THE

WESTERN PENNSYLVANIA HISTORICAL MAGAZINE

/olume 62

October 1979

NUMBER 4

THE ANATOMY OF A STREETCAR SUBURB: A DEVELOPMENT HISTORY OF SHADYSIDE, 1852-1916

ROBERT J. JUCHA

BETWEEN the Civil War and World War I, the East End of Pittsburgh grew at a rate far exceeding all other sections of the city. In this period, the East End experienced a population increase from less than 8,000 to over 160,000.¹ To a large extent this great growth was attributable to the introduction in the mid-nineteenth century of the railroad and streetcar — hence the term streetcar suburbs.² This study examines the development history of one of these East End streetcar suburbs, the Shadyside district. The period covered begins with the rise of rail transportation and concludes when the automobile supplants it in the early twentieth century. Primary concern will be with the land-use patterns that occurred, and secondary emphasis will be on the kinds of persons attracted to the suburb.

1 These figures are approximations based on the combined population of

Robert J. Jucha is completing his dissertation in American Studies at George Washington University in Washington, D.C. His topic is the de-velopment and architectural history of the Shadyside district of Pittsburgh. Mr. Jucha is also teaching part-time in art history at the Pennsylvania State University's New Kensington Campus.—Editor

¹ These figures are approximations based on the combined population of Peebles, Collins, and Pitt townships in 1860 and the Seventh through Fifteenth wards in 1910. See, U.S., Eighth Census of the United States, 1860 (Washing-ton, D.C., 1864) and U.S., Bureau of the Census, Thirteenth Census of the United States, 1910 (Washington, D.C., 1913). 2 For a general overview of suburbanization in general and specific cities see: Kenneth T. Jackson, "The Crabgrass Frontier: 150 Years of Suburban Growth in America," in Raymond Mohl and James Richardson, eds., The Urban Experience (Belmont, Calif., 1973), 196-221; Joel A. Tarr, Transporta-tion Innovation and Changing Spatial Patterns in Pittsburgh, 1850-1934 (Chicago, 1978); Sam Bass Warner, Jr., Streetcar Suburbs: The Process of Growth in Boston, 1870-1900 (1962; reprint ed., New York, 1976).

Like many city neighborhoods, the Shadyside district does not have clearly defined boundaries. Its edges blend into the surrounding communities of Oakland, Bloomfield, Squirrel Hill, Point Breeze, and especially East Liberty. For the purposes of this study, the district (see map) will be bounded by Neville Street in the west, both sides of Fifth Avenue on the south as far as Mellon Park, which itself forms the eastern edge, and on the north by Centre Avenue to South Negley, thence along a ragged line of Ellsworth Avenue and Alder and Marchand streets.

Prior to the 1850s, Pittsburgh was a walking city.³ As the term implies, the major means of getting about the city was by foot. The city's dimensions were as large as a person could reasonably walk within an hour. Characteristic of the walking city was a homogeneous mixture of residences, businesses, and workshops in a confined area. Contributing to this admixture was the ever-present soot and dirt of a young industrial city. The volatile relationships among classes, nativeborn Americans, and recent ethnic immigrants, and tensions between Protestants and Catholics were all aspects of urban life. The middle and upper classes tended strongly to reside closest to the center of the city to be near their sources of power and influence --- the banks, schools, halls of government, and major churches. Still, because of the close confines of the walking city, the upper classes were never too far from the working-class and poorer residents of the city. They jostled daily with them at the market and on the streets. Workers lived in housing that was within easy walking distance from the wealthier neighborhoods. Tradition and, according to Joel Tarr, an essential lack of transportation kept the affluent in the center city.⁴

The pattern of downtown residence for the middle and upper classes began to break down with the introduction of the steampowered railroad. In late 1852, the Pennsylvania Railroad completed its east-west line across the state, although portions of the old Pennsylvania Canal remained in use. The railroad's passage through the East Liberty Valley opened that area to business and professional men in search of country quarters. By 1857, six commuter trains each day operated between East Liberty and downtown Pittsburgh.⁵ The railroad's own promotional literature noted in 1855 that "East Liberty is a thriving and rapidly increasing village. Many of the merchants of

³ Tarr, Transportation Innovation, 1-4.

⁴ Ibid., 4.

⁵ Ibid., 5.

MELLON and the second second DEWNISTON , EAST LIBERTY N. Bishop AVENUE SELLERS YAAHZ H SUNSVER I AIGHTVAD EWERSON AINOS EHI AVENUE TRASS SOLLEGE 000 DEN CENTRE LAA VALN DN Se 0 VERTER 3793N JAN f CLAYBOURNE NE ž ٨ 200 AVENUE FILBERT S BELLEFONTE FIFTH ALL THE S 00 F ALTSON VIKEN D JUNSUA St. JAMES ·1s BMA 5 WEST MIN STER ¢ PEMBROKE AVENUE 「おろう ILIS WORTH NOSSABMA ++++++++ AMBLERSON CASTLEMAN QOOM 380W AVENUE AVENCE DEVONSHIRE 0577 CENTRE WALLING FORD FIFTH 328283TI3 BAYARD 3TTIA AN :15

Shadyside

Pittsburg have elegant residences near this place." 6 Five years later, in 1860, the railroad completed a second East End commuter station about one mile west of East Liberty at the foot of Amberson Avenue.⁷ It was called Shadyside in honor of the Aiken family estate in the area. Before the decade was out, the line gained a third station at Roup Street (later South Negley Avenue).

The development of steam railroad service and the emergence of a new concept of land use occurred together in the second quarter of the nineteenth century. In the old walking city, strictly urban patterns had developed. The urbanite who fled the city for the countryside wanted to evoke as rural a quality about his new home as the suburban situation would permit. Romantic attitudes concerning nature flourished at this time and affected several phases of American life and thought, particularly philosophy, religion, and art. On a more practical plane, romanticism lay behind the encouragement of landscape gardening, which in turn spawned the city park movement and the romantic suburb.8 The aesthetic viewpoint involved with these movements can only be described as the picturesque. The ideal of the romantic suburb was most effectively advanced by the house-pattern book writers, especially Andrew Jackson Downing.9 Through their books of the 1840s, 1850s, and 1860s, a concise portrayal of suburban living emerged which included not only models for domestic architecture but information on furnishing, treatment of grounds, and practical hints on the latest and best means of construction. People like Downing, through their writings, fostered a strong argument for the domestic virtues of suburban living.

In Shadyside and East Liberty the pattern associated with the peripheral railroad suburb appeared. Houses clustered within a five to ten-minute walk of the station with the area between stations re-

⁶ A Guide for the Pennsylvania Railroad with an Extensive Map including

⁶ A Guide for the Pennsylvania Railroad with an Extensive Map including the Entire Route with its Windings, Objects of Interest, and Information Use-ful to the Traveler (Philadelphia, 1855), 34.
7 William B. Negley, "Excerpts from the History of the Shadyside Sabbath School — Read before the congregation, Sabbath Evening, April 28th, 1885," typescript in church archives, Shadyside Presbyterian Church, Pitts-burgh, 2.
8 For a general discussion of the entire movement see, James Early, Romanticism and American Architecture (New York, 1965).
9 See, Henry-Russell Hitchcock, American Architectural Books: A List of Books. Portfolios and Pambhlets on Architecture and Related Subjects Pub-

Books, Portfolios and Pamphlets on Architecture and Related Subjects Pub-lished Before 1895 (New York, 1976), for a complete list of pattern books. For a discussion of their social and moral impact see, Clifford E. Clark, Jr., "Domestic Architecture as an Index to Social History: The Romantic Revival and the Cult of Domesticity in America, 1840-1870," Journal of Interdisci-plinary History 7 (Summer 1976): 33-56.

maining rural. There was a mixture of large houses on the main roads leading to the station and smaller dwellings on the side roads. This juxtaposition can still be faintly seen in Shadyside in the vicinity of Shady Avenue and Sellers Lane. The larger homes consciously attempted to emulate country houses as befitted the picturesque principles on which they were based. One account of the Joseph Woodwell compound, a twenty-acre site at Walnut and Emerson streets, described the driveway approach to the main house as bounded by trees. On his property Woodwell constructed a lake, framed by trees and flowering plants.¹⁰

In the mid-1860s, the horse-drawn streetcar supplemented the service provided by the railroad. The Oakland Passenger Railway was the first streetcar company to run a line from Market Square downtown to East Liberty.¹¹ The route followed Fifth Avenue and used Shady and South Highland avenues to complete its East End loop. While it is impossible to determine precisely how many persons rode the entire route from Shadyside into the city, yearly ridership totals were enormous. In 1866, the Oakland Passenger Railway reported it had 716,482 passengers.¹² The streetcar increased population growth in Shadyside, drew the district closer to the city, and helped to make it a viable suburban locale.

Another event of the 1860s cemented the tie between the city and the new suburb. In 1867, Pittsburgh annexed the eastern boroughs and townships, including Peebles and Liberty townships, of which Shadyside was a part. While the vote in Shadyside and the rest of the eastern municipalities went against the consolidation, the city outvoted the suburbs.¹³ Annexation cost Shadyside and the rest of the East End its political autonomy but did not alter its rural-suburban character. If anything, annexation made Shadyside a more attractive locale, since city services would now be extended to the area. One direct benefit was the improvement and paving of suburban roads under the Penn Avenue Act of 1870.¹⁴ The city engineer in his annual report of 1875 commented that the act greatly increased the value of suburban properties: "Rural homes assumed an attractiveness to the eyes of many who had never before thought of going outside the old

¹⁰ Annie Clark Miller, Chronicles of Families, Houses and Estates of Pittsburgh and Its Environs (Pittsburgh, 1921), 99.

¹¹ On streetcar route information see, Pennsylvania, Annual Report of the Auditor General for the Rail Road and Canal Companies for Fiscal Year 1866 (Harrisburg, 1867), 419-22.

¹² Ibid.

¹³ Pittsburgh Gazette, Oct. 12, 1867.

¹⁴ City of Pittsburgh, Municipal Record, vol. 3, Apr. 14, 1870.

portion of the city. The paved roads provide easy and quick access to the 'Rural District,' where the enjoyment of the country could be combined with the conveniences of the city. . . ." 15

By 1870, a series of suburban settlements lay in a line extending eastward from the city. This suburban line began in Oakland, roughly two-and-a-half miles from downtown, and continued along the main routes of transportation to the village of Wilkinsburg, about six miles from the center city. Shadyside was in an extremely favorable position. Its flat terrain and excellent transportation service by railroad, streetcar, and improved thoroughfares pointed toward an active suburban growth in the last decades of the century.

Accompanying the arrival of the horsecar and post-Civil War prosperity was the earliest subdividing of the land in Shadyside. The subdivisions that were to be made in the twenty-year period after the Civil War were to have major influences on the kinds of housing and types of residents which were to occupy the district.

Closer scrutiny reveals that Shadyside's land use is not of a uniform pattern but is a series of three subpatterns or neighborhoods. The first of these three smaller areas is that which is bounded by Centre, Aiken, and Fifth avenues and Neville Street. Originally this land belonged to Jacob Castleman in the 1780s, and he called his estate Castlemania. In 1793, William Amberson and two partners operated an iron furnace on this estate, the first of its kind in the Pittsburgh vicinity. Because no iron ore deposits were ever located in the immediate area, the venture came to an abrupt end in 1794.¹⁶

By the second decade of the nineteenth century, the old Castlemania estate came into the possession of the Aiken family. David and George Aiken, brothers, arrived from Ireland in the years between 1810 and 1814. David married Rachel Castleman and so acquired the old estate, while George Aiken settled on a farm at Centre and Aiken avenues north of the present railroad tracks. The daughter of David Aiken married her cousin Thomas Aiken, the son of George Aiken, in the 1830s. Through this marriage, Thomas Aiken came to own all of the western portion of Shadyside south of the railroad line except for the western part of Wallingford and Bayard streets which belonged to the Craig family of Bellefield. There is no evidence to

¹⁵ City of Pittsburgh, Annual Report of the City Controller, Fiscal Year 1875 (Pittsburgh, 1876), 430.

¹⁶ For information on the Castleman estate see, Miller, Chronicles, 109. For the Shadyside Furnace see, Myron B. Sharp and William H. Thomas, A Guide to the Old Stone Blast Furnaces in Western Pennsylvania (Pittsburgh, 1966), 6.

suggest that Thomas Aiken ever farmed his land extensively. City directories listed his occupation as a carpenter or architect. Several old accounts credited him with building many of the old East Liberty area mansions.¹⁷

In 1854, Thomas Aiken divided the property with his twentyone-year-old son David, Jr. The father held the land between Amberson Avenue and Aiken Avenue, while the son took over the portion west of Amberson. The Aikens possibly began selling plots of their land as early as the late 1850s, but they certainly did so after the opening of the Shadyside Station in 1860. The oldest deed found dates to 1863 when John A. Renshaw, an Allegheny grocer, bought a large lot on the northeast corner of Amberson and Ellsworth avenues from Thomas Aiken for \$8,300.¹⁸ Beginning in 1865, the senior Aiken started the systematic sale of at least thirty lots in the block bounded by Aiken, Fifth, and Amberson avenues and Westminster Place. He also sold larger sized lots on his stretches of Ellsworth and Amberson avenues. David, Jr., sold fewer lots than his father, but those that he did sell were substantial in size and located mainly along Fifth and Ellsworth.

Neither the father nor the son ever submitted to the city an official subdivision plan of lots for their section of Shadyside. Instead they preferred to arrange the sale of their lots through private transactions. By using this method they were probably better able to control the type of persons who moved into their neighborhood. It was clear from the size of the lots sold by the Aikens that they wished to see an affluent community develop. In the vicinity of the Shadyside Presbyterian Church, established under the guidance of the Aikens in 1866, emerged one of Pittsburgh's most prestigious residential communities. The men who bought land from the Aikens were among the city's social and financial elite, including E. M. Ferguson, Robert Pitcairn, the Childs family, Philander Knox, Oliver McClintock, and Henry Laughlin. Most of these men had come to Shadyside from Pittsburgh or Allegheny. Soon after their arrival, they established their own private schools - Shady Side Academy (1883) and the Pittsburgh Female College (1869), later Chatham College - and their own social clubs. The sum of these actions corresponds to what Samuel P. Hays has called the drive for "social differentiation"

¹⁷ For information on the Aiken family see, John W. Jordan, Encyclopedia of Pennsylvania Biography, vol. 1 (New York, 1914), 207-10.

¹⁸ Allegheny County Deed Book, vol. 170: 274.

inherent in the late nineteenth-century suburban movement.¹⁹ A desire to establish new subcommunities apart from the old downtown locales motivated the outward migration of the upper middle class. Here in the new environment, churches, schools, and other social organizations could be formed. The physical manifestation of this drive was conveyed by stately homes set in large fenced yards creating a sense of comfortable prosperity.

The second or central section of the Shadyside district took on in the immediate post-Civil War era an entirely different nature from the Aiken-dominated portion. The central area lay east of Aiken Avenue, stretching to about College Avenue, and was situated between Ellsworth and Fifth avenues. This area was originally the McFarland estate and dated back to the end of the eighteenth century. McFarland's descendants continued to farm part of the land as late as the 1870s, but large sections had already been sold in the 1860s. The first subdivision to occur here and the first to be officially recorded in Shadyside was the McFarland Grove Plan proposed by Thomas Mellon in 1865 and approved in 1867. Present-day Aiken and Ellsworth avenues and Walnut and Bellefonte streets bounded the plan. In this area, Mellon created 133 lots with an average size of twentyfive by one hundred feet which he sold for \$150 and \$250 per lot. Two similar subdivisions also soon appeared. In 1867, Alfred Harrison carved eleven lots from the old McFarland estate between Aiken. Walnut, and Howe streets, and in 1869, William and James Murdock established thirty-six lots on Howe and Walnut streets. Alfred Harrison's second subdivision divided the land adjacent to Mellon's McFarland Grove Plan into seventy-four lots. This plan, proposed in 1871, was not, however, officially approved until 1881. The single largest subdivision in the entire history of Shadyside was the 310-lot plan of Michael O'Hara in 1870, bounded by Negley, Fifth, and Maryland avenues and Walnut Street.

From the activities of men like Mellon, O'Hara, and Harrison, the central section of Shadyside took on a character in the 1860s and early 1870s that has remained unchanged to this day. The small lots averaging twenty feet to twenty-five feet in width and 100 to 130 feet in depth were essentially city lots placed in a rural-suburban setting. Developers gave no consideration to the possibility of adopting a curved roadway scheme as used in such famous planned suburbs as Frederick Law Olmsted's and Calvert Vaux's contemporary River-

¹⁹ Samuel P. Hays, "The Changing Political Structure of the City in Industrial America," Journal of Urban History 1 (Nov. 1974): 10.

side, Illinois.²⁰ Unlike the sought-after affluence of western Shadyside, central Shadyside made a bow to economics and the largest available profit return on the land. Only the picturesque architectural styles of the houses softened the urban scheme imposed on the area. Significantly, at no time did builders introduce the row house into this part of Shadyside. Each small lot received over the ensuing years an individual house, the exterior walls of which were separated from the next house's walls by only a few feet.

The third and final section of Shadyside is that part that lay east of College Avenue. This area before the 1850s had been divided among several large landholding families which included the Spahrs, Strattons, Bayards, Dalzells, and Hailmans. In the 1850s and early 1860s, three Pittsburgh businessmen moved into the area: Joseph Woodwell, a hardware merchant; William G. Johnston, a stationery dealer; and Francis Sellers, who owned a pork-packing firm. They would join with the older families in subdividing this section of Shadvside.

Each year from 1872 to 1875 saw the break-up of one of the large old properties. A total of 106 lots came from the Spahr, Sellers, and Woodwell estates. As a result of the subdivisions made in this area, its character changed to a mixture of small lots like those on Lehigh and Spahr streets and wealthy homesites situated along Shady and South Highland avenues.

This subdivision of previously rural lands was indicative of the real estate speculation happening in Pittsburgh in the decade after the Civil War. Thomas Mellon, who engaged in widespread activities of this sort, recalled in his autobiography the nature of this speculation: "In ordinary times the sales would have been too slow to be encouraging; but a mania existed in all classes for dealing in lots and other real estate, not alone for actual use but speculation. Every workingman and mechanic . . . had saved up . . . a small portion of the purchase money, securing the balance on deferred payments. Even professional men and merchants joined the throng of purchasers." 21

The creation of building lots through official subdivision plans was by far the most common method of selling land in the suburb. By 1886, fourteen subdivisions had formed 950 lots. The process which

²⁰ See, Albert Fein, Frederick Law Olmsted and the American Environ-mental Tradition (New York, 1972), 32-35. 21 Thomas Mellon, Thomas Mellon and His Times (Pittsburgh, 1885),

^{389.}

had evolved over the years was in itself quite simple. A speculator would purchase a large piece of property or perhaps take a section of land he already owned, survey it, and form from it a series of small rectangularly shaped lots. This he would submit to the city engineer for approval. City council voted on final acceptance of the subdivision.

Unfortunately, little is known as to how these lots were sold or promoted. A perusal of Pittsburgh newspapers from these years did not turn up any type of promotional advertisements. Lots for sale were merely factually listed under real estate notices. The land speculator could not expect a quick profit on his investment, because lots were often resold two or three times before a house finally went up on them. By comparing real estate maps from 1872, 1882, and 1890, it was apparent that many lots formed ten and even fifteen years before still remained empty of buildings.²² Land speculation, therefore, anticipated building trends and the subsequent direction of suburban growth.

One important by-product of subdividing the district's land was the establishment of the street system. Shadyside is essentially flat — a rarity in Pittsburgh for any large area of land. This fact plus the urban-scale lots laid out would suggest setting up a traditional city gridiron system. What Shadyside received in effect was a haphazard gridiron system. There are several reasons why this occurred. As we have seen, it had been a long-standing practice that after a person laid out a plan of lots and created roads inside the subdivision all the lots and roads were then submitted to the city for approval. Because the city did not generally lay out the secondary street system, that system was at the whim of the developers. In Shadyside, the subdivisions did not take place all at the same time nor in the same location. The large tracts of land remaining between the various subdivisions meant that the plans never matched up perfectly.

A second and more influential factor affecting the street system was that many of the old rural lanes remained as components of the new layout. Some were merely boundaries between large properties and were later incorporated into the overall system. When these old arteries came into contact with the subdivisions, they caused haphazard lot shapes. The irregular course of some of the old roads like Ellsworth, South Highland, and Shady avenues lent a rural quality to the area long after it had passed into a well-populated suburb.

²² G. M. Hopkins and Co., comp., Atlas of the Cities of Pittsburgh, Allegheny and the Adjoining Boroughs (Philadelphia, 1872); Atlas of the Cities of Pittsburgh and Allegheny (Philadelphia, 1882); Atlas of the City of Pittsburgh, From Official Records, Private Plans and Actual Surveys, vol. 4 (Philadelphia, 1889-1890).

The rate at which Shadyside grew depended on transportation and general economic conditions. The railroad suburb showed only modest growth because just a few wealthy businessmen could afford the yearly costs of commuting from the suburb. One account of the district recalled that only about twenty families lived in the area in 1859.23

The coming of the horsecar and postwar prosperity stimulated population growth and sparked a building boom. This cooled temporarily during the depression of the 1870s. Beginning in 1877, the city started issuing building permits. It was one of the first attempts by Pittsburgh to regulate building activity, and as such represents an early sign of the city's movement toward a modern metropolis. Unfortunately, because the permit dockets for the first ten years are vague in the exact location of new buildings, it is difficult to establish how many of the new houses were in Shadyside. In 1878, permits

Year	Number	Year	Number
1888	59	1903	32
1889*	N/A	1904	43
1890	61	1905	41
1891	54	1906	19
1892	126	1907	8
1893	63	1908	10
1894	57	1909	9
1895	55	1910	8
1896	67	1911	10
1897	67	1912	21
1898	56	1913	19
1899	31	1914	19
1900	45	1915	17
1901	57	1916	26
1902	36		
Total .			. 1,116

TABLE 1

YEARLY HOUSING STARTS IN SHADYSIDE, 1888-1916

Source: Pittsburgh Building Permit Dockets, vols. 5-30, 1888-1916, Archives of Industrial Society, University of Pittsburgh, Pittsburgh, Pa. (hereafter cited as AIS).
*Volume for 1889 is lost.

23 Negley, "Shadyside Sabbath School," 1.

311

show only five housing starts for the Twentieth Ward of which Shadyside composed half. Yet with the return of prosperity in the 1880s, the suburban Twentieth Ward became one of the city's most active. Throughout the 1880s, the ward never ranked lower than fourth in number of building starts, and it continually stood first or second in the total value of construction.²⁴

After 1887, the permits become more accurate, giving a general location of each house. Thus it is possible to pinpoint houses built in Shadyside and provide a year-to-year account of housing construction in the district.

The boom that occurred in the late 1880s and carried through the 1890s owes a great deal to improved transportation. In 1888, the city's first cable car system began operation, replacing the old horsecar line along Fifth Avenue. The cable car cut by more than half the time spent in traveling between Shadyside and downtown. In 1889, the district received its first electric streetcar line on Centre Avenue. Before the end

Type of owner by activity	No. of owners	Percent of total owners	No. of houses	Percent of total houses
owners who built one house	378	69.23	378	33.87
owners who built two houses	84	15.38	168	15.05
owners who built three houses	26	4.76	78	6.99
owners who built four to nine houses	40	7.33	223	19.98
owners who built ten or more houses	18	3.30	2 69	24.11
Total	546	100.00	1,116	100.00

TABLE 2

HOUSE BUILDING ACTIVITY OF OWNERS, 1888-1916

Average number houses built per owner - 2.04

Source: Pittsburgh Building Permit Dockets, vols. 5-30, 1888-1916, AIS.

24 City of Pittsburgh, Third Annual Report of the Pittsburgh Public Safety Department, Bureau of Building Inspection (Pittsburgh, 1890), 93-97. of the 1890s, electric lines operated for various periods of time on Fifth, Shady, South Highland, Denniston, Howe, and Ellsworth.25

An analysis of the building permit data reveals in detail the nature of house-building activity in Shadyside. The owners listed in Table 2 above are considered to be those persons who held the property when the decision was made to build.

The information contained in Table 2 has great implications for understanding the nature of the streetcar suburb. Shadyside was not built by a few powerful speculators but instead by hundreds of individual decision makers. No single owner in the study period erected more than thirty-one houses. The typical owner built only one to three houses. He or she usually was a resident of the district who, besides building a family home, constructed as a small side investment a second or third house to rent or sell. Backing this basic group were the more active owners who in the 1880s and 1890s could have been expected to build several dwellings of similar cost and size in one general vicinity over a period of several years. The uncertainty of the market, the lack of ready capital, and the absence of modern machinery made the mass production of houses impossible.

Speculation was not limited to modest houses only, as the activity of two vastly different speculators shows. Mary Kaufman, a widow, built nineteen houses between 1890 and 1896. All these houses were modest-sized wooden frame or brick dwellings located on the narrow lots on Howe, Kentucky, Denniston, and Ivy streets. Their average cost was \$3,280. The history of the two-and-a-half-story house at 5536 Kentucky Avenue is a typical example of Kaufman's speculative building. She purchased the lot in March 1892. In June of that year, she took out a permit for three frame dwellings at a total cost of \$10,000. In December 1893, she sold one of these houses for \$4,250 to Frank and Sarah Hoskinson, a clerk and high school teacher.26

Edward M. Ferguson, a wealthy banker and contemporary of Kaufman, built five stone and brick mansions in western Shadyside. These mansions were located on the prestigious streets of Morewood, Devonshire, and Ellsworth. One of the mansions was for Ferguson's own use, but the other four were sold within a year after their construction to other wealthy businessmen. The average cost of each was \$20,600.

1979

²⁵ Information on the charter histories of streetcar companies can be found in Pittsburgh Railway Company Records (1891-1966)-1971. Histories of local street railways, No. 8, History of the Consolidation Traction Company and Its Underlying Companies (Harrisburg, 1900), located in AIS. 26 Allegheny County Deed Book, vol. 857: 460.

After the turn of the century, individual speculators like Kaufman and Ferguson became less of a force in Shadyside's development. Professional contractors or realtors built the majority of new homes from the late 1890s on. This activity mostly occurred on those few remaining streets which were as yet not lined with houses, such as Alder Street, Stratton Lane, and Walnut Street east of Shady Avenue. Still, even this group could expect to build no more than a few dozen houses while they were in business. As a result of the house-building speculative process, Shadyside's housing stock was highly varied in size, cost, and style. At the same time, developers strictly adhered to the preference for the single-family house.

Little, however, is known about the builders and architects of Shadyside's houses. Each permit lists the name of a contractor but never the name of the architect. Probably the owner or carpenterbuilder designed the smaller, more modest houses from the many pattern books and building magazines available at the time. An architect aided with larger houses and mansions, but only a few can be attributed to an individual, and most of these come after 1900.

Sam Bass Warner in his seminal study of late nineteenth-century Boston suburbs. Streetcar Suburbs. concluded that suburban neighborhoods were segregated along lines of income and not ethnicity.27 Generally. Shadyside supports this thesis. From the 1880 manuscript census schedule a profile of Shadyside for this period can be ascertained.²⁸ The census found approximately 2,600 residents living in Shadyside. Most significant was the finding that the district had 459 households divided among 454 houses. This leaves little doubt but that singlefamily homes composed virtually all of Shadyside. The single-family detached house was a foundation stone of the suburban movement.

Computations from the census reveal that about a third of the 459 household heads were in the top echelon occupations of merchants, professionals, managers, and manufacturers. At this date the city's iron and steel barons did not favor the East End over Allegheny for their residence. Only thirteen steel men lived in Shadyside. At the next economic level, approximately 40 percent were in such middleclass occupations as salesman and bookkeeper, or were engaged in a skilled trade like carpenter or bricklayer. Not all residents of the district were well off economically. A concentration of laborers each reporting an average of two to three months annual unemployment lived

²⁷ Warner, Streetcar Suburbs, 46. 28 U.S., Census Office, Tenth Census, 1880. Manuscript Schedule for Ward 20, Pittsburgh, Pa., 1880.

in the McFarland Grove neighborhood. However, the general affluence of the district is attested to by the glaring fact that a large number of live-in servants were turned up by the census. There were 362 servants divided among 191 households; thus 41.6 percent of all houses had live-in help.

The East End was the fastest growing section of Pittsburgh, and Shadyside was no exception. The 1900 manuscript census schedule reported 8,854 persons living in Shadyside, an increase of 238 percent in twenty years.²⁹ The distribution of occupation categories is similar to the earlier census, but there was a slight shift toward more upperlevel groups. Merchants, professionals, manufacturers, businessmen, and bankers accounted for over 42 percent of the occupations. The percentage of middle-level jobs slightly declined to just one-third of the household heads. The census reported thirty-four real estate agents living in the district.

One of the most interesting findings of the 1900 census was the ratio of houses owned by their occupants to those rented. Out of 1,515 housing units, 813 were rented, while 641 were owner-occupied, with information not available for 61 units. In terms of percentage, this breaks down to more than half the houses, 53.66 percent, being rented, while 42.31 percent were lived in by their owners.

The end of the nineteenth century saw an outpouring of sentiment from writers and intellectuals in favor of the suburban trend. Among the most articulate suburban enthusiasts was Adna Weber who wrote in The Growth of Cities in the Nineteenth Century (1899) that suburbs were the city's greatest hope for improving the living conditions for the majority of city dwellers.³⁰ Many of these writers, like Weber, were from the East Coast cities, particularly New York, where the row house and tenement had long been a standing tradition. When they traveled to inland cities like Pittsburgh they reacted with amazed delight to the detached single-family suburban houses they found on the city's outskirts. Even the Pittsburgh Survey noted that with the aid of the trolley the city residents above the level of the working classes had become suburbanized.³¹ The East Liberty Board of Trade issued a promotional booklet in 1906 entitled, East End - Uptown Pittsburgh's Classic Section — The World's Most Beautiful Suburb.

²⁹ Ibid., Twelfth Census, 1900. Manuscript Schedule for Ward 20, Pittsburgh, Pa., 1900.
30 Adna Ferrin Weber, The Growth of Cities in the Nineteenth Century: A Study in Statistics (1899; reprint ed., Ithaca, N.Y., 1963), 458-59.
31 Robert A. Woods, "Pittsburgh: An Interpretation of its Growth," in Paul U. Kellogg, ed., The Pittsburgh District: Civic Frontage (1914; reprint ed., New York, 1974), 16.

Ironically, at the height of this suburban fever, Shadyside's growth leveled off and there began to appear forms of land use and building types not usually associated with the suburb. Because Shadyside was by the early twentieth century a mature suburb, little building could take place. In 1907, only eight houses were started. This slow trend continued through 1911. Even though available land was becoming scarce and expensive, the demand for a house in so fashionable an area continued. The answer was to create more building lots and to develop housing that would take up less space.

From as early as the formation of the small lots in the 1860s through 1880s, the suburban builder faced the obstacle of building a relatively large house on a small lot. He mitigated against this awk-ward aesthetic situation by decking his house with picturesque details. Yet the suburban fulfillment for most persons living in Shadyside consisted of a front porch and a small backyard. Now in the early twentieth century the affluent western portion of Shadyside saw a similar development with the dead-end street scheme.

In 1897, Colonial Place became the first dead-end street development, creating twelve expensive lots where only one house had previously stood. In 1905, S. S. Marvin established Von Lent Place. For the first time, the city enforced extensive deed restrictions which dictated the building line and minimum cost of each house and prohibited the erection of apartments or stores on the land. Von Lent Place, Marvin hoped, would form "one of the choicest residence sections" in the city.³² Finally in 1910, the widow of David Aiken, Jr., broke up Shadyside's most venerable estate to form Amberson Place. The main achievement of the dead-end street was the creation of dozens of small, expensive lots.

Housing developments similar to the dead-end streets were the three terraces built between 1912 and 1916. Although not technically terraces, Ellsworth Terrace (1912), St. James Terrace (1915), and Roslyn Place (1916), combined types of row houses with duplexes and detached dwellings. The concept of the terrace was to provide selective housing at moderate cost. The selectivity of the developments came from their vague "arts and crafts" architecture and their aristocratic-sounding names. The developer of Roslyn Place, Thomas Rodd, went so far as to pave its roadway with rare wooden blocks to help create this effect.

With urban forms becoming more evident it is not surprising to

³² Allegheny County Deed Book, vol. 1440: 127.

see the most completely urban housing type of all — the apartment building — begin to appear in the district. There had been boardinghouses in Shadyside but no apartments prior to 1900.³³ Between 1900 and 1916, twenty-six apartment houses were built. They were generally located in the middle part of the district between Walnut Street and Ellsworth Avenue and along Maryland Avenue. The apartment house could have been expected to signal the social decline of the district; that they did not is a credit to the success of the district in maintaining its fashionable appeal. The early apartment houses were meant for the solidly middle class. The design of the buildings maintained a link with their suburban location by providing each flat with a large open porch allowing contact with the out-of-doors.

By the second decade of the twentieth century, the substitution of the streetcar with the private automobile had begun. Shadyside's developers never envisioned the time when the streetcar would be replaced and had not planned for it.³⁴ Building activity moved to less densely inhabited areas like Squirrel Hill and to suburbs beyond the city limits. After the First World War, Shadyside maintained itself better than many other East End communities, but it would not enjoy the standing it once did for many decades.

Admittedly, this study has not covered the evolution of Shadyside in its entirety. Only half the story has been told since space does not permit treatment of the architecture which shaped and conformed to the developments discussed here. In Shadyside it is possible to trace in great thoroughness the evolution of American domestic suburban architecture over a half-century period. Nor have Shadyside's important churches and their impressive edifices been discussed. Many of these churches followed the population's movement from downtown to the suburbs and constitute an interesting study of the suburban church of this era.

By any normative twentieth-century sense of the term, the building of Shadyside appears to have been an unplanned process. But the contrary is true, as this study has attempted to demonstrate. Following the standard practices of the late nineteenth century, Shadyside was a planned community. Moreover, its development followed the normal sequence of events for suburban growth at this time. The remarkable feature of this development was how order and coherency were main-

³³ There were some hotels with permanent guests, notably the Kenmawr Hotel on Shady Avenue.

³⁴ It is interesting to note that the residential section of the Schenley Farms development in Oakland, ca. 1910-1915, allowed for driveways on all the housing lots.

tained in an unregulated building process which involved hundreds of individuals acting on an equal number of economic decisions. The most likely reason for this seemingly paradoxical situation was that all suburban residents shared a common vision of domestic order. This vision translated into the physical reality of the dominance of the single-family suburban house resting on its own plot of ground. This was the greatest legacy of the streetcar suburb.

Name	Date	Number of lots	General Vicinity	Plan Book volume and page
McFarland Grove (Thomas Mellon)	1867	133	Ellsworth- Aiken-Walnut- Bellefonte	3/ 74
Alfred Harrison	1867	11	Aiken-Walnut- Howe	3/ 206
William and James Murdock	1869	36	Ivy-Howe- Walnut	4/1
M. O'Hara	1870	310	Fifth-Negley- Walnut-Maryland	4/26
Alexander Bates	1870	64	Denniston-Howe- Shady	4/ 59
East End Life	1872	61	S. Highland- Spahr-College	4/ 284
Lemuel Spahr	1873	23	Alder-Lehigh- S. Highland- College	5/ 165
Francis Sellers	1874	63	Fifth-Shady- Howe-Emerson	5/ 300
Joseph Woodwell	1875	20	Walnut-Emerson- S. Highland	6/43
Alfred Harrison	1881	74	Filbert-Walnut- Ivy-Ellsworth	6/266
Eliza Wallingford	1882	25	Neville-Bayard- Wallingford- Ellsworth	6/ 276
The Rev. W. B. McIlvaine	1883	30	north side of Marchand	7/ 51
William Guckert and N. Seibert	1884	11	Negley near Ellsworth	7/97
Abbott's Revised	1885	11	east side of Maryland-Howe- Kentucky	7/ 136
D. B. Maxwell	1886	85	Maryland-Elmer- Ellwood-Summerlea- Negley	7/ 220
Irving Place	1886	20	Japonica Way	7/262
W. R. Kuhn	1889	10	east corner of Denniston-Howe	8/297

Appendix Officially Recorded Plans

1979 THE ANATOMY OF A STREETCAR SUBURB

Heirs of David Aiken	1887	45	Centre-Graham- Claybourne-Noble- Aiken	7/ 256
Joseph Graham	1891	8	Graham-Clay- bourne	12/ 35
George M. Bell Joseph P. Caldwell	1892	6	northwest corner of Denniston-Kentucky	13/ 5
Marine Hospital	1893	15	Filbert-Elmer- Bellefonte- Ellsworth	13/ 190
Edward G. Mooney	1893	19	Spahr-College- Holden	14/ 100
W. A. Shaw	1896	8	Fifth-Emerson- Kentucky	16/ 49
John Pedder	1898	11	Ivy north of Ellsworth	16/ 132
Amberson Place	1910	14	Amberson Place	25/ 118
Bayard Place	1910	12	Emerson-Alder	25/26
Roslyn Place	1913	14	Roslyn Place	26/ 114

319