Control and Competition:
The Architecture of Boathouse Row

Twenty-first-century Philadelphians know Boathouse Row as the idiosyncratic collection of boathouses that dot the shoreline of the Schuylkill River (fig. 1). But the unique architectural character and definition of the row is no accident of history; rather, it is the result of one of the earliest attempts to exert municipal control over private structures, initiated in response to a confluence of cultural and historic trends sweeping through Philadelphia and parts of America in the late nineteenth century. This paper investigates how the architecture of Boathouse Row developed in three distinct phases: first, under city ordinances influenced by prominent individuals who oversaw the founding and growth of Fairmount Park; then, as an aesthetic competition developed between the boat clubs within the constraints determined by the city; and finally as municipal control over the design of the boathouses declined as the Fairmount Park Commission shifted its attention elsewhere and as prominent architects took the stage and a rise of architectural eclecticism led to a profusion of new styles.

The boathouses are located in Fairmount Park, founded in 1855. Though the city had acquired the land in 1844, it did not begin to exert municipal control over the site with its first ordinances until 1860. With the establishment of the Fairmount Park Commission in 1867, figures such as Frederic Graff Jr., chief engineer of the Fairmount Waterworks, and Hermann Schwarzmann, a park engineer and later designer of the...

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Centennial Exhibition, joined forces with city leaders to give authority to park rules that subsequently controlled the development of Boathouse Row.

The regulations pertaining specifically to Boathouse Row joined other rules governing the park that restricted commerce, encouraged leisure, and promoted standards of decorum. Because rowing was viewed as an appropriately rigorous activity for the emerging leisure class, the city allowed the private boathouses that existed before the founding of the park to remain. At the same time, since the rules that governed the clubs also reinforced or exceeded those for the park, their members served as visible examples of the social standards for park visitors to this section of the park. The clubs, which restricted use of the boathouses to club members, readily agreed to governance by the city because they wanted to remain on the Schuylkill, enhanced for rowing by the construction of a dam for the Fairmount Waterworks in 1821.

Despite these shared interests, city leaders, influenced by such architects as Andrew Jackson Downing and Samuel Sloan who had promoted the connection between architecture and morality in their popular architectural treatises, wanted to change the architecture of the boathouses to reflect the ideals of moral vigor embodied in the sport. To establish this architectural transformation, the city required existing clubs to demolish their boathouses and rebuild in an appropriate style. Due to the competitive nature of the clubs, these constraints did not produce a uniform set of boathouses, but rather each boat club balanced its desire for more intri-
cate irregular structures containing boat storage, dressing rooms, and porches with the Park Commission’s stipulations for specific material requirements and regulated spacing between the clubs.

Municipal control over the design of the boathouses began with the lavish development of the opposite bank of the park for the Centennial Exhibition of 1876 and the departure of the leading members of the Park Commission following the exhibition. This decline in municipal control coincided with an increasing desire for distinction by members of the individual boat clubs that led them to turn to such prominent architects as Frank Furness. Furness’s 1881 Undine Barge Club clearly superseded previous boathouses in its bold volumes while challenging to future boathouses with its combination of materials. Subsequent boathouses would meet this challenge with even newer forms rendered in brick or in newly popular eclectic styles that now went unchallenged by the Park Commission. Philadelphia’s boathouses are more than a mere architectural curiosity, but rather symbols in built form of late nineteenth-century Philadelphians attempting to distinguish themselves first collectively, and then individually, within a quickly transforming city.

A Place for Rowing: Fairmount Park and Its Waterworks

The growth of Philadelphia and the yellow fever epidemics in the 1790s and early 1800s forced the city to turn to the banks of the Schuylkill for a new location for a waterworks to provide potable water for the city. Frederick Graff, the chief superintendent of the Water Committee decided on a site just below Fairmount, a large hill on the outskirts of the city on the east bank of the river, where a pumping station could take advantage of the swift flowing river.¹ The new waterworks, designed by Graff in 1811, not only provided a new source of water for the city, it also set an aesthetic precedent that would guide the city as it approved designs for boathouses on the Schuylkill’s banks. Its functional residential design, its exposed random rubble walls, and its picturesque feel became defining characteristics of Boathouse Row until the 1880s.

Graff’s design for the Fairmount Waterworks closely followed the ideas established by his mentor and architect of the Centre Square Waterworks, Benjamin Henry Latrobe. Latrobe’s building masked its

pure utilitarian function and beautified the surrounding area. Graff proposed an engine house of cut bluestone in the form of a typical house of the time. The Water Committee rejected this idea in favor of a less expensive stuccoed house with Federal period detail, while retaining the idea of a functional residential structure along the banks of the Schuylkill. The redesigned house still disguised the engine mechanism. The back of the building, facing away from the river, was not stuccoed and revealed the underlying random rubble walls.

The Water Committee understood the potential for the structure to draw visitors to a new part of the city. And the public responded not only to the engineering genius of the machinery, but also to the picturesque setting and the recreational possibilities along the banks of the river. Frances Trollope, a visitor to the waterworks in 1830, captured the spirit of contemporary opinion of the facility, marveling at both the engineering and setting, and commenting on the number of people who visited the site, which, “interesting and curious as this machinery is, . . . would not be so attractive had it not something else to offer. It is, in truth, one of the very prettiest spots the eye can look upon. A broad wear [weir] is thrown across the Schuylkill, which produces the sound and look of a cascade.” The waterfall had been constructed in 1821 when the Fairmount Waterworks switched from a system driven by steam to one driven by waterwheels to pump water to the reservoir on Fairmount Hill. It was the constant shoreline created by the building of this dam that made possible the establishment of the boathouses. The potential of the site for rowing was foreseen by Thomas Oakes, who noted to the Water Committee in 1819 that the area behind the dam “would afford a spacious basin for boats.”

The Fairmount Waterworks experienced its golden age from 1830 to 1850, as both municipal control of the lands surrounding the waterworks and the popularity of rowing increased. Both factors contributed to the establishment of boathouses on the east bank of the Schuylkill above the Fairmount Waterworks. Leading the city in its fight to protect the water system of Philadelphia, Frederick Graff advocated further upriver land acquisition as a buffer against the ever-encroaching industry of the

2 Ibid., 9.
expanding city. Because of Graff’s encouragement, in 1844 the city decided to purchase the forty-five-acre Lemon Hill estate, situated near the forebay of the waterworks. The land helped protect the city’s water source, and its river shoreline became the site for the boathouses.

On September 15, 1851, a city ordinance made official the recreational use of the area by setting aside the Lemon Hill land in a trust for the citizens of the city and encouraging future city councils to protect the water source further with more land acquisitions. But it was not until 1856 that the city took such action, with the purchase of thirty-three acres contiguous to the Lemon Hill estate and the purchase of Sedgeley estate adjacent to these tracts in 1857. These acquisitions were facilitated by the consolidation of the disparate boroughs and townships surrounding the city in 1854, which brought the Schuylkill River within the city limits for several miles above the Fairmount Waterworks, and by the establishment of Fairmount Park in 1855. In addition, Frederic Graff Jr., who had taken over his father’s job as chief engineer of the Fairmount Waterworks in 1847, strongly advocated for additional land acquisitions. These additional parcels helped protect the upriver water source and made possible the development of a naturally landscaped public park.

Rowing Clubs: The Distinction of Middle-Class Leisure

Rowing gained in popularity during the mid-nineteenth century and set the stage for the construction of boathouses within the park. A period of club organization followed the first recorded rowing race in America, which occurred in New York in 1833. Mimicking the English system, where competition by professional oarsmen led to the establishment of college and private rowing clubs, the number of clubs greatly expanded during the subsequent years, especially in the 1850s. Early clubs dedicated themselves not so much to competition as to pleasure. Most activity in these clubs revolved around “co-educational boating parties” rather than racing. The boathouses served these clubs by offering practical shelter and a social gathering point.

The social origins of amateur rowers in America were different from

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7 Ibid., 359.
those in England, where an unwritten rule prevented mechanics, artisans, and laborers from becoming rowers. In *A Short History of American Rowing*, Thomas Mendenhall explains that many rowers combined their work ethic with a growing interest in leisure: “The American amateur was not seen as a gentleman whose independent income gave him the leisure to row for pleasure, but rather as a working man whose job or business would effectively prevent him from training as regularly or extensively as a professional.” Philadelphia’s new economic prosperity produced a substantial number of city dwellers with sufficient income and leisure time to row. Many of these workers engaged exclusively in mentally taxing indoor work, which led them to the outdoors and to physical activity for recreation and relaxation.

Rowing neatly fit the era’s fascination with technology and its newfound leisure. Journals and books from this period often equated rowers with machines, leading one author to compare a rower to a steam engine, as “the fire-grate and chimneys of the human engine must be kept clear and in perfect working order.” The new interest in rowing, which reflected the city’s development into the workshop of the world and its transforming work ethic, would bring participants and spectators to the new boathouses in Fairmount Park. Both the Victorian emphasis on team over individual sports and the frequent association in art and sermons of the boat with the “voyage of life” also contributed to the sport’s popularity.

The early history of the Undine Barge Club provides insight into the construction of these early structures. The club was founded in May 1856 when George Heberton organized a group of men into an association whose purpose, according to a 1925 history of the club, “would be healthful exercise, relaxation from business, friendly intercourse and pleasure, having in view to this end the possession of a pleasure barge on the River Schuylkill.” The club’s first act was to acquire a site for the boathouse that was approximately where the present-day Bachelors Barge Club stands,

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11 Martin A. Berger, *Man Made: Thomas Eakins and the Construction of Gilded Age Manhood* (Berkeley, 2000), 43. See also Daniel T. Rogers, *The Work Ethic in Industrial America, 1850–1920* (Chicago, 1978), 102–7, on America’s shift from a country that was solely intoxicated with work to one that encouraged active leisure.
which they rented for twenty-five dollars a year. On this land, Undine erected a very basic boathouse that was fifty feet long by eight feet wide and cost approximately one hundred dollars (fig. 2).  

Although the building was rudimentary, the club required that its members follow a strict set of rules. The boathouse was to be closed on Sundays, spirituous and malt liquors, as well as wine or cider were not to be consumed in the house or barge, and members who placed bets on the barge in competition with others would face a twenty-five-dollar fine. In general, rules that governed the clubs were stricter than those enacted to govern the park and thus club members set a level of decorum for all park visitors. 

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13 Louis Heiland, comp., *The Undine Barge Club of Philadelphia* (Philadelphia, 1925), 13. Heiland states that the rent was paid to William H. Kern. It is not clear why Kern had rights to rent this property that had recently become part of Fairmount Park. It appears that the city allowed existing systems of commerce and governance to continue until it was ready to exert full municipal control.

14 Ibid., 14–15.

15 The original park rules that were approved in 1868 provided eighteen broadly worded regulations with the intention of restricting commercial or social practices that might be detrimental to the maintenance of the park or to its enjoyment. These included restrictions on grazing animals, hunting,
In addition to instituting their own rules, the clubs formed the Schuylkill Navy in 1858 to oversee activities between the clubs. The navy’s main purpose was to regulate and supervise amateur rowing competitions on the river, but it also offered the city another level of regulation for this newly acquired part of the park. Sparsely settled and little policed, this section of the park could be dangerous. Transient men known as “Schuylkill Rangers” often attacked oarsmen who as a result traveled in bands for protection. The Schuylkill Navy thus served as an informal police force, overseeing the area surrounding the boathouses in addition to enforcing rowing regulations.

The city also subscribed to the idea that the buildings themselves could impose order. A. J. Downing’s popular The Architecture of Country Houses (1850) had made popular the idea that buildings could have a civilizing effect. “When smiling lawns and tasteful cottages begin to embellish a country,” Downing declared, “we know that order and culture are established.” Though Downing was discussing houses, his philosophy influenced the construction of similar structures. Rowing, too, Americans believed, where mental control could prevail in physical circumstances, could impose “moral” discipline. With these concerns and ideas in mind at the beginning of the 1860s, the city moved to establish control over the informal development of Boathouse Row in order to ensure the continued development and safety of the park.

In the 1860s, as the city’s population increased and the popularity of social clubs grew, the rowing clubs experienced a surge in membership. The expansion of rowing clubs and the Park Commission’s desire to unify the riverfront park with the waterworks fueled a need for more permanent boathouses. American urban historian Sam Bass Warner described this period in Philadelphia as an age of clubs and associations, as “the era of the urban parish church, the lodge, the benefit association, the social and athletic club, the political club, the fire company, and the gang. Over the

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17 Kelley, American Rowing, 56.
19 Johns, Thomas Eakins, 29.
whole range of sociability, from the parties of the wealthy to the meanest boy’s gang, Philadelphians sought a sense of social place and community in club life.” The Park Commission responded to this desire for “social place” around the boathouses in 1859 with a plan that attempted to link the waterworks with the two recently purchased estates. The plan for the East Park by James Clark Sidney and Andrew Adams clearly showed the orderly placement of a group of boathouses (see cover). Controlled development of the boathouses that stood on this parcel of land offered the city a chance to provide stability in built form during an era of rapidly shifting class divisions and growing distinction between the commercial and domestic realms.

Boathouse Location and Design: Early Efforts at City Control

Although the city had established Fairmount Park in 1855, it only began to exert control over the boathouse area in 1860. In an ordinance passed on January 9, 1860, the city allotted a specific parcel of land to the clubs, determined the style of the boathouses, and brought these clubs under the regulations governing the park. The city set aside a three-hundred-by-eighty-foot tract of land along the Schuylkill for up to three boathouses, the designs of which were to be subject to approval by the Committee on City Property. With a document specifying that only members of the Pacific Club and the Schuylkill Navy could construct houses, the city shrewdly extended its absolute control over an already established organization and any future boathouses without undermining the Schuylkill Navy’s efforts at oversight of the clubs. This ordinance also made clear that the boathouses and clubs would be under the control of the city and established the fundamental ideas that the Fairmount Park Commission would later follow.22

The Pacific Rowing Club, the Quaker City Rowing Club, and the Philadelphia Skaters’ Club constructed boathouses under this ordinance, adding their structures to three existing rudimentary brick houses built in

22 Ordinances and Joint Resolutions of the Select and Common Councils of the Consolidated City of Philadelphia, as Passed by Them and Approved by the Mayor, From January First to December Thirty-First, 1860 (Philadelphia, 1860), 1.
An August 1, 1868, entry in the minutes of the Board of Commissioners of the Fairmount Park Commission describes the position of the standing boathouses. The Malta and Ione barge clubs shared a "small brick structure," as did the Philadelphia and Washington barge clubs. The third brick boathouse belonged to the Pennsylvania Barge Club, which would "erect an ornamental stone house once work on the river wall begins." Board of Commissioners, Minutes, Aug. 1, 1868, Fairmount Park Commission Records, Philadelphia City Archives.

Ordinances and Joint Resolutions, 1860, 24–25.
The Skaters’ Club immediately chose an architect and began construction of the building, and at a club meeting on September 26, 1860, agreed that the cost of the house would not exceed three thousand dollars. While an early history of the club flatly states that James C. Sidney was the architect, other club documents refer to both Sidney and William S. Andrews as “the architect.” Susan Anderson conjectures that Sidney, who had completed the 1859 plan for the East Park, was probably responsible for the boathouse plans, while Andrews completed the details and supervised the construction.25

Though the coming of the Civil War prevented the complete implementation of the Sidney & Adams plan, Sidney was the first of several influential individuals who steered a plan of controlled development of the boathouses. Several entries in the Skaters’ Club log book reveal Sidney’s involvement in helping choose a site for the club, culminating in a meeting recorded on March 27, 1860, at which Sidney was present and a plan and site were approved.26 Sidney functioned as a proxy for city control and probably practiced this same type of control over the other new structures, setting a precedent that the Fairmount Park Commission would follow.

With Sidney’s approval, the Skaters’ Club’s building, designed in the Italianate style, was soon constructed on the east bank of the Schuylkill River, the Italianate style representing one of the many eclectic European-influenced styles popular at the time. Samuel Sloan, in his widely read Model Architecture (1852), noted that Italianate style was appropriate for a site “not in the depths of the forest, but near some frequented highway within a few miles of the city.”27 The building of irregularly cut greystone had a semioctagonal east facade interrupted by an elevated entrance flanked by windows. This entry layout, combined with a rectangular west (river) facade featuring a boat bay partially covered by a porch, gave the entire structure a pleasant picturesque effect. The club had two stories and a central wooden cupola protruding above. The first floor was divided into three rooms, with the porch extending outside for river vistas. The rough stone reception room over the boat bay and porch facing the river became fundamental elements in later boathouses.

27 Ibid., 5.
The Quaker City Barge Club, which is today a part of the Fairmount Rowing Association, incorporated these three elements in its simple structure of the same year. This one-bay, one-story building stood in a low profile to the surrounding landscape. East side-entry stairs led to the elevated door of the dressing room, which extended over the boat bay approximately half the length of the building. The other half of this floor was dedicated to a porch facing the river. Thus, this very simple building provided the basic needs of a dressing/reception room and a vista from which to enjoy the surrounding landscape. The Quaker City boathouse established a prototype for structures to follow: a random rubble building engaged with the landscape, constructed in a picturesque manner while serving the needs of the club for both sport and leisure. These two boathouses endured the changes introduced by later structures (which expanded on these fundamental characteristics) and established the protocol for construction between the boat clubs and the city.

On March 26, 1867, Pennsylvania’s General Assembly passed an act that established the borders of Fairmount Park and called for the creation of the Park Commission comprised of the mayor of Philadelphia, the presidents of the select and common councils, the commissioner of city property, the chief engineer of the waterworks, and ten Philadelphia residents appointed for five-year terms. The inclusion of the chief engineer of the waterworks signaled a continuity of municipal control that had begun with the waterworks’ construction.

Frederic Graff Jr., who continued the push for protection of Philadelphia’s water supply, became the leader of a five-member subcommittee known as the Committee on Plans and Improvements, which had jurisdiction over the area that included Boathouse Row. In May 1867 the full commission stated the functions of this subcommittee, charging it with presenting plans for “embellishing and improvement of the Park” and setting specifications for both landscape and architectural design proposals, while “having a careful regard . . . to the preservation of the purity of the water supply of the city.” With the precedent established by the 1860 city ordinance, this committee would oversee any further construction or additions pertaining to the boathouses.

It is not surprising that Frederic Graff Jr. would be one of the five

29 Board of Commissioners, Minutes, May 28, 1867, Rules for the Government of the Commissioners of Fairmount Park, Fairmount Park Commission Records.
members of the first Committee on Plans and Improvements. Even though he focused his activities on protecting the city’s water source with additional land purchases, he hoped to embellish the park at the same time. Graff designed additional buildings in the area of the boathouses, including some rustic summer houses installed during the rehabilitation of the waterworks’ garden in 1866. Under the direction of the committee, future boathouses would be required to beautify the park while facilitating a sport of low environmental impact. Maintaining the picturesque character of the boathouses would be a chief activity of this committee during its early years.

Most of the other members of the committee came from prominent backgrounds and shared an interest in architecture, though no one else had Graff’s intimate knowledge of the park and its structures. General George Meade, a Civil War hero, joined the committee in its first year. His social prominence and ability to develop and execute plans aided the acceptance of the committee’s proposals. Two other members, N. B. Browne and Joseph Harrison, had commissioned buildings throughout the city, often using Samuel Sloan as their architect. The initial chairman of the committee, Theodore Cuyler, had fought many aesthetic battles in the city, having been involved with both the location of city hall and the construction of the Academy of Music in 1854. John Welsh, a commission merchant and civic leader, served on the committee from 1868 until he was chosen to preside over the planned development of the 1876 Centennial Exhibition.30

Graff imparted his architectural vision to this committee of powerful men who already supported municipal control, often co-signing recommendations sent to the larger Park Commission. In return, the members of the commission took seriously their work of governing an important part of the social life of the city. In the early years of the commission meetings occurred every six to ten days and absences were rare.31 The first goal of the commission was to develop ordinances governing the park, including the boathouses. By lending his knowledge of the prior development of the park, Graff shaped the commission’s efforts towards municipal control.

The Committee on Plans and Improvements passed its first major

resolution concerning the boathouses in October 1867. This act was an attempt to eliminate the boathouses not covered by the 1860 ordinance, and in doing so allow the construction of committee-approved buildings. The resolution called “the attention of the Committee to the propriety of notifying at once those Clubs whose houses are constructed without regard to architectural adornment, that they must at an early day replace their buildings with such structures as may be acceptable in design to the Park Commission,” naming June 1, 1868, as a deadline for removal of the old structures and completion of new ones. The committee also recommended that new sites be granted to clubs required to build new boathouses “as marked upon the annexed traced map,” leaving “a length of 370 feet of river slope between the Skating Club and the first Barge Club Houses . . . open for the enjoyment of the public.” The map cited remains lost to this day, though it was probably created from a survey by Samuel Smedely executed during the first few years of the Park Commission. An earlier September 7, 1867, entry in the Park Commission’s minutes had described a comprehensive plan “of that portion of the Park from Turtle Rock to the wheel-house exhibiting the location of the boat houses and surroundings on a larger scale” that had been prepared for the commission. 32 Although the October resolution was specific about the location of the boathouses, it did not specify a particular style or type of material for construction, allowing these issues to be settled by committee consensus for each specific boathouse.

This survey and the committee’s resolution suggest a continuous string of lots marked from the Quaker City boathouse to a point 370 feet from the Skaters’ house, similar to Sidney’s 1859 plan for the park. Each house would receive individual consideration as to its plans, but a relationship would be established between the architectural elements and the spacing among the group of boathouses. With the passage of this resolution, Boathouse Row officially became a unified development.

The approval process for the Pennsylvania Boat House Association’s boathouse in 1868 and the constructed elements of the Crescent Rowing Club’s boathouse of the same year shed light on the relationships between the clubs and the city and between the clubs themselves. The Board of Commissioners’ minutes of February 1, 1868, record the Pennsylvania Boat House Association’s request to build “an ornamental stone house . . . to

32 Board of Commissioners, Minutes, Sept. 7, 1867, and Oct. 15, 1867, Fairmount Park Commission Records.
be used exclusively for boating purposes” and for a suitable lot, preferably “a site nearest the stone houses occupied by the Pacific and Quaker City Clubs.” Explaining that they “at present occup[ied] the first brick house on the river,” they “propose[d] erecting something entirely new and different,” which, being “very ornamental,” they hoped would meet with committee approval.33 The club emphasized the point that the house would be of stone and ornament, two criteria the city would demand until the end of the 1870s.

Approval came quickly, though the Park Commission required modification of the placement and plan of the house to fit its concept of the completed development of the area. Highlighting the importance of the placement of the boathouse relative to others already constructed, the commission required that “the house be located with its centre line half way between the Pacific and Bachelors Barge Club Houses, with front wall 20 feet back of a line drawn from the upper front corner of the Pacific to the lower front corner of the Bachelor’s Club house, with line of house parallel with said Bachelor’s Barge Club House.”34 Thus the commission established a progression of buildings beginning at the northern end of the row of boathouses where the Quaker City and Pacific Clubs lay and extending south in an orderly fashion on plots of regularly spaced land. By so spacing the boathouses, the commission not only allowed for future expansion but established a regular relationship between the buildings that would contrast with the irregular elements of the individual structures—illustrating the nineteenth-century ideal of the balance of individualism and the common good (fig. 4).

The Crescent Boat Club also constructed a boathouse in 1868 that maintained the elements of the stone houses built following the 1860 ordinance. But this boathouse also signaled a new desire to supersede previous structures in beauty and utility. The complexity of subsequent boathouses would grow as other clubs also sought to set themselves apart. The building’s style closely resembled that of the nearby Quaker City Boat Club, as it maintained a low profile supported by walls of random rubble. Brick accented the openings on the east elevation with thick arches above the elevated door and front window. These opened into a small dressing room connected to a porch, with the fifteen-by-forty-foot boat bay lying beneath these areas. The entrance to the club, similar to the

33 Board of Commissioners, Minutes, Feb. 1, 1868, Fairmount Park Commission Records.
34 Board of Commissioners, Minutes, Mar. 7, 1868, Fairmount Park Commission Records.
Quaker City boathouse, opened at the level of the dressing room. The door was placed slightly off-center from the midline of the building. This small detail announced the beginning of a competition between these clubs, each of which attempted, within the Park Commission’s regulations, to make its boathouse more picturesque and more beautiful in its irregularity.

No record exists naming an architect for this structure, as with the Quaker City boathouse, but one possibility is the active club member Charles D. Supplee, who was an engineer for the Philadelphia Railroad and a builder in his own right. Supplee’s son, who joined him in his building firm, completed the plans for the first addition to the Crescent Rowing Club in 1873. This firm achieved a reputation for low-cost housing designs, which might have appealed to a club struggling to fund a boathouse.35 The simplicity of these early structures did not warrant hiring a

great architect, though this would change as the boathouses became more complex.

The Park Commission formalized its control of the development of Boathouse Row when on April 14, 1868, it adopted the “Powers and Duties of the Park Commission.” Of the fourteen powers vested in the commission, one dealt specifically with structures within the park and thus the governance of the boathouses:

All houses and buildings now built, or to be built, on any part of the park grounds, by or for boat or skating clubs, or zoological or other purposes, shall be taken to have rights subordinate to the public purposes intended to be subserved by acquiring and laying out the park, and shall be subject to the regulations of said park commissioners, under licenses which shall be approved by the commission, and signed by the president and secretary, and will subject them to their supervision and to removal, or surrender to the city, whencesoever the said commissioners may require.36

The explicit language of this ordinance asserting the absolute power of the commission may explain why there is no evidence that any club ever challenged a decision of the Park Commission. In the following decade the Park Commission would use this ordinance as a starting point for further control of the design and placement of future clubs along Boathouse Row.

The Centennial and Continued Control

At the beginning of the 1870s, the Park Commission began to organize the 1876 Centennial Exhibition. Soon after Congress approved Philadelphia as the site in 1873, the Park Commission appointed assistant engineer H. J. Schwarzmann as chief architect of the exhibition. Schwarzmann had been originally hired in 1868 as one of two assistant engineers for the park, and he impressed his superiors with a plan for the old section of the park that seemed superior to that put forth by Frederick Law Olmsted.37 Schwarzmann continued to influence the Park Commission with his European-inspired ideas for complete plans for development of certain portions of the park. His design in 1872 for the

36 Brightly, Digest of the Laws and Ordinances, 500–501.
37 Olmsted’s plan and Robert Morris Copeland’s plans are discussed thoroughly in the minutes of the Board of Commissioners, Jan. 4, 1868, Fairmount Park Commission Records.
thirty-five-acre zoo, located in the west section of the park, included a thoughtful, comprehensive design for the entire area. Many of the animal houses and pavilions resembled the boathouses in their picturesque combinations of stone and wood.38

These two initial successes allowed Schwarzmann to garner approval for his plans for the 1876 Centennial Exhibition’s grounds and buildings. Although the main pavilion area was dominated by Beaux-Arts structures, he merged the axiality of this section with meandering paths to outer pavilions closer to the periphery of the 450-acre site.39 Schwarzmann’s pragmatic plans reinforced the overriding theme of development for the Fairmount Waterworks and the boathouses; that thorough planning could create a unified picturesque effect even among buildings of different styles.

During the period of Centennial influence, the College Boat Club’s house of 1874 and the West Philadelphia boathouse of 1878 present two good examples of how the Park Commission exerted control over the construction of the boathouses. The process of construction began with petitioning for a site and creation of plans, all requiring the approval of the Park Commission. The series of spaces allotted for the construction of boathouses under the 1867 Park Commission resolution were almost completely occupied as the College Boat Club began construction. On March 14, 1874, the Park Commission noted that the College boathouse was “located as to leave room for one more between it and the Skating Club house, the filling of which [would] complete the series of eight structures and thus fill up symmetrically all the space allotted for this purpose.”40 The addition of the College Boat Club’s house increased the picturesque effect of the group by creating a symmetry that contrasted with the irregular design of the structures.

The two-story brownstone College boathouse maintained the basic elements of the prior structures with its stone construction, sloped roof,
riverside porch, and reception room above a single boat bay (fig. 5). But in hopes of creating a more beautiful structure, these features were modified. Entering the boathouse, visitors arrived not in the reception room, but into the ground-level boat bay, setting the upstairs off from the storage space below as a more separate and exclusive space than in earlier boathouses. The upper rooms were decorated with carved wooden beams, an influence of the Eastlake style, which was growing in popularity at the time. A large central gable framing three Palladian-styled windows flanked by two smaller gables framing single windows accented the exterior sides of the second level of the boathouse above a similar rhythm of windows on the ground level. Wooden accents, such as the gables finished in frame rather than stone, were introduced on this mainly stone building.

The College Boat Club deliberately designed its boathouse as an improvement over the Quaker City and Crescent structures in terms of function and style. An article in the 1876 edition of the University Magazine revealed this competitive purpose: “The house is all that could be desired by the most exacting, containing all the conveniences and appliances necessary for a complete boat house, and for the comfort of the members. It has the largest boat room on the river and surpasses in its
conveniences many of the houses, while in beauty of finish and symmetry of form it is unsurpassed.” The competition to outdo prior boathouses that had begun when the Crescent club introduced the off-center door now expanded into the realm of plan and size.

The Park Commission’s requirements for the West Philadelphia Boat Club shed additional light on the evolving relationship between the clubs and the commission. The West Philadelphia club first expressed its desire to build a boathouse in its February 21, 1877, minutes. When, in the fall of that year the club proposed a plan to the Park Commission, the commission again emphasized the importance of spacing, stipulating that the club could erect a boathouse “between the Skating Club House and the Boat house south of it, at a distance of 40 feet from either house, which will leave a sufficient space for the accommodation of another Boat-Club.” The Park Commission remained committed to the idea that the boathouses should function as a group through development that allowed each building its own expression within the larger ensemble.

With a similar intention, the Park Commission dictated the building material of the West Philadelphia boathouse. In a letter dated September 27, 1877, the West Philadelphia club requested “permission to erect an ornamental Brick Boat House.” The Park Commission had required stone construction since the introduction of the 1860 ordinance, and it did not change this policy for the West Philadelphia club. On November 10, 1877, the commission recommended approval of the West Philadelphia club’s plan “with the substitution of stone for brick.” The stone wall envelope remained a stable element that tied together the evolving individual expression that was developing throughout the total group of buildings.

The West Philadelphia boathouse revealed the influence of Queen Anne elements and a new irregularity in plan. The predominately brownstone structure was comprised of two main parts: a one-and-a-half-story structure perpendicular to the river on the east side connected to a two-story west section running parallel to the river with the opening of the boat bay and a covered porch. The east facade was somewhat similar to

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41 *University Magazine* 2 (May 1876): 76.
42 West Philadelphia Boat Club, Minutes, Feb. 21, 1877, Independence Seaport Museum, Philadelphia; Board of Commissioners, Minutes, Nov. 10, 1877, 385, Fairmount Park Commission Records.
43 Board of Commissioners, Minutes, 1877, appendix 76 and Oct. 13, 1877, Nov. 10, 1877, Fairmount Park Commission Records.
that of its preceding neighbor, the College Boat Club, with its ground-level door flanked by two windows, though in this case stone lintels above and below accented the window openings. Bay windows pierced the stone facade under the gabled roof on either side of the second story of the eastern section of the boathouse. The design of the roof, as in the College boathouse, highlighted the second-story openings.

The riverward portion of this boathouse employed the roof to accent its main feature, the covered porch. This first appearance of a covered porch symbolized a social change as much as an architectural one. The clubs were trying to become more distinctive amid the jumble of many social clubs. Allowing a member to look out without being looked upon gave the club a certain mysteriousness, an effect of distinction through the unknown. The architecture of the West Philadelphia boathouse achieved this effect with a steep roof covering a porch that extended from each side of the boathouse, offering views of other structures along the row. Cantilevering the porch further than the underlying boat bay with large curved beams created a dramatic effect.

The ground floor also presented an irregularity with its off-center boat bay, equivalent to the off-center entrance of the Crescent boathouse a decade earlier. The northern side of the boathouse introduced the first fully wooden-clad element: a square gabled second-story room cantilevered over the connecting portion of the boathouse between the western and eastern halves. This structure revolutionized the plan of the boathouse as it assumed space outside of the strict confines of the rectangular building. The Queen Anne elements combined with the previous characteristics of the stone structures to create a uniquely picturesque effect, challenging future boathouses to seek a new means of expression.

The Rise of Undine and the Decline of Control

The final period of the development of Boathouse Row was characterized by the waning of municipal control and by the greater influence of prominent architects with their distinctive styles. Although the clubs still sought approval on the sites for their structures, the Park Commission no longer objected either to the use of new materials or to deviation from a picturesque style. A combination of events led to these changes and to the new character of future boathouses. The depressed economy of the late 1870s limited funding, influential figures who had overseen the controlled
development of the park left their positions of power, and Downing’s and Sloan’s theories of residential architecture grew outdated, clearing the way for competition from other architectural styles and architects. The boathouses constructed in this last great period of building, from the 1880s until the turn of the century, reflected these shifting forces and expressed new ideas concerning the boathouses’ envelope and materials. These new buildings valued the individual structure over its relationship to the other boathouses.

Following the Centennial and its wonderful display of technology, the novelty of the Fairmount Waterworks began to decline. The machines in the engine house appeared outdated in comparison to the marvels of the Centennial. This factor, combined with the Park Commission’s tight budget in the years following the Centennial and its attempt to maintain the popularity of the exhibition location, shifted the focus of the commission’s efforts from East Park to West Park.

Controlled development of the boathouse area also suffered from the loss of waterworks chief engineer Frederic Graff Jr. in 1872. Graff had attempted to revitalize the facility in 1866 when, after a thirteen-year absence, he again became the chief engineer. Immediately he embarked on an addition of new machinery into the old mill house that replaced the waterwheels with massive turbines similar to those that would be displayed at the Centennial Exhibition. Graff also endeavored to rehabilitate the surrounding garden area with a series of rustic summer houses with installed benches. His departure brought to a close over sixty years of control of the waterworks by his family. He and his father had consistently sought to develop the Fairmount Waterworks by combining building improvements with the beautification of the surrounding landscape. Future engineers would concentrate more on the development of the steam-powered pumps than on the integration of the building with its site.44

Another strong supporter of controlled development of the park, H. J. Schwarzmann, left for New York in 1878, compounding the loss of Graff. The impact of his departure on the planning of the park cannot be overemphasized, for, as John Maass stated so succinctly in his history of the Centennial, “In the ten years since Schwarzmann arrived as an unknown immigrant of 22, he had been chief designer of America’s largest park, he had laid out the first zoo in America, and he had built the

44 Gibson and Wolterstorff, Fairmount Waterworks, 36, 38.
greatest Exhibition in the world.”45 Schwarzmann had been the chief
avocate of the idea of enhancing the beauty of the park through the
placement of structures and paths within the preexisting landscape. A
similar principle had controlled the location and character of the boat-
houses and had been accepted due to Graff’s and Schwarzmann’s stature
and their ability to marshal the influence of other prominent men.

The departure of these two men coincided with a gradual shift in
residential architecture in the 1880s. Architectural journals of the late
1870s and early 1880s discussed the need not only to look at old styles,
but also to develop a distinctly American architecture. An editorial in the
1877 American Architect argued that “notwithstanding all our experi-
mental revivals of old styles, the principal element in modern work, in this
country especially, is modern, born of new materials and our new way of
using old materials, of our new methods of workmanship, and of our new
conditions of life.”46 This new attitude would influence the construction
of future boathouses. Competition by clubs to create more beautiful
buildings had increased their complexity, aligning them even more closely
to residential structures of the time and implying a relationship between
club life and family life, the center of Victorian culture. Strength in
rational mass and simplicity in form combined with a love of the vitality
of the surface to characterize the new boathouses of the last two decades
of the nineteenth century.

Taking advantage of the decline in municipal control and the shift in
architectural ideas, the clubs transformed the nature of the architectural
competition between them. The clubs hired well-known architects who
introduced architectural elements now seen in the city that surrounded
East Park. The clubs now sought not to have the most beautiful boat-
house of the group, but to have the boathouse. As with commercial buildings
in the city, a club’s prestige rested upon the prominence of its architect
and the architectural distinction of its boathouse.

This new attitude undermined the sense of unity among the boat-
houses and the control once exerted by the influential leaders of the Park
Commission. In its request to replace its single-room structure with a new
boathouse, the Undine Barge Club signaled its desire to exceed the efforts
of any previous club both in design and cost, telling the commission, “we

45 Maass, Glorious Enterprise, 135.
46 Quoted in Vincent J. Scully, The Shingle Style: Architectural Theory and Design from
Richardson to the Origins of Wright (New Haven, CT, 1955), 47.
are prepared to expend at least $8000 in the erection of a new house which in its convenience and adaptability to its purpose and in its architectural appearance will be far in advance of any house in the Park.” The Park Commission, however, was reluctant to allow any additional boathouses, and for this reason delayed approval until 1882. Following approval, Undine Barge Club initiated the break from the unified character of the row by choosing the prestigious firm of Furness and Evans to design its boathouse, at a cost of fourteen thousand dollars. Furness had already designed Undine’s upriver club, Castle Ringstetten, in 1875, creating a frame building surrounded by a large porch that conformed to the artistic character required by the Park Commission. While employing a stone surface, Furness constructed a new boathouse on the row that commanded the eye in its new combination of materials and forms. Furness and Evans utilized their prior experience of designing striking, yet functional, commercial buildings to give this boathouse a similar individual character.

Occupying the first floor, the boat room spanned the entire length and width of the building by using a tied truss system to support the second floor without interior columns. Three pairs of large sliding doors, two opening to the river side and one towards the park, combined with large side-wall lower-story windows, allowed the atmosphere of the river to enter this unimpeded space and even to flow through it to the east side of the building (fig. 6). Furness, thus, expanded the concept of the porch, which connected the building to the surrounding landscape, to the boat storage area.

The upper floor contained a large locker room and lounge divided for female and male visitors, with a covered porch extending towards the river. The dressing room contained wooden lockers and a centrally located log book for recording the day’s mileage. Four stained-glass windows gave

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48 Evans may have been particularly influential due to his athletic prowess. Michael J. Lewis, Frank Furness: Architecture and the Violent Mind (New York, 2001), 101.
49 Heiland’s history of the Undine Barge Club wonderfully describes not only the architecture but also many of the events that took place in the upriver club. Heiland, comp., Undine Barge Club, 44.
50 Tatman and Moss, Philadelphia Architects, 287–96.
51 Henry Pettit had designed the main exhibition hall of the Centennial and soon after joined Furness’s firm. He should be credited with the inverted truss that can also be seen in the National Bank of the Republic. Lewis, Frank Furness, 120.
this room a heightened elegance while denoting the sense of somber, almost religious devotion that the club’s members showed to the sport. A large side staircase flanked by windows, emphasized by the oversized features of the balustrade, connected these two levels. Furness removed the stairs from the boat bay, enclosing them in a large rounded tower capped by a cupola on the south side. Future boathouses would copy the idea of isolating the stairs.

The outside of the boathouse also displayed this strange balance between closed and open space. The front facade, facing away from the river, featured a protruding center section of green painted wood alternating in columns and horizontals. Furness designed a similar thrusting center section for the Provident Life and Trust Company Building of 1876. In comparison to the flat north side of the building, the south side revealed the curved cylinder for the interior stairwell and a recessed entrance. The passageway leading to this door was open, though covered by huge diagonal beams that support part of the cantilevered second story,
thereby monumentalizing the support system seen on the West Philadelphia Club boathouse.

The combination of simple geometric spaces allowed the structure to appear both solid and fluid. The rear elevation combined simple geometries of square openings for the boat bays and a rectangular covered porch topped by a triangular gabled story. The north side reflected a different combination of geometry, with a commanding chimney juxtaposed to small second-story wooden accents. Architectural historian James O’Gorman has called this single wall “one of the most memorable vignettes in nineteenth-century American architecture,” noting the composition of the plant-like chimney with the rubble wall and wooden balcony accented by double eaves gutters (fig. 7). Furness created a building that related to the riverfront atmosphere not through integration but by commanding and controlling it. The irregularity that seemed calming in the other buildings was transformed in Undine into an agitated Gothic conglomeration balanced by its clear geometric massing. The boathouse evoked the qualities of its athletes; a fundamental solidity binding the

pent-up energy displayed in its combination of tension and compression, presenting an architecture unlike that of earlier boathouses.

Clubs that constructed boathouses after Undine attempted to integrate its novel characteristics either by expanding the size of their structure or by deviating completely from the stone structures of the past. The Malta Rowing Club, which shared a double boathouse with the Vesper Rowing Club, sought to expand its building twice before the turn of the century. The original random rubble structure of 1872 had become too small for the club, which requested an expansion in 1881. Large front porches facing the park rather than the water formed the most prominent additions to the double boathouse other than the expanded boat bays. These porches functioned in a completely different way from those facing the river. They afforded views of the park to the club members and, conversely, allowed viewing of the club members by the other users of Fairmount Park, creating a sense of exclusiveness. The city had expanded to the edge of the park by this time so that distinction from the large number of visitors became as much an issue as distinction among the clubs.

Malta expanded its portion of the boathouse even further in 1901, after retaining the services of George and William Hewitt. Aspects of the enlargement followed the lead of Furness, with whom George Hewitt had once been a partner and in whose office William had worked. The Hewitts were loath to stray from the colors and curious elements of the High Victorian Gothic, and Furness’s influence was particularly evident in the addition of a protruding part of the structure on the south side that housed the entrance and the stairs to the upper floors. A cantilevered portion of the second story supported by massive diagonal beams over the pathway to this door functioned in much the same way as with the Undine boathouse.

But in many respects, the Hewitts’ design deviated from the Undine precedent. They chose simpler ways of capturing the viewers’ attention, such as increasing the total space of the structure rather than creating new spaces in distinct sections. The addition of a new third story made the neighboring Vesper clubhouse, which had once appeared symmetrical on its west elevation, appear shrunken in comparison. In the Victorian city height lent prestige, and the Hewitts understood that volume and verticality could be taken from the cityscape and introduced to Boathouse

53 William Hewitt was also a great athlete like Evans and reveled in the manly atmosphere of Furness’s atelier. Lewis, Frank Furness, 109, 61; Tatman and Moss, Philadelphia Architects, 367–77.
The clubs had long understood the principle of prestige in architecture, but now they looked towards the city’s architecture that stood nearby rather than to the country house to attain grand structures. This shift in architectural inspiration revealed a change in the attitude of the boat clubs that exacerbated the departure of the individuals on the Park Commission who had overseen Boathouse Row.

The Hewitts projected this new vision by combining many different types of materials to keep the eye interested and attracted to the building. Stone dominated the lower level, grounding the building in the landscape while also referencing the style of the earlier boathouses. Shingles and pebble-dashed stucco accented by copper formed the upper stories into a rhythmically patterned ornamented structure, where one space built on another, expanding upward and outward. If Furness’s structure attained its power through composition and dominating elements, then the Hewitts’ employed sheer size and a combination of various materials to create an imposing ornate building.

Continuing the movement towards individual rather than a collective expression, the Bachelors Barge Club received permission in 1893 to raze its brownstone boathouse and replace it with a two-story brick structure, ending the tradition of using stone as the predominant element in construction. The two-story freestanding building, designed by Edward Hazlehurst and Samuel Huckel Jr., earned distinction through its Mediterranean style (fig. 8). Red brick composed the first floor, with a pebble-dashed stucco covering the second story. The brick, approximately two inches in height and a foot long, was omnipresent in townhouses of this time and its use came as no surprise, as Hazlehurst and Huckel were active in this type of construction. By introducing this element of Philadelphia townhouse construction to Boathouse Row they further connected the boathouses to the city.

While disregarding the previous random rubble construction, the Bachelors Barge Club boathouse did hold onto the elements of irregularity and the prominence of captured vistas that were the hallmark of earlier structures. The ground floor contained a separate side-entrance door vestibule. As in other structures, this allowed the boat bays to remain unimpeded by the interior stairs while providing a pleasant irregularity on

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54 O’Gorman, Architecture of Frank Furness, 14.
55 Edward Hazlehurst had been a draftsman in Furness’s office. Lewis, Frank Furness, 166; Tatman and Moss, Philadelphia Architects, 350–56, 397–99.
the outside of the structure. Hazlehurst and Huckel advanced Furness’s idea by placing an octagonal pavilion on top of the entrance protrusion. Not only did this give the building an interesting profile, it also allowed for the introduction of small porches on the corners of the roof of the lower square level not covered by the octagonal upper structure.

Hazlehurst and Huckel may have been the most inventive in the transformation of the traditional upper porch areas, creating open and closed spaces of varying rhythms. The west porch rested on the lower bays, which opened to the river through two rounded brick arches. The porch led into two separate rooms, each entered by one of four arched doorways: a trophy room with a fireplace and a small banquet room. The arches united the two floors, yet created a distinct rhythm for each floor. The combination of the octagonal and square sections on the east facade continued a play of the symmetrical and the asymmetrical between the separate elements of the boathouse rather than between the boathouse and its surrounding structures.

Expanding the idea presented in the Vesper and Malta boathouse, Hazlehurst and Huckel also regarded the front porch as an important viewing area. Stretching the length of the second story, an arched canopy covered the porch on the front facade of the Bachelors boathouse. The
arcade, two arches deep and six wide, made the front porch into a space, not just in which to be seen, but in which to be framed by the architecture of the boathouse. The prominence of the club’s members was connected directly to the design of the club and its expanding places for public display.

Long thin bricks helped to give the building a planar quality, broken only by the accented elements. The lower square windows that flanked the main door of the boat bay had slightly raised frames, and a horizontal course of bricks lightly protruded on the surface just below the second story, helping to create the contrast of flat and textured. The upper arched windows where three layers of brick moved concentrically inwards towards the window illustrated the internal nature of contrasts within this building. Hazlehurst and Huckel’s self-referential boathouse no longer responded to the landscape or the symmetry of the boathouses as a group, but only to its own balance of the rhythmic and the irregular.

In 1904, the Fairmount Rowing Association designed the last boathouse, a very different type of brick structure from the Bachelors boathouse. Commanding the surrounding landscape with its large symmetrical structure, the imposing Fairmount boathouse, designed by Walter Smedley, abandoned the picturesque altogether. The original concept of the boathouse maintained the idea of the picturesque, as the original plans submitted described “a frame and stone house with two stories and a mansard roof.”56 These plans, however, were radically altered, as the final construction a year later reflected a Georgian style, completely ignoring the long-established use of stone. The reasons for this change remain a mystery, though Smedley was noted for use of the Colonial style in his residential construction.57 What the change does reveal is that concern for materials and style was no longer a focus of the Park Commission. Boathouse Row had taken on the eclectic nature of the city, where a building of one style could stand next to another of radically different style.

Ironically, the Fairmount boathouse was constructed almost contiguous to the Quaker City boathouse and thus the two ends of the architectural and chronological spectrum stand in direct juxtaposition. Stone, mansard roof, one bay with a single room above and a small porch described the Quaker City boathouse. The elevation of the building respected the sur-

56 Philadelphia Real Estate Record and Builder’s Guide 18 (Sept. 16, 1903).
57 Tatman and Moss, Philadelphia Architects, 735–37.
roundings, and the structure provided the minimum space necessary for the storage of boats and practice of the sport. The Fairmount boathouse, constructed in a distinctly American Georgian Revival style, introduced a design by a well-known architect unlike any other seen on Boathouse Row. Built with three porches, four boat bays, and almost three stories in height, the structure commanded space, and in this way represented the dominance of the Fairmount club, the most feared on the river prior to 1904. The rules of the municipally controlled architectural “competition” had been rewritten. The original goal of integrating individual boathouses into the row eventually gave way to building commanding, architecturally distinctive structures that reflected club members’ status. The architecture of the final phase of boathouse building referred more to the eclectic architecture of the surrounding city than to the country house, promoting choice rather than a unified style.

Boathouse Row’s architecture provides a built testament to the social evolution of the rowing clubs, which initially worked and competed within the constraints of city regulations, but eventually broke through those constraints in an effort to distinguish themselves from one another. Ironically, the city’s ordinances that inspired competition for architectural innovations between the clubs eventually led to the pursuit of eclectic designs when those very rules were no longer enforced. Rather than arresting the city’s volatile social forces in a single picturesque expression of built forms, Boathouse Row reflected the continually shifting balance between the city’s wishes and the aspirations of the clubs.

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