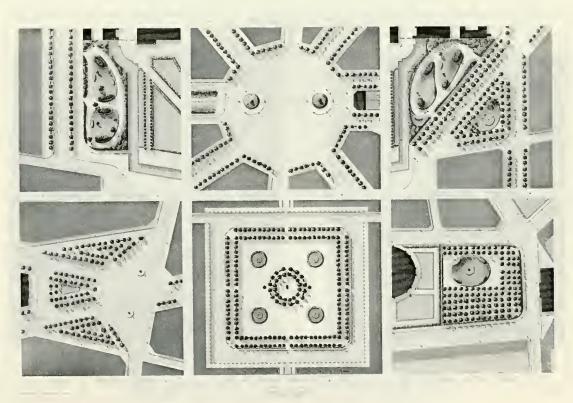


Fig. 43, from Alphand's Promenade de Paris, 1867-1873.



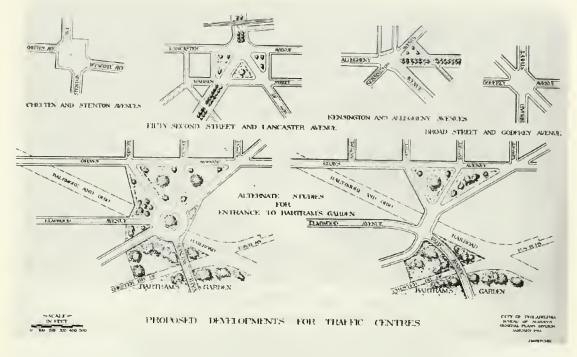


Fig. 44 Proposed plans for typical traffic island parks, 1911. Philadelphia *Dept. of Public Works Annual Report*, 1911.

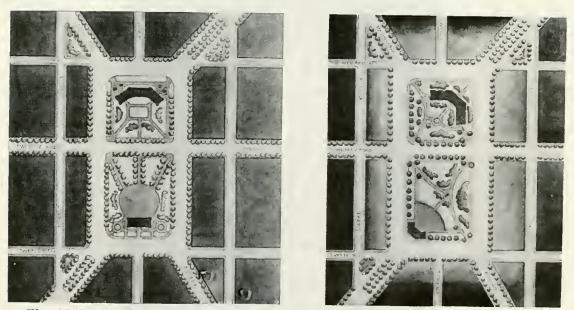


Fig. 45 Two variations of a design for a 'Park and Social Center' at 21st and Wolf Streets, Philadelphia.

Philadelphia Dept. of Public Works Annual Report, 1911.



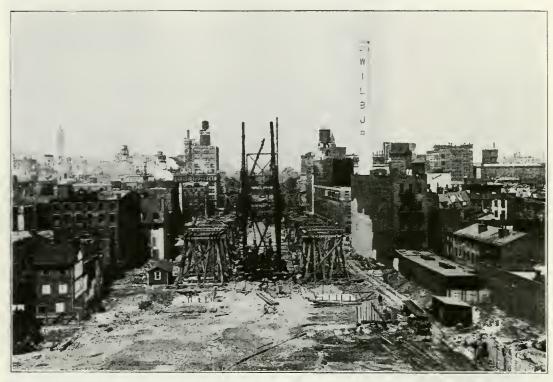


Fig. 46 Delaware River Bridge Plaza, 1921. Philadelphia City Parks Association Annual Report, 1921.



Fig. 47 Delaware River Plaza, c. 1924. Philadelphia City Parks Association Annual Report, 1921.





HAUSSMANNIZATION IN PROCRESS, TO CREATE THE APPROACH TO THE DELAWARE RIVER BRIDGE.

Fig. 48 Construction of Delaware River Bridge Philadelphia City Parks Association Annual Report, 1921.





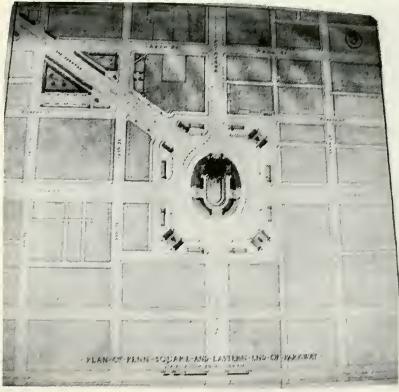


Fig. 49 (top) Design for Penn (City Hall) Square, perspective, 1924.

(bottom)
Design for Penn (City
Hall) Square, plan view,
1924.

Cret Collection, Architectural Archives of the University of Pennsylvania





Fig. 50 Design for Penn (City Hall) Square, section, 1924. Cret Collection, Architectural Archives of the University of Pennsylvania



Fig. 51 Design for Extension for Independence Square, "Scheme A", 1924. Cret Collection, Architectural Archives of the University of Pennsylvania





Fig. 52 Design for Extension of Independence Square, "Scheme B", 1924.

Cret Collection, Architectural Archives of the

University of Pennsylvania

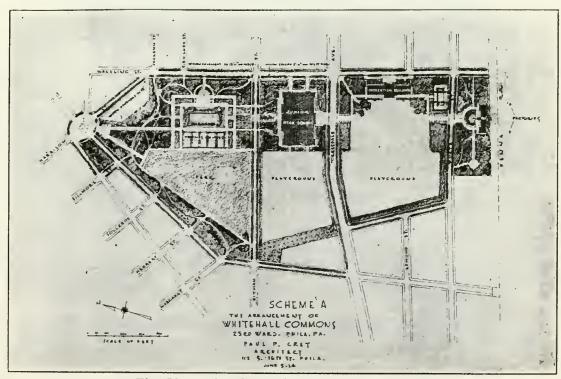


Fig. 53 Design for Whitehall Commons, 1923 City Parks Association of Philadelphia Annual Report, 1923.





Fig. 54 Proposed Improvements for Rittenhouse Square, no date Print and Picture Collection, Free Library of Philadelphia

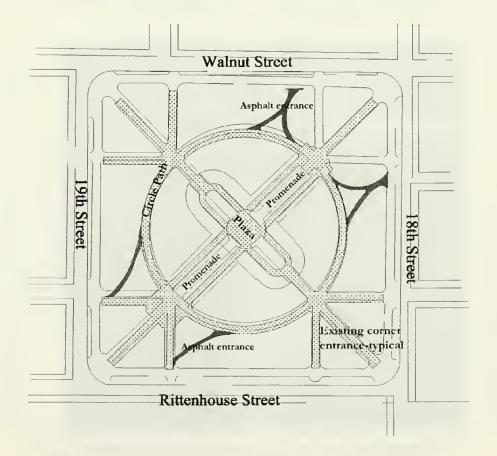


Fig. 55 Rittenhouse Square, surface features, 1913



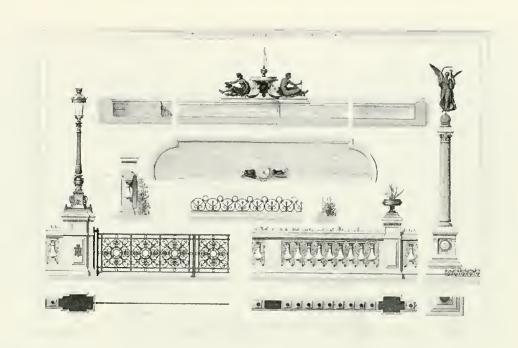


Fig. 56 Details from Alphand's Promenade de Paris, 1867-1873.



Fig. 57 Planting Plan for Rittenhouse Square by Paul Oglesby, 1913 Paul P. Cret Collection, Athenaeum of Philadelphia



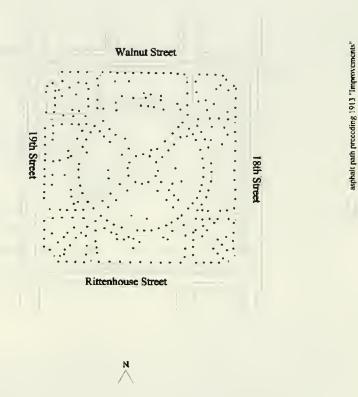


Fig. 58 Rittenhouse Square, existing trees prior to 1913 design





Fig. 59, Rittenhouse Square, bird's eye view from northeast corner Cret Collection, Architectural Archives, University of Pennsylvania



Fig. 60 Rittenhouse Square plaza, view from southeast corner Cret Collection, Architectural Archives, University of Pennsylvania



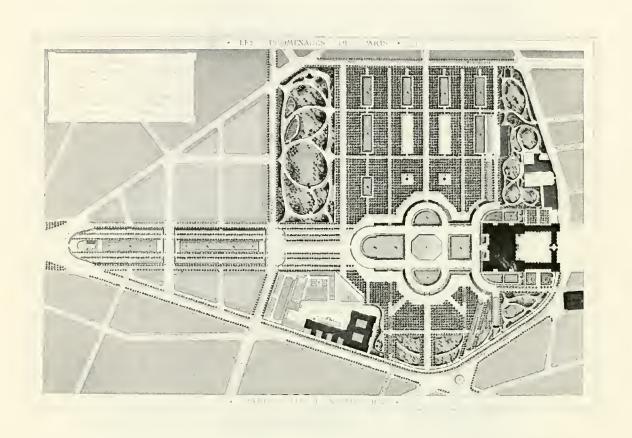


Fig. 61, plan for Luxembourg Gardens, from Alphand's Promenades de Paris, 1867-1873.



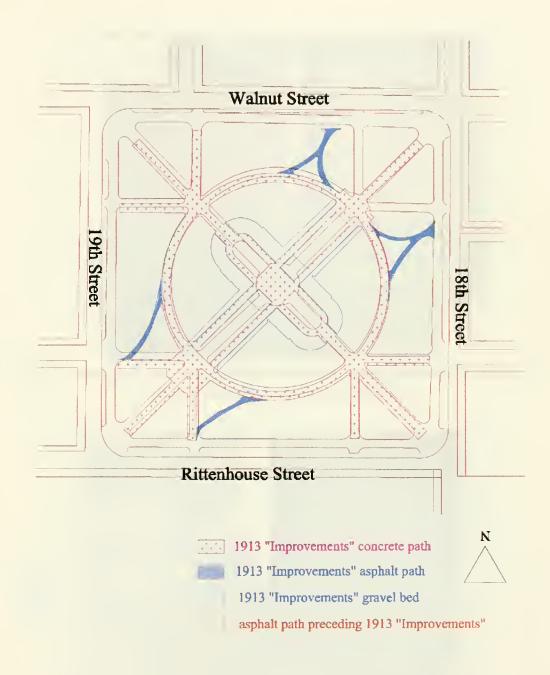


Fig. 62 Comparison between 1913 "Improvements" and pre-existing design



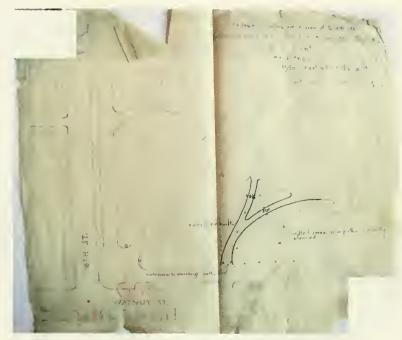


Fig. 63, Paul Cret, path adjustment for northeast corner of Rittenhouse Square Paul P. Cret Collection, Athenaeum of Philadelphia

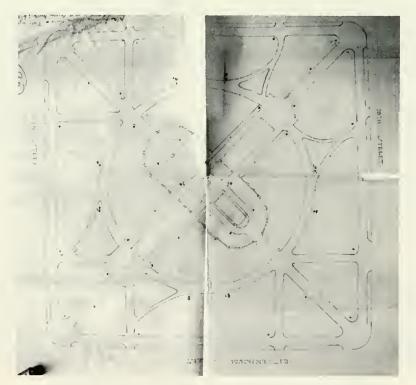


Fig. 64 Placement of lighting standards. Paul Cret, 1915 Paul P. Cret Collection, Athenaeum of Philadelphia



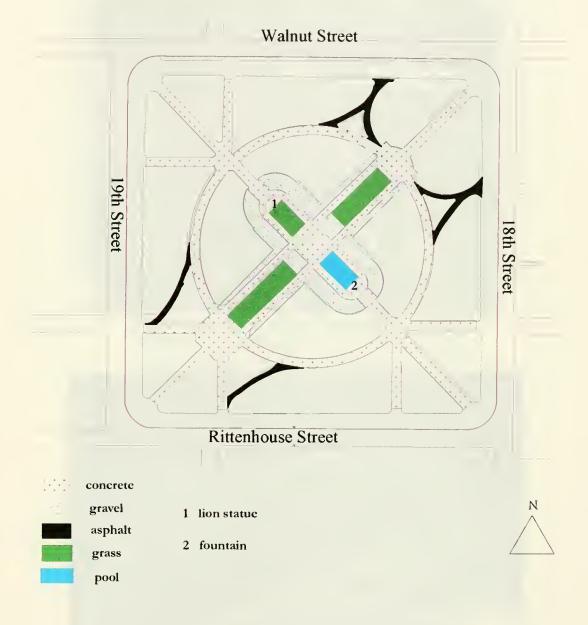


Fig. 65 Organization of central surface materials





Fig. 66 Rittenhouse Square Flowermarket, c. 1917 Print and Pictures Collection, Free Library of Philadelphia



Fig. 67 Dog show in Rittenhouse Square, 1953 Print and Pictures Collection, Free Library of Philadelphia



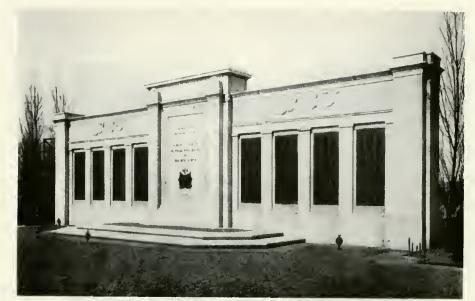


Fig. 68 Frankford War Memorial, Philadelphia. 1922 White, Theophilus Ballou. *Paul Philippe Cret, Architect and Teacher*. Edited, with introductory text by Theo B. White. Foreword by John F. Harbeson. Philadelphia: Art Alliance Press, 1973, plate 21.



Fig. 69 Indianapolis Public Library, Indianapolis. 1914. White, Theophilus Ballou. *Paul Philippe Cret, Architect and Teacher*. Edited, with introductory text by Theo B. White. Foreword by John F. Harbeson. Philadelphia: Art Alliance Press, 1973, plate 8.





Fig. 70 Integrity Trust Company, Philadelphia. 1923. White, Theophilus Ballou. *Paul Philippe Cret, Architect and Teacher*. Edited, with introductory text by Theo B. White. Foreword by John F. Harbeson. Philadelphia: Art Alliance Press, 1973, plate 24.



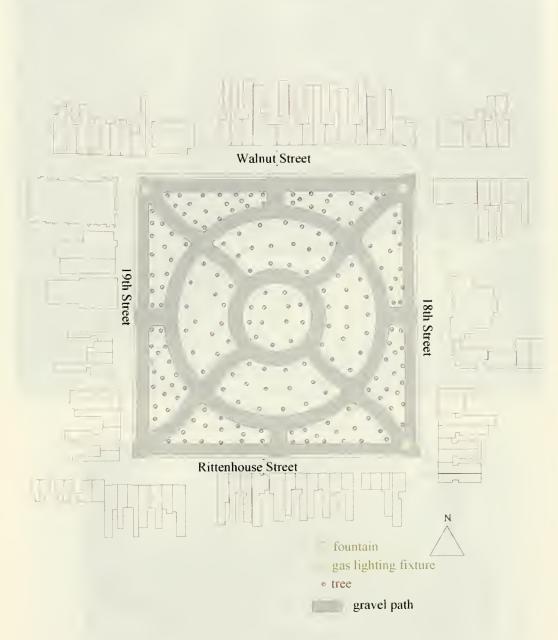


Fig. 71 Rittenhouse Square and surrounding blocks, 1874.





Fig. 72 Rittenhouse Square, 1913 Print and Picture Collection, Free Library of Philadelphia



Fig. 73 Rittenhouse Square, 1913
Print and Picture Collection, Free Library of Philadelphia





Fig. 74 Rittenhouse Square, Fountain and pool, 1915 Philadelphia City Archives



Fig. 75 Rittenhouse Square, Lion sculpture, no date Paul Cret Collection, Van Pelt Library, University of Pennsylvania





Fig. 76 Rittenhouse Squre, lion statue. 1913 Philadelphia City Archives



Fig. 77 Rittenhouse Square, Heracles statue proposal, Paul Cret. Undated. Paul P. Cret Collection, Athenaeum of Philadelphia



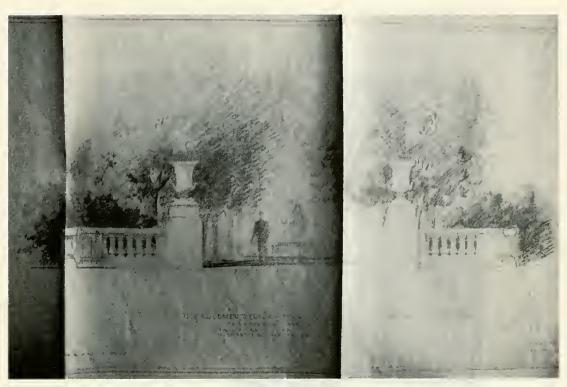


Figure 78 Rittenhouse Square, Entrance at 18th and Walnut Streets, Paul Cret. 1934
Paul P. Cret Collection, Athenaeum of Philadelphia



Fig. 79 Rittenhouse Square, view to plaza from the northwest, 1947.
Print and Picture Collection, Free Library of Philadelphia





Fig. 80 Rittenhouse Square, Evelyn Taylor Memorial Sundial, 1949 Philadelphia City Archives





Fig. 18 Rittenhouse Square, Giant Frog. 1959 Print and Picture Collection, Free Library of Philadelphia



Fig. 82 Rittenhouse Square, view south into plaza. 1915 Philadelphia City Archives



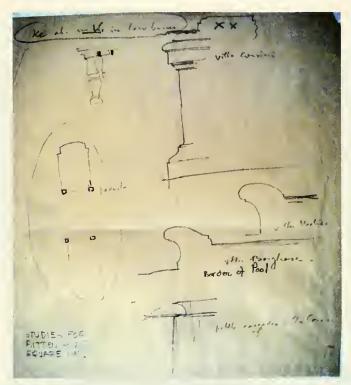


Fig. 83 Rittenhouse Square, Studies for pool design, Paul Cret. 1913 Cret Collection, Architectural Archives, University of Pennsylvania

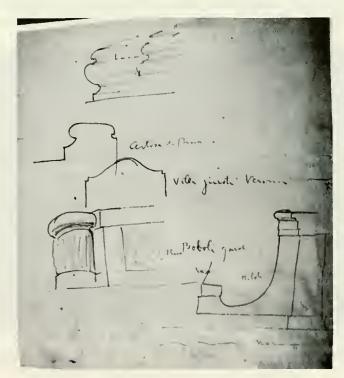


Fig. 84 Rittenhouse Square, Studies for pool and fountain design, Paul Cret. 1913 Cret Collection, Architectural Archives, University of Pennsylvania



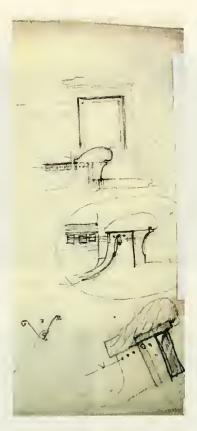


Fig. 85 Rittenhouse Square, Studies for pool design, Paul Cret. 1913 Cret Collection, Architectural Archives, University of Pennsylvania



Fig. 86 Rittenhouse Square, Fountain. Undated Cret Collection, Architectural Archives, University of Pennsylvania





Fig. 87 Rittenhouse Square, Fountain. Undated. Cret Collection, Architectural Archives, University of Pennsylvania

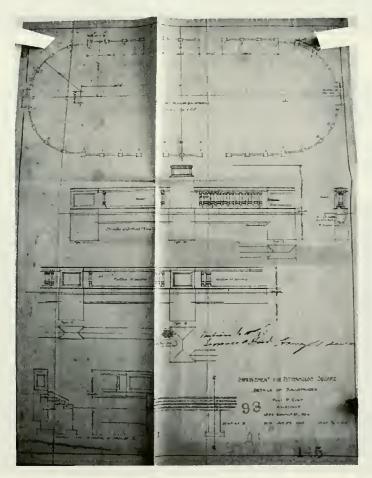


Fig. 88 Rittenhouse Square, Design drawings for Balustrade, Paul Cret. 1913
Paul P. Cret Collection, Athenaeum of Philadelphia



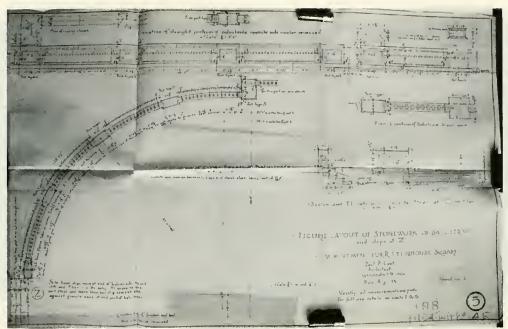


Fig. 89 Rittenhouse Square, Design drawings for Balustrade, Paul Cret. 1913
Paul P. Cret Collection, Athenaeum of Philadelphia



Fig. 90 Rittenhouse Square, Balustrade. 1914 Philadelphia City Archives





Fig. 91 Rittenhouse Square, view looking northwest into plaza. 1914 Philadelphia City Archives

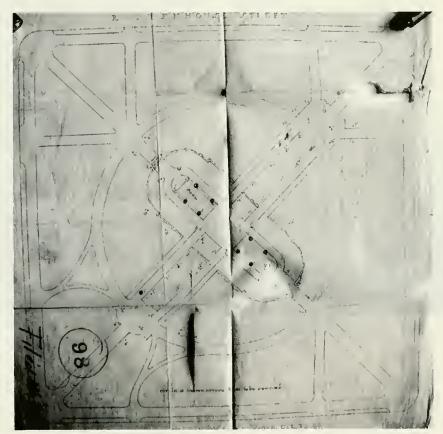


Fig. 92 Rittenhouse Square, tree removal plan, Paul Cret. 1913 Paul P. Cret Collection, Athenaeum of Philadelphia



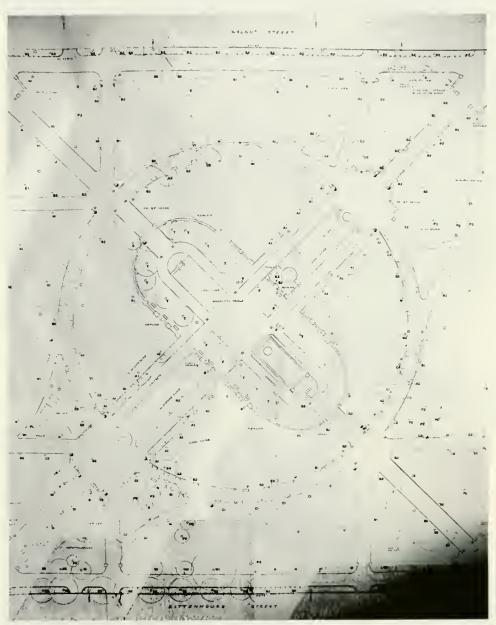


Fig. 93 Rittenhouse Square, Existing tree inventory. 1965 Fairmount Park Commission Archives



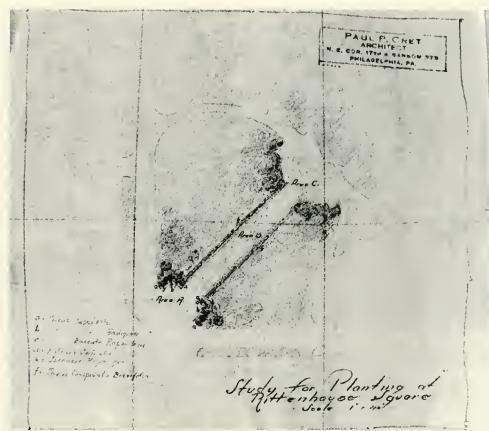


Fig. 94 Rittenhouse Square, Study for plantings. Paul Cret. Undated, probably 1934.
Paul P. Cret Collection, Athenaeum of Philadelphia



Fig. 95 Rittenhouse Square, perspective of northeast entrance. 1934 Paul P. Cret Collection, Athenaeum of Philadelphia



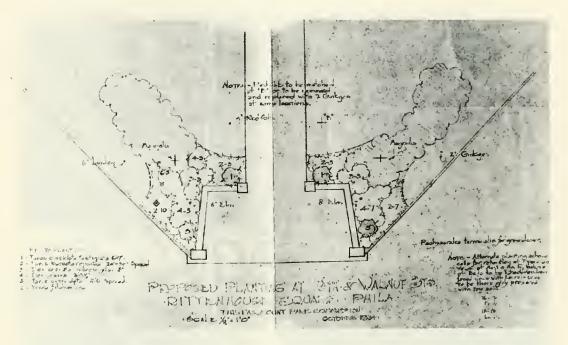


Fig. 96 Rittenhouse Square, Planting Plan, Fairmount Park Commission. 1934 Paul P. Cret Collection, Athenaeum of Philadelphia

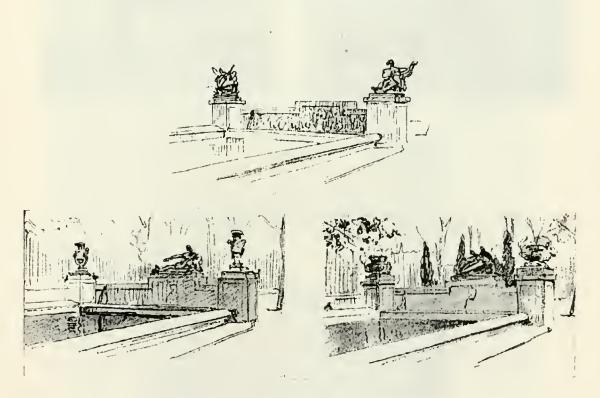
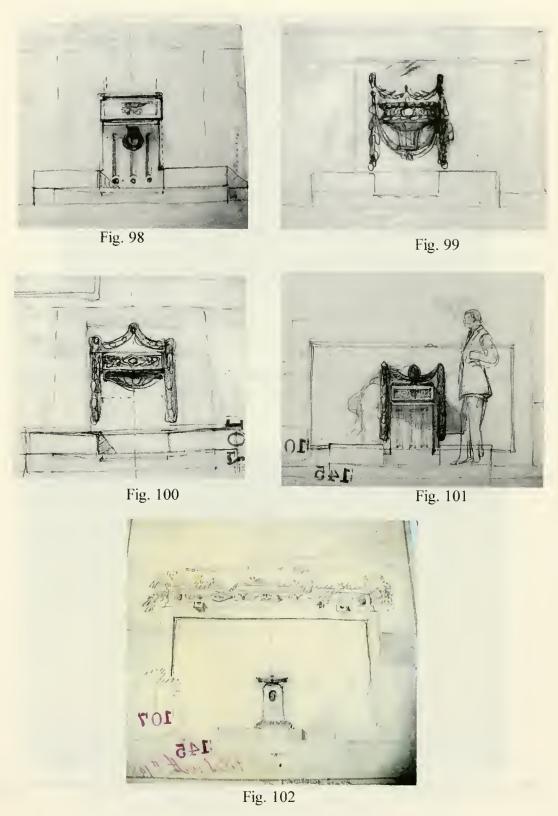


Fig. 97 Sketches for J. William White Memorial, Paul Cret. 1915 Paul Cret Collection, Architectural Archives, University of Pennsylvania.





Figs 98-102: Paul Cret Collection, Architectural Archives, University of Pennsylvania



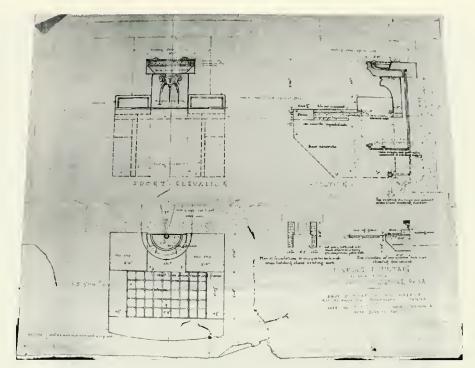


Fig. 103 Rittenhouse Square, Drawings for drinking fountain, Paul Cret. 1920.

Fairmount Park Commission Archives

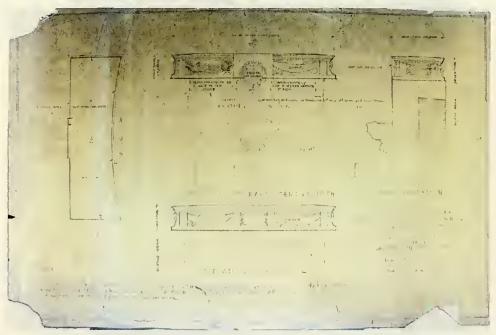


Fig. 104 Rittenhouse Square, Drawings for J. William White Memorial, Paul Cret. 1921 Fairmount Park Commission Archives





Fig. 103 Rittenhouse Square, Drinking fountain. Undated Paul Cret Papers, Rare Books Room, Van Pelt Library, University of Pennsylvania

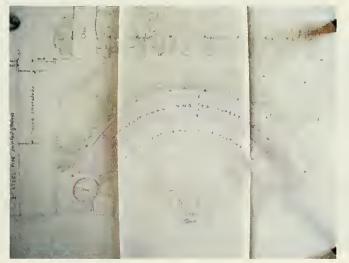


Fig. 104 Rittenhouse Square, goat exedra revisions. 1939 Paul P. Cret Collection, Athenaeum of Philadelphia



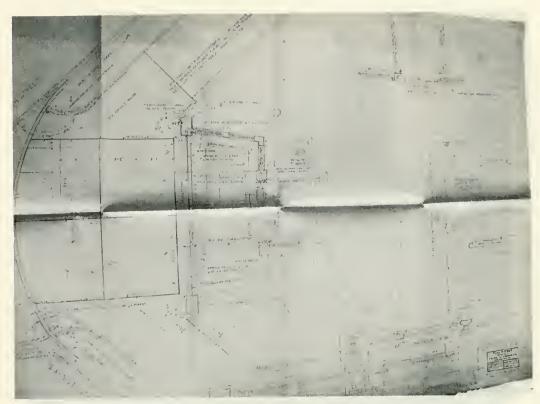


Fig. 105 Rittenhouse Square, Northeast entrance. 1934 Paul P. Cret Collection, Athenaeum of Philadelphia



Fig. 106 Rittenhouse Square, Northwest entrance. 1935 Philadelphia City Archives





Fig. 107 Rittenhouse Square, Northeast entrance. 1935 Philadelphia City Archives



Fig. 108 Rittenhouse Square, View north. 1924 Philadelphia City Archives





Fig. 109 Rittenhouse Square, view of southwest corner from above. 1921
Philadelphia City Archives



Fig. 110 Rittenhouse Square, southwest corner. 1924 Print and Picture Collection, Free Library of Philadelphia





Fig. 111 View from Rittenhouse Plaza. 1926 Print and Picture Collection, Free Library of Philadelphia



Fig. 112 Rittenhouse Square, From Fortune Magazine, 1936
Print and Picture Collection, Free Library of Philadelphia





Fig. 113 Rittenhouse Square Flower Market, 1932 Print and Picture Collection, Philadephia Free Library

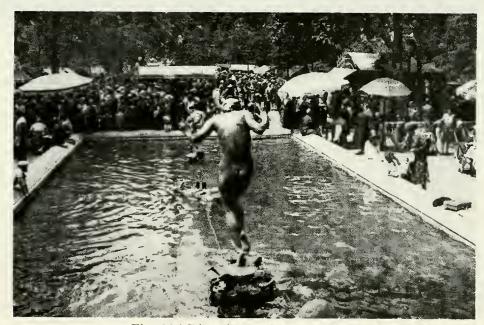


Fig. 114 Rittenhouse Square, 1928 Philadelphia City Archives





Fig. 115 Rittenhouse Square, Goat Exedra users, 2001



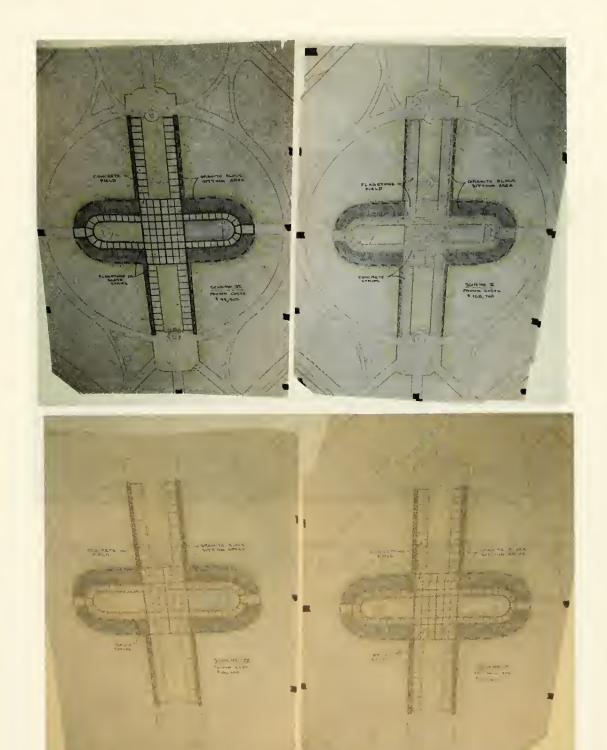


Fig. 116 Rittenhouse Square, Paving Schemes 1 & 6 (top) 2 & 4(bottom), George Patton. 1976

George E. Patton Collection, Architectural Archives, University of Pennsylvania



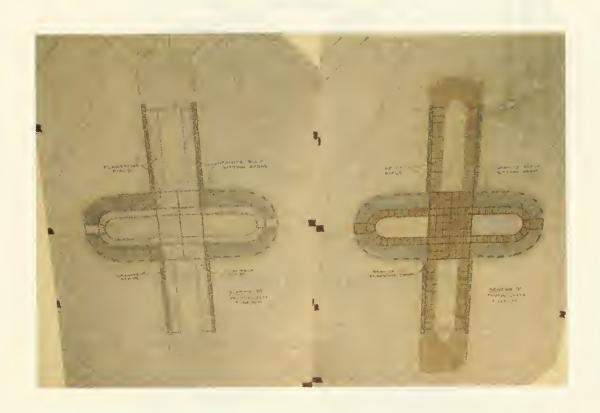


Fig. 117 Rittenhouse Square, Paving Schemes 3 & 5, George Patton. 1976 George E. Patton Collection, Architectural Archives, University of Pennsylvania



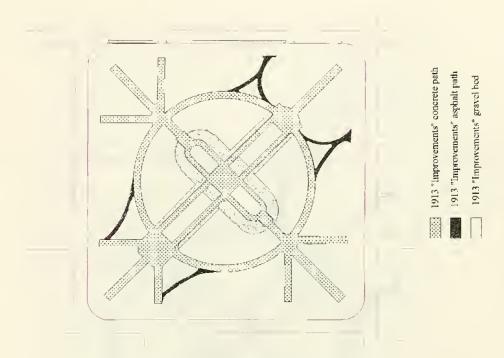


Fig. 118 Cret's design of suface continuity and flow

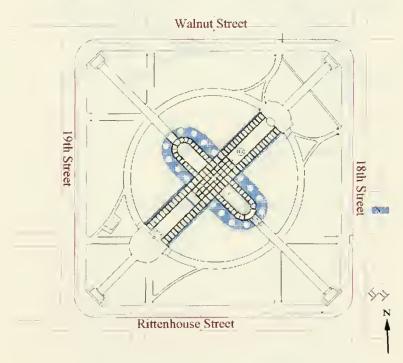


Fig. 119 George E. Patton's design of 1976



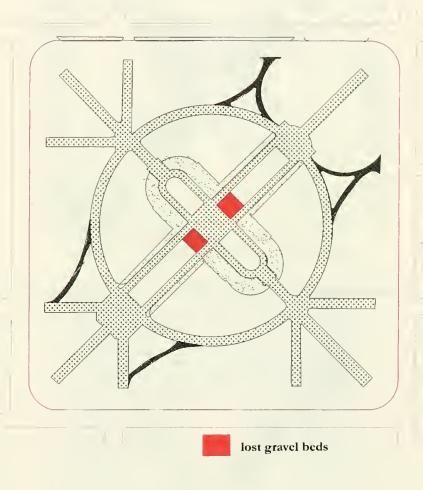


Fig. 120 Removed plaza beds



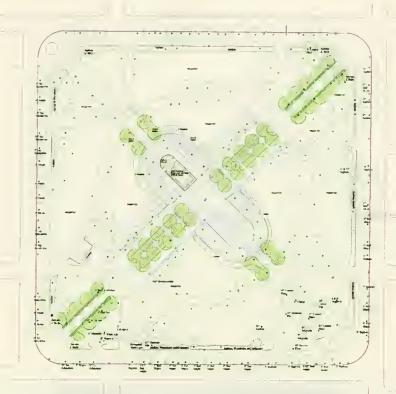


Fig. 121 Composite plan including project recommendations

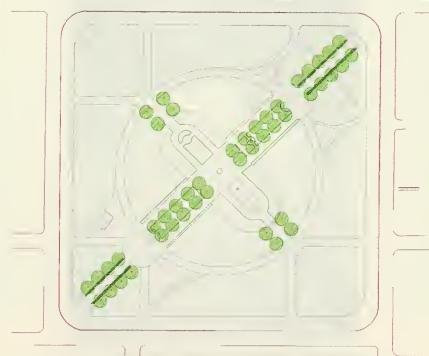


Fig. 122 Addition of plane tree allees along diagonal axis



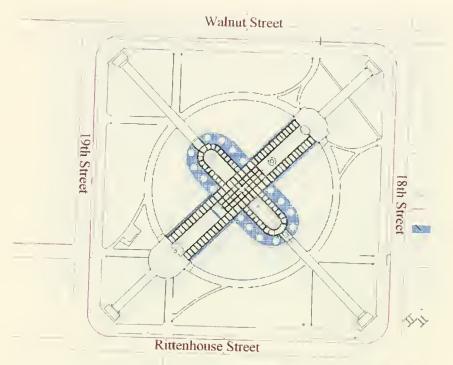


Fig. 123 Patton paving plan

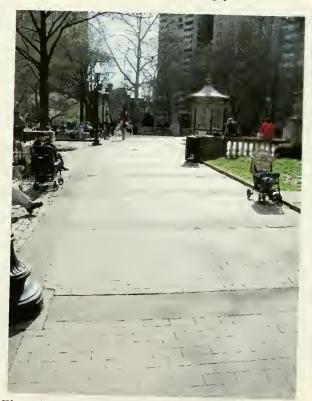


Fig. 124 Banding pattern along the promenade.





Fig. 125 Proposed surface continuity of altered features

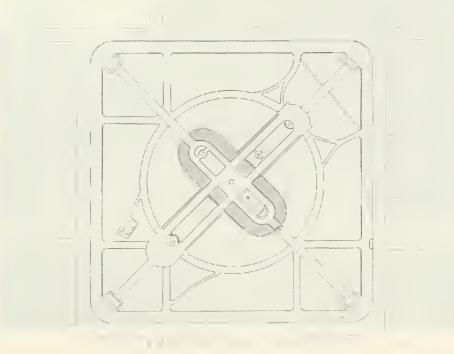


Fig. 126 Restoration of gravel beds



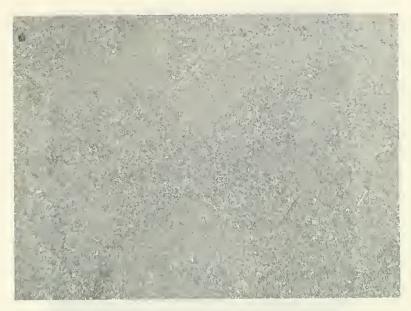


Fig. 127 Traprock screening paving surface



Fig. 128 Metrotech plaza, Brooklyn, NY





Fig. 129 Asphalt path on northeast corner of square.

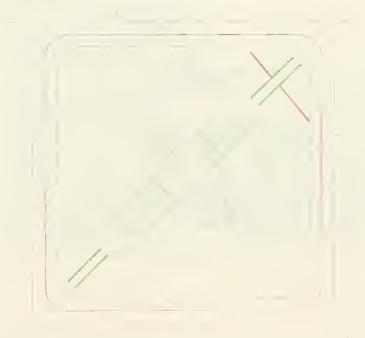


Fig. 130 Plan indicating asphalt path and proposed hedges.



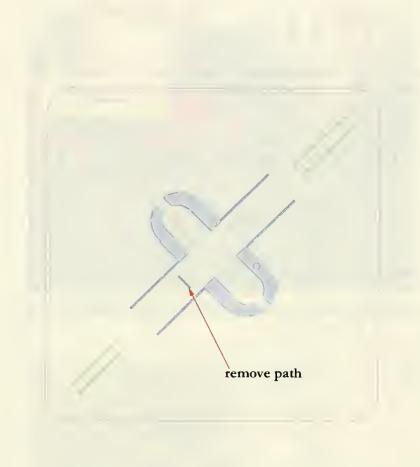


Fig. 131 granite path removal





Fig. 132 vehicle installing holiday decorations-planting damage



Fig. 133 vehicle installing holiday decorations-soil compaction





Fig. 134 position of gazebo



BIBLIOGRAPHY

- Adams, Rayne. "Paul Philippe Cret," Architecture, Vol. 63, 1931, 263-268.
- Allen, George N. "The little master of the arts, Paul Philippe Cret of Philadelphia, of Pennsylvania, and of the world at large," <u>Architectural Forum</u>, April 1931, 483-484.
- Allen, J. H. Dulles. "Correspondence with Paul Philippe Cret, 1917-1929," Paul Philippe Cret Papers, 1865-1976, Rare Book & Ms Library Manuscripts, University of Pennsylvania, Philadelphia.
- Alphand, Adolphe. <u>Les Promenades de Paris.</u> Princeton: Princeton Architectural Press, 1984.
- "American Beaux-Arts Architecture 1870-1940," <u>Architectural Forum</u>, November 1983, 4-64.
- Art Commission Records. "Plans for the Improvements to Rittenhouse Square," Submission No. 88, Philadelphia, 1913.
- Aspinwall, Marguerite. <u>A Hundred Years in His House: The Story of the Church of the Holy Trinity on Rittenhouse Square, Philadelphia, 1857-1957.</u> Philadelphia: Holy Trinity, 1956.
- Barr, Jeffrey. Philadelphia Historical Commission, Interview by Eric Baratta, Jeff Barr, October 23, 2001.
- Burke, Bobby, ed. <u>Historic Rittenhouse</u>, <u>A Philadelphia Neighborhood</u>. Philadelphia: University of Pennsylvania Press, 1982.
- City Of Philadelphia. "Annual Report of the Director of the Department of Public Works and of the Chief of the Bureau of Surveys," Philadelphia: Dunlap Printing Co., 1912.

	"Annual Report of the Department of Public Works," Philadelphia:
Dunlap Pri	nting Co., 1913.
	"Philadelphia," Volume I, No. 1. Philadelphia: City Government,
1909.	
	Philadelphia, Volume II, No.1. Philadelphia: City Government,
1910.	
	. Philadelphia, Volume IV, No. 1. Philadelphia: City Government,



- City of Philadelphia. City Archives Collection. Philadelphia.
- City of Philadelphia Art Jury. "Annual Report," Volumes 1-XXXV. Philadelphia: City Government, 1913-1935.
- City Parks Association of Philadelphia. "Report," Philadelphia: City Government, 1 September 1913. . "Report on City Planning," Philadelphia: City Government, 1 September 1911. . "Special Report on the City Plan," Philadelphia: City Government, 15 April 1902. . "Report," Philadelphia: City Government, 1927-1928. . "Report," Philadelphia: City Government, 1 September 1914. Cohen, Charles. Rittenhouse Square, Past and Present. Philadelphia: Private Publisher. 1922. Commissioners of Fairmount Park. "Eighty Fourth Annual Report," Philadelphia: City of Philadelphia, 1951. Craighead, Stephanie. Director of Planning, Fairmount Park Commission, Interviewed by Eric Baratta, December 3, 2002. Cret. Paul Philippe. "A Comparative Study of Sevres Methods," The Craftsman, October, 1904. . "Architecture of the Future," Essay, 28 November 1930. Cret Papers, Van Pelt Library, University of Pennsylvania: Philadelphia. . "Art Commissions in the Brave New World," Journal of the American Institute of Architects, April 1945. . Correspondence with Edgar Fahs Smith, 1915-1916, Edgar Fahs Smith Papers, ca. 1870-1940. Rare Book and Manuscripts Library, University of Pennsylvania: Philadelphia. . "Design" The Book of the School (of Architecture). University of

Pennsylvania Press: Philadelphia, 1934.



. "How I Spend My Day Off" The Federal Architect, Final Number,		
1946.		
. Papers, 1865-1976. Rare Book and Manuscripts Library, University of Pennsylvania: Philadelphia.		
. "Ten Years of Modernism," The Architectural Forum, August 1933.		
. "The Classic versus the Modernist," <u>Beaux-Arts Architect</u> , Yearbook, 1934.		
. "Truth and Tradition," The Architectural Record, February 1909.		
Cret, Paul P. and Harry Sternfeld. "Report on Improvement of City Hall Square- Philadelphia, Pennsylvania," Cret Papers, Van Pelt Library, University of Pennsylvania: Philadelphia.		
Fairmount Park Historical Commission. Archive Collection, Philadelphia.		
Finkel, Kenneth. Nineteenth Century Photography in Philadelphia: 250 Historic Prints from the Library Company of Philadelphia. New York: 1980.		
French, Jere Stuart. <u>Urban Space: A Brief History of the City Square.</u> Second Edition. Dubuque: Kendall/Hunt Publishing Company, 1983.		
Free Library of Philadelphia. Print and Picture Collection, Philadelphia.		
Free Library of Philadelphia. Map Collection, Philadelphia.		
Gilchrist, Agnes Addison. "The Classic Essence of Paul Cret," Charette, January 1964.		
Cill 44 Hannel and William Cutlar, The Divided Metropolicy Social and Spatial		

Gillette, Howard and William Cutler. <u>The Divided Metropolis: Social and Spatial Dimensions of Philadelphia</u>, 1800-1975. Westport: Private Publisher, 1980.

Grumbach, Antoine. "The Promenades of Paris," Oppositions, Spring, 1977.

Hannah, Robert. Landscape Architect, Interviewed by Eric Baratta, February 26, 2002.

Harbeson, John. <u>The Study of Architectural Design.</u> New York: The Pencil Points Press, 1927.

Henard, Robert. Les Jardins et Les Squares. Paris: Libairie Renouard, 1911.



- Historical Society of Pennsylvania. Archive Collection, Philadelphia.
- Jacobs, Jane. <u>The Death and Life of Great American Cities</u>. New York: Vintage Books, 1961.
- Kimball, Fiske and others. "American Architecture," <u>The Architectural Record.</u> Vol. 65, 1929, 431-434.
- Lewis, Lawrence. <u>Land Titles in Philadelphia.</u> Philadelphia: Kay and Broth Publications, 1880.
- Looney, Robert F. Old Philadelphia in Early Photographs, 1839-1914. New York: Dover Publications, 1976.
- McMichael, Carol. <u>Paul Cret at Texas: Architectural Drawing and the Image of the University in the 1930s</u>. Austin: University of Texas at Austin Publications, 1983.
- Mease, James. <u>The Picture of Philadelphia</u>. Philadelphia: B. and T. Kite Publications, 1811.
- Meigs, Arthur I. "Paul Philippe Cret," T-Square Club Journal, May 1931, p. 8-12.
- Pennsylvania State College. School of Engineering, Correspondence from Paul Philippe Cret, 1943, University Park.
- Reps, John W. <u>The Making of Urban America</u>. A <u>History of City Planning in the United States</u>. Princeton: Princeton University Press, 1965.
- "Rittenhouse Bicentenary Celebration Number," <u>Pennsylvania Magazine of History and Biography</u>, 3 July 1932.
- Ried, Kenneth. "Paul Philippe Cret: Master of Design," Pencil Points, October 1938.
- Rivinus, Marion. <u>The Story of Rittenhouse Square</u>, 1682-1951. Philadelphia: Private Publisher, 1952.
- Ross, Janet. Long-time Resident Rittenhouse Apartment, Interview by Eric Baratta, October 15, 2001.
- Scharf, John Thomas and Wescott, Thompson. <u>History of Philadelphia</u>, 1609-1884. Philadelphia: L.H. Everts Publishers, 1884.
- Seymour, Jr., Whitney North, ed. <u>Small Urban Spaces</u>. <u>The Philosophy, Design, Sociology and Politics of Vest-Pocket Parks and Other Small Urban Open Spaces</u>.



- New York: New York University Press, 1969.
- Snyder, Martin P. <u>City of Independence: Views of Philadelphia before 1800</u>. New York: 1975.
- Stuhlman, Theresa. Historic Preservation Officer, Fairmount Park Commission, Interviewed by Eric Baratta, December 3, 2001.
- Tatum, George B. Penn's Great Town: 250 Years of Philadelphia Architecture Illustrated in Prints and Drawings. Philadelphia: University of Pennsylvania, 1961.
- Tavakolian, Abdolhosain. "Spaces for Human Communication: The Inner Life of Two Urban Plazas in Philadelphia, Rittenhouse and Washington squares." PhD Dissertation, Philadelphia: University of Pennsylvania, 1990.
- The Athenaeum. Paul P. Cret Collection, Philadelphia.
- University of Pennsylvania. The Architectural Archives Collection, Philadelphia.
- University of Pennsylvania. Rare Books and Manusrcipt Collection, Philadelphia.
- Van Zanten, David. <u>Designing Paris: The Architecture of Duban, Labrouste, Duc, and Vaudoyer</u>. Cambridge: MIT Press, 1987.
- Vincent, Marc. "Natura Non Facit Saltus": The Evolution of Paul Cret's Architectural Theory." PhD. Dissertation, Philadelphia: University of Pennsylvania, 1994.
- Weigley, Russell F. <u>Philadelphia: A 300-year History.</u> New York: Private Publisher, 1982.
- White, Theophilus Ballou. <u>Paul Philippe Cret, Architect and Teacher.</u> Philadelphia: Art Alliance Press, 1973
- Zucker, Paul. <u>Town and Square. From the Agora to the Village Green.</u> NewYork: Columbia University Press, 1959.



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