THE GLOBAL CITY AND ITS DISCONTENTS
A STUDY OF NEW YORK CITY'S
GARMENT DISTRICT, 1930–1980

by

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DISSERTATION ABSTRACT

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Big business and small business, the global and the local, the rich and the poor—these polarities often inhabit compartmentalized geographies within the modern global city. This compartmentalization proves to be problematic since the lack of a localized diversity of socioeconomic actors is a critical point of vulnerability in the context of urban resilience. The question is, what role does the relationship between the built world and human socioeconomic agency play in the context of this issue?

The objective of this dissertation is to document, analyze, and understand: (1) at the district scale, how architectural / urban characteristics, typologies, and configurations have historically influenced the developmental trajectory and composition of the city's socioeconomic fabric, and in turn how socioeconomic structures have historically influenced the architectural / urban characteristics, typologies, and configurations observed in the city; (2) at the building scale, how the internal physical / spatial characteristics and configurations of buildings have historically influenced the developmental trajectory and composition of the socioeconomic fabric, and how socioeconomic actors in turn have historically altered and influenced the internal physical / spatial characteristics and configurations of buildings over time; (3) the commonalities, patterns, and processes that can be discerned via the historic study of these narratives of physical and socioeconomic change; and (4) how these commonalities can in turn inform future architectural and urban projects in their capacity to support localized diversities of socioeconomic actors.

In seeking to answer these questions, this dissertation endeavors to understand, more broadly: (1) the historic nature of the relationship between the physical and the socioeconomic fabric of the city; and (2) how future alterations to the physical fabric of the city can be informed so as to positively impact a locality's ability to attract and maintain a diversity of socioeconomic actors over an extended period of time. These broader objectives are pursued with the supposition that they have the capacity to significantly impact the ideological conception, as well as practical regulation, planning, and administration of global cities.

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CHAPTER I

INTRODUCTION

Big business and small business, the global and the local, the rich and the poor—these polarities often inhabit compartmentalized geographies within the modern global city. This compartmentalization proves to be problematic since the lack of a localized diversity of socioeconomic actors is a critical point of vulnerability in the context of urban resilience. The question is, what role does the relationship between the built world and human socioeconomic agency play in the context of this issue?

The objective of this dissertation is to document, analyze, and understand: (1) at the district scale, how architectural / urban characteristics, typologies, and configurations have historically influenced the developmental trajectory and composition of the city's socioeconomic fabric, and in turn how socioeconomic structures have historically influenced the architectural / urban characteristics, typologies, and configurations observed in the city; (2) at the building scale, how the internal physical / spatial characteristics and configurations of buildings have historically influenced the developmental trajectory and composition of the socioeconomic fabric, and how socioeconomic actors in turn have historically altered and influenced the internal physical / spatial characteristics and configurations of buildings over time; (3) the commonalities, patterns, and processes that can be discerned via the historic study of these narratives of physical and socioeconomic change; and (4) how these commonalities can in turn inform future architectural and urban projects in their capacity to support localized diversities of socioeconomic actors.

The initial hypothesis of this research was that: (1) at the district scale, there is an ongoing reciprocal dialogue between, on the one hand, a city's architectural / urban characteristics and configurations favoring the development of certain socioeconomic structures and compositions over others, and on the other hand, the socioeconomic characteristics and configurations of the city favoring the development of certain architectural / urban characteristics and configurations over others; (2) at the building scale, there is a similar relationship between the physical / spatial characteristics and configurations of buildings favoring the development of certain socioeconomic structures and configurations over others, and in turn certain configurations of socioeconomic actors favoring the development of certain internal physical / spatial characteristics and configurations of buildings, over others; (3) if maintained over time, these macro- and micro-scale reciprocal relationships form critical parts of a layered process that inclines the built world to become more responsive to the physical needs of a wider range of socioeconomic actors, and inclines socioeconomic structures to become more responsive to the advantages and disadvantages inherent to the physical limitations of the urban fabric; and (4) informing future architectural projects with the macro- and micro-scale commonalities, patterns, and processes of change uncovered in the testing of these prior hypotheses, will positively influence the built world's capacity to attract, maintain, and be acted upon by a localized diversity of economic actors.

This research has been structured as a mixed-method instrumental case study focused on the Midtown Garment District of Manhattan. Initially, it was broken down into two main phases: (Phase I) the study, documentation, and analysis of the physical and socioeconomic changes observed in the Midtown Garment District over the period of 1930–1980, over ten-year increments; and (Phase II) the study, documentation, and analysis of the more-detailed physical and socioeconomic changes observed in fifteen buildings that consistently supported a higher diversity of socioeconomic actors for the given time period. Upon completion of Phase II, one further research phase was undertaken in order to further test the findings of Phase II—namely: (Phase III) the study, documentation, and analysis of the more-detailed physical and socioeconomic changes observed in five buildings that consistently supported a lower diversity of socioeconomic actors for the given time period. The reasoning for, and the differences in, the sample sizes in Phase II and Phase III, in turn, are explained in detail in the relevant methodological sections that follow (Section 1.3, 3.0, and 4.0).

These three research phases sought to address the following questions:

- Phase I:
    - How did the physical and socioeconomic fabric of the Garment District change during the period of 1930–1980?
    - Did specific architectural / urban characteristics, typologies, and configurations consistently support and subsequently influence the development of specific socioeconomic compositions and configurations, and vice versa?
- Phase II and III:
    - Which buildings in the Garment District consistently supported a higher, and lower, diversity of socioeconomic actors throughout the period of 1930–1980?
    - How did the physical and socioeconomic characteristics and configurations of these buildings change over time?
    - What commonalities, patterns, and processes of change can be discerned in studying these parallel narratives of physical and socioeconomic change?

In seeking to answer these questions, this dissertation endeavors to understand, more broadly: (1) the historic nature of the relationship between the physical and the socioeconomic fabric of the city; and (2) how future alterations to the physical fabric of the city can be informed so as to positively impact a locality's ability to attract and maintain a diversity of socioeconomic actors over an extended period of time. These broader objectives are pursued with the supposition that they have the capacity to significantly impact the ideological conception, as well as practical regulation, planning, and administration of global cities.

1.1. SIGNIFICANCE WITHIN THE DISCOURSE OF SUSTAINABILITY

Synthesizing the relevant arguments from the literature review in the subsequent sections, the following points can be outlined: (1) The economic composition of the global city, which is increasingly becoming dominated by two scales of economic actors, the formal macro / global and the informal micro / local, is lacking in cross-scalar diversity; (2) such an economic composition, when confronted by a disturbance regime will be more likely to have low response diversity, and thus be more likely to be systemically vulnerable rather than resilient; (3) global cities, much like industrial cities once were, are falsely assumed to lie outside of the contact of economic disturbance regimes, but are, as inter-global-city competition continues to increase, growingly becoming more susceptible to such disturbances; (4) the establishment of a cross-scalar diversity of socioeconomic actors can help to support a more-robust response diversity within the city; (5) based on this, the pursuit of urban inclusivity, can be seen to be in accord with the pursuit of urban socioeconomic resilience.

This fifth point, if it is to achieve architectural and urban relevance, must be understood in the context that socioeconomic functions take place within specific spaces, specific buildings, and specific parts of the urban fabric—with differing spatial, physical, infrastructural, and geographic parameters being required for differing functions. More importantly, what must be recognized is that socioeconomic actors who attempt, to the best of their knowledge, to pursue their socioeconomic interests, invariably take these spatial, physical, infrastructural, and geographic parameters into consideration, while navigating their socioeconomic decision-making processes.

This assertion, building on the basic tenets of how complex free-labor societal systems function (Hayek 1960), has a deep implication for the subject of architectural and urban sustainability—a realm of study that has largely focused on achieving heightened performance and lowered impact in terms of energy consumption, while leaning on the assumption that the structure of socioeconomic networks lies outside the purview of architects and urbanists. It is often assumed, in other words, that since the built world is shaped by socioeconomics, and given that architects and urbanists do not, except in rare circumstances, decide the socioeconomic nature of the projects they are commissioned for, then what is left to the architect or urbanist must logically lie outside of socioeconomics.

As a rebuttal to this, it can be contended, via an appropriation of an oft-quoted statement by Winston Churchill regarding the rebuilding of the House of Commons, that “we shape our buildings, and afterwards our buildings shape us” (Churchill 1943). In other words, while it is indeed true that the physicality of the built world is shaped and molded by various forces, socioeconomic or otherwise, it is also rather difficult to deny that the physicality of the built world has implications for the future composition, structure, and configuration of urban networks and systems, socioeconomic or otherwise. This is observable by the basic reality that certain spatial arrangements and building materials lend themselves more readily to reuse and adaptation than others; that buildings constructed under differing economic scopes coincide with differing rental, lease, and insurance rates; that differing price ranges and spatial constraints draw differing socioeconomic classes as well as differing socioeconomic functions; that the expenses involved in achieving the standards of stringent zoning and building codes can dissuade lower-budget redevelopment projects; and so on.

If the common definition of sustainability, of “meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs” (UN General Assembly 1983, 54) is used as a starting point, while achieving low-impact and high-performance buildings will remain a crucial aspect of this endeavor, so too will the maintenance and reinforcement of the socioeconomic relevance, potential, and worth of the built world. For while buildings and cities may be constructed and organized in a manner wherein they consume little and perform well in terms of energy, if their physical / spatial characteristics and configurations are not also actively reinforcing their future potential in remaining within the scope of viable and fruitful socioeconomic networks, such energy-saving actions will have little meaning. Put simply, such buildings, though high-performing, will remain hollow.

It is through understanding therefore, how the physicality of the built world, both on a micro and macro scale influences and is influenced by socioeconomic structures, that the realm of sustainable architecture and urbanism can begin to achieve socioeconomic relevance, and push beyond the realm of life-cycle costs, energy-use analytics, façade performance evaluations, etc.

1.2. LITERATURE REVIEW

The following literature review sheds light on the following topics: (1) the economic composition of the global city, and the nature of the interaction between its dominant economic actors (Section 1.2.1); (2) how cross-scalar diversity in the composition of an economic system helps to support various compensatory mechanisms as well as those dealing with systemic productivity and efficiency (Section 1.2.2); (3) the interdisciplinary roots of contemporary resilience theory (Section 1.2.3); (4) the myth of the permanence of the established global-city hierarchy (Section 1.2.4); and (5) the existing discourse concerning the study of cities and urban human agency, and how it relates to issues of urban systemic resilience (Section 1.2.5).

These sections serve to highlight the following points: (1) the economic composition of the global city is growingly becoming dominated by two scales of economic actors—the formal macro / global and the informal micro / local (Section 1.2.1); (2) this scalarly-polarized economic composition is unlikely to sustain the various mechanisms that cross-scalarly diverse economic systems are inclined to support (Section 1.2.2); (3) this lack of localized cross-scalar diversity is a deep deficiency in terms of systemic resilience (Section 1,2.3); (4) this lack of systemic resilience, while often evaded via the myth of the permanence of the current global-city hierarchy, is in fact a significant point of vulnerability for the global city (Section 1.2.4); and (5) architecture and urbanism have critical roles to play in supporting local diversities of socioeconomic actors, and more broadly, in supporting urban systemic resilience (Section 1.2.5).

1.2.1. THE ECONOMIC ACTORS OF THE GLOBAL CITY

In studying the literature surrounding the phenomenon of the global city, one is often initially confronted by an ambiguous portrayal of authority—by nebulous descriptions of “strategic sites where global processes materialize” (Sassen 2000, 80), “basing points in the spatial organization and articulation of production and markets” (Friedmann 1986, 71), “nodes of accumulation [that] are embedded within flows of capital” (Brenner 1998, 20), “neo-Marshallian nodes act[ing] as collective brain[s]” (Murphy 1998, 158), and so on. Such introductory analyses leave the reader with an image reminiscent of the empty central chamber of Bentham’s “Panopticon” (Bentham 1791)—i.e., a point of societal vacancy prolifically producing mechanisms of control and subordination. This image establishes a powerful understanding of the socio-political potentials of the global city, but in terms of its economic inner-workings, seems to offer few details.

At its more detailed points however, the relevant discourse defines the global-city economy quite clearly. Friedmann (1986), for instance, characterizes it as being composed of a very specifically "dichotomized labor force" (Friedmann 1986, 74). The poles of this dichotomy are said to encompass, on the one hand, specialists engaged in the industries of finance, insurance, accounting, legal services, telecommunications, and transportation, and, on the other, a "vast army" of more-generalist workers, involved in manufacturing, lower-end producer services, and consumer services (Friedmann 1986, 74). It is not only argued that this "vast army" exists in order to supply goods and services for the survival of this finance-based economic elite, but further, that the global city itself exists for the consumption of the elite (Friedmann 1986, 74)—a contention later echoed by Sassen (1991).

Sassen (2000) characterizes the establishments associated with the informal economy that satisfies the day-to-day needs of this pool of low-income workers as "small, rely[ing] on family labor, and often fall[ing] below minimum safety and health standards" (Sassen 2000, 85). This low-income informality is juxtaposed with the higher echelons of the global-city economy, in order to contend that what is being established is "a new geography of centers and margins that not only strengthens existing inequalities but sets in motion a whole series of new dynamics of inequality" (Sassen 2000, 85). The claim is further intensified with the argument that the emergence of such a polarized urban geography, while being previously observable in the developing world, is not only inherently novel to the developed world, but is a specific product of the inequity-producing pressures of modern globalization.

Explicitly, the above arguments put forth by Friedmann (1986) and Sassen (1991; 2000) help to give foundation to the often-commonplace anti-global vocabulary found in contemporary urban discourse. Implicitly however, their arguments also create another point of antagonism—specifically one directed against the informal local economy. Put simply, by contending that the latter is a product and victim of the former, the aforementioned discourse, at its logical terminus, maintains that the low-wage informal economy does not have a place in the modern urban economy. As is outlined in Section 1.2.2, this antagonism towards the formal macro / global as well as the informal micro / local proves to be particularly problematic and limiting, when striving to support a cross-scalar diversity of economic actors within the urban fabric, in that it effectively cuts off the two ends of this scale.

Systemic issues aside however, the arguments put forth by Friedmann (1986) and Sassen (1991; 2000) also appear to be historic simplifications. Davis (2012) for instance, argues that an urban fabric composed of similar demographic polarities, was in existence far before the theorized point of global-city formation. The work of Green (1997) also supports this historic refutation. This is an important factor to note, in that the existence of the low-wage informal economy in the global city therefore cannot be viewed as a historic novelty.

> "A hundred years ago, conditions on New York's Lower East Side were crowded, unsanitary and unhealthy. But tenement apartments were used as workplaces in piecework arrangements with clothing manufacturers. These home workshops made the Lower East Side the stepping stone to economic advancement. [...] People, or their children, moved from being a peddler, to opening a shop, to being an entrepreneur, to being a professional" (Davis 2012, 118).

Beyond acting as a refutation of the notion of novelty that Friedmann (1986) and Sassen (1991; 2000) stress upon, in regard to the contemporary inequities in global cities, another key aspect in Davis' (2012) analysis is its contradiction of Friedmann's (1986) and Sassen's (1991; 2000) claim that the citizenry functioning within the informal micro / local economy are essentially victims under the heel of a larger economic system. Davis (2012), while not denying the larger economic forces at play, nor the potential insalubriousness of the physical conditions that are produced, argues that such informality can be understood—and actually is often regarded by the very citizens that use it—as a "springboard to economic advancement" (Davis 2012, 117). The broader argument put forth by Davis (2012), in turn, is that the urban-economic condition must be analyzed synchronically as well as diachronically—that is, both as a detailed snapshot as well as part of a dynamic history—if a more-accurate and more-robust image of historic conditions is to be established. This robustness is clearly compromised in much of global city literature.

However, within Davis' (2012) quote above, one does find a critical point upon which a theoretical commonality can begin to be established—that the informal micro / local economy, if it is to function as such an economic springboard, must be linked to a diversity of economic layers, composed of a diversity of economic actors undertaking functions of varying size and scope. This cross-scalar diversity, unfortunately, is precisely what appears to be gradually diminishing within the confines of the global city, with two specific scales of economic actors taking on growingly-dominant roles—the formal macro / global and the informal micro / local. On this point, the broader global-city discourse appears to be widely in agreement, although with varying degrees of pessimism or optimism in regard to future outlook.

Despite disagreements concerning the specific nature of the interactions between the formal macro / global economy and the informal micro / local economy of the global city therefore, what is quite consistent within global-city discourse is the contention that: (1) a growingly-monocultural urban economy, composed of the formal macro / global and informal micro / local, is taking root; and (2) the interstitial scales of economies required to be able to network the system together, in order to aid, among other things, with the upward mobility of the lower echelons of the economy, are being displaced. The following section, in turn, attempts to highlight some of the networking functions that the aforementioned interstitial scales of economic actors can help to provide within a layered socioeconomic fabric.

1.2.2. THE ROLE OF CROSS-SCALAR ECONOMIC DIVERSITY

The literature on the subject of resilient economic systems contends that there are a range of areas in which cross-scalar economic diversity can aid in the formation and reinforcement of advantageous economic mechanisms. Komareck and Loveridge (2014), offering a noteworthy summary of this topic, assert that having cross-scalar diversity within the economic system of a locality allows for: (1) large firms to push part of their employee-search and -training costs onto smaller firms; (2) smaller firms to be able to offer lower wages to their entry-level employees, since employees will be able to see a palpable career ladder within their immediate geography—the climbing of which would allow them to eventually attain higher positions at higher-paying firms; (3) smaller firms to retain contacts to larger firms via their former employees; (4) smaller firms to repurpose the by-products of larger firms' main processes; (5) large firms to sell or lease innovations produced through their research and development branches to smaller firms—specifically innovations that they have found ill-fitting with larger scales of operations; (6) large firms to learn from the experimentations of smaller firms, allowing the former to gain insight into ways of reforming their operations, without bearing the larger fiscal costs that experimenting on larger operations would entail; (7) regions to invest in larger-scale infrastructural, institutional, or sector-specific improvements, while leaning on the large-scale economic influxes that large firms bring to an area, without becoming single-company towns; (8) economic systems to be buffered against disturbances to, or collapses in, specific parts of the economy, via the compensation of other industries which have not been as badly affected by, or have actually been able to grow through, the disturbances in question; (9) political-power imbalances or monopolies, such as those commonly found in single-company towns, to be avoided; (10) smaller firms to take advantage of the economic foresight that larger firms have due to their dealings with large-scale market forces (Komareck and Loveridge 2014, 30–31).

While the outline provided by Komareck and Loveridge (2014) does give detailed insight into the nature of the relationships and mechanisms present in diverse economic systems, there is potentially a more-useful manner of categorizing the attributes of cross-scalarly diverse economic systems. Looking at the broader literature on the subject, two such categories come to light: (1) compensatory relationships that reinforce systemic resilience in the face of disturbance regimes; and (2) systemic relationships that promote productivity and efficiency. It is important to note furthermore, that these complex economic relationships, whether they be ones of efficiency, productivity, or are compensatory in nature, while discussed in detail within the discourse of economics and economic geography, are not given as much attention within architectural and urban theory. This dissertation, pushing for a critical and detailed understanding of the spatial and physical dimensions involved in these economic networks, attempts to aid in bridging this discursive gap.

1.2.2.1. COMPENSATORY RELATIONSHIPS

> "Over the time span of several business cycles, metropolitan economies experience supply-side and demand-side disturbances. To withstand external shocks, an area must either maintain its competitive advantage or have enough variety of industries to reemploy displaced workers" (Malizia and Ke 1993, 222–223).

One of the primary reasons given in support of maintaining a cross-scalarly diverse economy, is that having a cross-scalar diversity of firms within a given region can aid in maintaining high employment levels in the work force. Even as early as McLaughlin (1930), one finds this to be a common point of emphasis (McLaughlin 1930, 133).

While portfolio diversification of individual firms is a comparable practice to a city maintaining a cross-scalar diversity in its economic system though, the notion being focused on here is overall city-level stability. When a disturbance places pressure on an urban system, in other words, it is unrealistic, and potentially hazardous, to assume that all individual firms ought to be able to react positively to it. Regardless of how well firms may have diversified their own internal economies, some firms will experience stagnation, decay, or collapse. The goal in maintaining and reinforcing cross-scalar diversity within urban economic systems, is that when firms do decay, others will be able to reemploy and reutilize portions of the work force and capital, respectively, that has been displaced from the fiscal deterioration in question.

Malizia and Ke (1993) argue that "[f]or diversity to work effectively in reducing unemployment, workers laid off in one industry should be able to find work in another local industry" (Malizia and Ke 1993, 223). Dissart (2003) echoes this contention, by stating that "the presence of various economic activities in a given area will reduce employment instability in that area (Dissart 2003, 442). Komareck and Loveridge (2014), though speaking on the notion of broader employment creation, argue a similar point: "Small innovator firms, with more growth potential, could help sop up new entrants into the labor market, reducing costs of unemployment support and crime that is associated with unemployment" (Komareck and Loveridge 2014, 31).

The capacity of a system to find rapid reemployment for a displaced work force however, depends not only on a territory having active industries in times of decay. It is critical, also, that the occupational structures and staffing patterns of the collapsing firms be compatible with those of the firms compensating for the decline. Malizia and Ke (1993) point to this seemingly contradictory notion—while cross-scalar economic diversity reinforces systemic stability, heterogeneity in the organizational structures of the work force can make reemployment opportunities more difficult (Malizia and Ke 1993, 223).

From this framework, a potential point of conflict emerges—namely "that growth requires specialization, which is polar opposite to diversification" (Wagner and Deller 1998, 541). In order to compensate for the isolationist tendencies propagated by specialization, "structural inter-industry linkages," Wagner and Deller (1998) argue, should be promoted on a systemic level (Wagner and Deller 1998, 541). The presence of such inter-industry linkages, Malizia and Ke (1993) contend, is preferred by competitive firms engaged in agglomeration economies. They go on to state:

> "Diversity is not simply the absence of specialization. Among metropolitan areas of sufficient size, diversity reflects the presence of multiple specializations. These specializations can be the source of competitiveness, as well as compensate for one another when business cycles or external shocks occur" (Malizia and Ke 1993, 223).

1.2.2.2. RELATIONSHIPS OF PRODUCTIVITY AND EFFICIENCY

On the subject of systemic productivity and efficiency, the relevant discourse contends that there are four primary areas supported by maintaining a cross-scalar assortment of firms within economic systems. These include: (1) innovation; (2) entrepreneurship; (3) byproduct repurposing and waste reduction; and (4) local market generation.

In regard to the first point, innovation, the existing literature states that homogenously-oligopolistic structures have a tendency to suffocate the innovative capacities of diverse economic systems. Tisdell (1999) argues this point through a historic perspective, in the text that follows.

> "[O]ptimistic market evolutionists seem to overlook the possibility that market systems do not necessarily evolve to an ideal evolutionary state or, on the basis of their own endogenous motion, to the best attainable outcome; […] they need not yield the best attainable evolutionary trajectory […] Industrial diversity […] can have value in increasing the likelihood that an economy (or system) can jump to a superior state. Structural adjustment policies that encourage market extension and globalization may very well be reducing global industrial diversity. They may drive the economic system closer to a local optimum […] but make it more difficult for the system to move to a superior optimum" (Tisdell 1999, 157–158+164).

Despite the fact that larger firms can be inclined to pursue the monopolization and subsequent suffocation of the market, it is still important to not overlook the critical role of having a cross-scalar diversity of firms, including large ones, in the economic system, specifically in the context of the second point mentioned above, namely, entrepreneurship. Loveridge and Nizalov (2007) contend, for instance, that while entrepreneurship is often a characteristic assigned only to smaller firms, detailed studies of economic systems show, rather, that mid- and large-size firms can be quite entrepreneurial, and some small firms, may fundamentally "lack entrepreneurial characteristics" (Loveridge and Nizalov 2007, 245). Thus it is argued that "[e]ntrepreneurial development requires a balanced distribution of businesses within the local economy" (Loveridge and Nizalov 2007, 245). Part of this development is seen to be supported by the flows of knowledge that are observed in such diversified economies.

> “Small, nimble firms may be able to experiment with new process or market development techniques. By observing and interacting with local innovators, larger firms might pick up on ways to improve business without the large transaction costs associated with experimentation in a larger, more complex operation. The benefits may flow in the other direction as second-stage firms start to grow and need to put into place human resource departments and other more formalized management structures” (Komareck and Loveridge 2014, 31).

In the context of the third point of byproduct repurposing and waste reduction, Templet (1999) argues that cross-scalar diversity in an economic system promotes a range of networked catabolic and anabolic economic activities (Templet 1999, 224). Industries commonly cited as having such a historically-synergistic relationship include: the health care industry, with regional hospitals accompanied by smaller clinics, practitioners, and suppliers of medical equipment; the automotive industry, with larger manufacturing companies being supported by smaller subcontractors (Loveridge and Nizalov 2007, 245); and the garment industry, with large-to-small scale contractors, subcontractors, jobbers, designers, manufacturers, wholesalers, retailers, advertisers, journalists etc., functioning in a complex system to take advantage of the various niches, products, and byproducts of the haute couture and the ready-to-wear market (Green 1997).

Such synergy is also asserted by Komareck and Loveridge (2014) to exist in the realm of research and development—with firms with smaller research and development budgets taking advantage of the products produced by neighboring better-financed research and development branches (Komareck and Loveridge 2014, 31). This allows for research at the latter, better-financed branches, to be undertaken with a more multi-scalar approach in mind, given that there is an established, and broader, market in the immediate geographic proximity. The capacity for local market generation, the fourth and final point mentioned prior, is cleanly summarized by Syrett and Sepulveda (2011):

> “The mix of population characteristics of the residents and workers of a city is a key component, particularly within an economic context where skills and knowledge embedded within the workforce are seen as central to achieving high levels of productivity and competitive advantage. Yet population diversity not only contributes to a different mix of human capital in terms of formal and tacit skills, knowledge, and education, but also creates new markets for goods and services, new business networks and opportunities for innovation and entrepreneurship, and urban environments attractive to workers, investors, and visitors” (Syrett and Sepulveda 2011, 487).

1.2.3. THE DISCOURSE OF RESILIENCE THEORY

The previous sections have outlined many of the systemic roles that maintaining a cross-scalarly diverse economic composition can sustain. Many of these roles are supportive of what is broadly referred to as systemic resilience.

In contemporary discourse, the concept of systemic resilience is often traced to the realm of ecology, specifically to Holling (1973). It can be defined, broadly, as the capacity of a system to rebound in the wake of a disturbance regime. This definition has been utilized, over the years, to understand, describe, and analyze ecological systems of varying scales. Nystrom and Folke (2001), for instance, speaking of coral reefs, define resilience as the ability of systems "to absorb disturbance, reorganize, and adapt to change" (Nystrom and Folke 2001, 406). Allison and Martiny (2008), in turn speaking of microbial communities, define resilience as the ability of systems to "recover quickly, whether by growth or by physiological or genetic adaptation," in response to an environmental change (Allison and Martiny 2008, 11513).

The contemporary understanding of ecology characterizes ecosystems as being in a constant state of adaptation and change, reacting to both minor and major pressures, and subsequently fluctuating between multiple states of stability (Nystrom and Folke 2001, 408). In this flux-based perception, nature is understood not as an object, but as a process—fluid, as opposed to rigid. Through this process-oriented lens, change is seen as an essential part of the functioning of the ecosystem, rather than as an anomaly, or as a pressure to be avoided.

Fundamental to the theory of ecological resilience are two main components—pressure, and change. The former being more often referred to as a disturbance, the latter, as a response. Disturbances, so long as they are not of a scale that provokes complete systemic failure, are assumed to help challenge and develop an ecosystem's adaptive capacities (Nystrom and Folke 2001, 407). The combined activities of small and large disturbances are known as disturbance regimes (Nystrom and Folke 2001, 406). In order to take advantage of the simultaneously creative and destructive effects of such disturbance regimes, however, ecosystems must be confronted by pressures that are within their scope of adaptive capacity.

The ability of an ecosystem to respond to a disturbance regime is linked to two aspects of adaptive systems: (1) cross-scalar functional diversity—i.e., a system having a range of functions at multiple scales; and (2) cross-scalar functional redundancy—i.e., a system having overlapping functions at multiple scales, wherein one function can compensate for the loss of another (Nystrom 2006, 31).

Both of these factors, in turn, are asserted to be supported by the presence of cross-scalar species richness (Walker 1992; Nystrom and Folke 2001; Petchey and Gaston 2002; Loreau 2004; Lin 2011).

The goal in maintaining such diversities and redundancies is ultimately aimed at reinforcing high *response diversity*—i.e., a system's capacity to have a range of functional responses to disturbances (Nystrom 2006, 31). Intriguingly, even if a system has high functional redundancy, if all the system's functional units respond in a similar manner to a disturbance, then the system may still prove vulnerable. The current literature on the subject though, posits that cross-scalar species richness serves as a natural buffer against this pitfall (Nystrom and Folke 2001, 408). Such species richness, as well as functional diversity, are helped kept active through the pressures provided by disturbance regimes—regimes which challenge the existing system, elicit a response, and trigger structural as well as functional changes, at the scale of the overall system as well as at the level of individual species (Young et al. 2007, 2480).

Although the notion of systemic resilience is understood to be under the aegis of ecology, the theory as a whole has been appropriated by many disciplines over the years. Ting (2003), for instance, in analyzing the effectiveness and resilience of institutional organizations via the lens of game theory, actively refers to functional redundancy models. Porter (1986), Allenby and Fink (2005), and Santora and Wilson (2008), in analyzing the reliability of urban infrastructures, utilize resilience and functional-redundancy models. Lim and Fong (1994), in attempting to theorize the fiscal resilience of Southeast Asia during the economic difficulties of the early 1990s, use a similar functional and financial redundancy model in their analyses. Redman (2005), speaking from an archaeological perspective on adaptive systems, puts forth an adaptation of the resilience model in order to contextualize phases of societal development (Redman 2005, 72-73).

In the interdisciplinary appropriation of resilience theory, one sees, once more, the replacement of the object-based view of systems with the process-based perspective. In the scope of cities, for instance, urban systems are no longer regarded as engineered objects, set to resist disturbance regimes, but as a compilation of flexible and malleable processes, of varying scales, set to react to disturbance regimes. The studies of Nielsen and Kesting (2003), Crate (2008), Schneider (2008), Wrigley and Dolega (2011), and Amann and Jaussaud (2012), among others, are fundamentally based on the observation that resilient economic systems, urban or otherwise, are fluid rather than rigid, and adaptive rather than ossified.

Within the work of Neilsen and Kesting (2003), the small- and medium-sized business is presented as a model of resilience in Denmark. Within the work of Schneider (2008), the family-owned *grupo*—a group corporation, comprised of diversified, large, private, domestic firms—is presented as a model of resilience in Latin America. Within the work of Crate (2008), diversified Sakha agricultural practices in Northern Russia are analyzed from a socioeconomic-resilience perspective. Within the work of Wrigley and Dolega (2011), the diversified high street is presented as a model of resilience in the United Kingdom. Within the work of Amann and Jaussaud (2012), the family-owned business is presented as a model of resilience in Japan that dates back to the Tokugawa period.

Throughout this range of studies, when the characteristics ascribed to resilient ecological systems are compared to those ascribed to resilient economic structures, overlaps begin to appear. Specifically, cross-scalar functional redundancy, cross-scalar functional diversity, cross-scalar response diversity, and having regular contact with disturbance regimes—these are the common characteristics ascribed to complex adaptive systems that exhibit resilience.

1.2.4. THE SYSTEMIC VULNERABILITY OF THE GLOBAL CITY

Based on the literature reviews above, it is apparent that the global city, as it is understood by the existing literature on the subject, is deficient in terms of systemic resilience. The main factor of this deficiency is the lack of cross-scalar diversity of economic actors in the urban fabric, and thus the lack of cross-scalar diversity of economic-functional redundancies.

Despite this vulnerability, however, there is still an oftentimes-unspoken assertion within the discourse that the current global-city hierarchy inhabits a state of permanence. This false presumption seems to be partly founded on a misinterpretation of history, and partly on a misinterpretation of the current day.

Sassen (2000) for instance, argues that the rise of the global city established "new global and regional hierarchies of cities" that usurped the previous, primarily-industrial networks of cities that were anchored around "important manufacturing centers and port[s]" (Sassen 2000, 82). In simpler terms, what is claimed is that "global cities accumulate[d] immense concentrations of economic power while cities that were once major manufacturing centers suffer[ed] inordinate declines" (Sassen 2000, 82). A point of intrigue however, is that the two highest nodes of the global-city hierarchy as identified by Friedmann (1986) and Sassen (1991)—i.e., New York City and London—were also historically dominant centers of manufacturing and shipping.

Observing this historic point, one begins to wonder then whether New York City and London were anomalies in regard to their being both dominant industrial and dominant global cities, or that there are in fact observed historic overlaps between financial-service-based economic networks commonplace in the global-city phenomenon and product-based economic networks commonplace in the industrial-city phenomenon. Supporting this latter perspective, going back to the eighteenth century, one can indeed find that the rapid expansion of the financial sector of New York City, and its related industries, were situated in lower Manhattan, not only in close physical proximity to the points in the urban geography involved with the slave trade, but in close association with the slave economy itself (McManus 1966).

The financial-service economy that forms such an integral part of the contemporary global-city phenomenon then, cannot be accurately categorized as an anomalous product of the current day, nor one that is detached from the product-based industrial urban fabric, particularly in the case of New York City. Historically rather, the rise of such financial services appear to have been deeply tied to the production, shipping, and exchange of physical goods, which, in the scope of human history, at times included the exchange of other human beings. In the context of New York City, this latter realm of the slave trade in fact, appears to have served as a key stimulus in the initial formation of the financial, legal, and accounting sectors of the city (McManus 1966) that currently mark Manhattan as a dominant node within the global-city hierarchy.

This is not to say that the manufacturing of goods in London and New York has not declined over the years—indeed such industry has significantly shifted away from these cities. However, the innate flaw in Sassen's (2000) argument lies in the insistence on seeing product-based and service-based economies as incompatible polarities in terms of economic structures, rather than as complex networks with potentially unexpected points of connection and overlap. Persky and Wiewel (1994), albeit in a more-superficial manner, build upon these unexpected overlaps between product and service, and global and local, as follows:

> "At root, the simultaneous growth of far-flung economic networks and of locally oriented economies are not necessarily contradictory. Both extremes can grow at the expense of the middle. In this case the middle ground consists of traditional regional and national exchange relations. For example, where factory workers in Chicago formerly sold their output to factory workers in Detroit, today secretaries

> in Chicago-based international law firms sell their services to German corporations and spend much of their earnings on local health care and restaurants" (Persky and Wiewel 1994, 129).

Another point of overlap between the industrial city and global city can be observed in the realm of competition. As the high-finance service industry becomes more and more export oriented, this local-to-global economic trend is seen as being capable of pushing the high-finance service industry, just as it pushed the manufacturing industry, to open itself up to global competition, and potential outsourcing. Bryson (2007) reinforces this statement, in pointing out that technological advances are allowing for the possibility of relocating specific "service functions from high to low-cost production locations," thus mimicking the global shift previously observed in the manufacturing industry (Bryson 2007, 32).

This latter observation serves to debase another key aspect of the initial conception of the global city—that of the assumed permanence of the hierarchies currently existent within the global-city network. The rapid rise of Dublin since the late 1980s, as a powerful node in global financial authority, that subsequently triggered, for instance, a federal revision of German tax legislation—implemented in fear of a flight of capital from German banks—is a further refutation of the supposed permanence of existing global-city hierarchies (Murphy 1991, 163).

1.2.5. THE BUILT WORLD AND HUMAN AGENCY

The question, in the context of the socioeconomic forces, conflicts, and disturbances outlined in the previous sections, is whether architecture and urbanism have roles to play in helping to resolve the issues at hand.

Within the study of cities, there is a long tradition of inquiry looking into the nature of the relationship between the urban fabric, socioeconomic forces, and human agency. Smith (2011) breaks down the field of urban theory relevant to this subject, down to eight categories: environment-behavior theory, architectural-communication theory, space syntax, urban morphology, reception theory, generative-planning theory, normative theory, and city-size theory.

The less-relevant realms of theory for the purposes of this dissertation, include architectural-communication theory, reception theory, and space syntax—the reason being the heavy emphasis on sociocultural meaning and symbolism within architectural-communication and reception theory, and the mono-causal determinism underpinning space syntax theory. This is not to say though that the methods and analytical frameworks that are associated with these portions of the discourse are without informative potential, for indeed if they are linked with other approaches to urban analysis they can prove to be quite constructive. Rather, what is being argued here is that these theoretical frameworks, if they are adopted in isolation or in totality, tend to support the simplification of urban and architectural phenomena in a manner that in turn tends to distort, rather than accurately describe, the various physical, socioeconomic, ecological, political, etc., facets inherent to the urban fabric.

As aforementioned, architectural-communication theory and reception theory, while still delving into the complexity of interactions between actors and the urban fabric, tend to deal more with the explicit or implicit meanings and ideologies ascribed to, or communicated by, space. Architectural-communication theory, for instance, often focusing on civic, public, and monumental architecture, frequently attempts to unravel the symbolism and meaning embedded into the built world (Smith 2011, 174-175). Reception theory, in turn, delves into the nature of public urban perception—specifically, the phenomenological patterns experienced via human actors, as they traverse, inhabit, and appropriate the urban fabric (Smith 2011, 177-178). The work of Lynch (1960) is frequently cited as the seminal work within reception theory discourse.

Space syntax, on the other hand, rooted in the work of Hillier and Hanson (1984), appears upon initial inspection, to be very much fitting with the broader discourse of environment-behavior theory and urban morphology in that it attempts to uncover the relationship between urban structure and socioeconomic human agency (Smith 2011, 176). In this light, its theoretical claims would appear to be pertinent to the proposed research. Its eventual assertion, however, lapses towards causal oversimplification, contending that space syntax, through its analysis of urban physicality can effectively “forecast the effect of planning and design decisions on the movement and interaction of people in buildings and urban areas” (Space Syntax 2014). This assertion, in turn, is at odds with a much-broader discursive contention that while urban structure does indeed impact human agency, it is one of a range of forces exerting influence on, and being influenced by, human agency:

> “In the field of human-environment research, the search for a single overriding influence is tempting, due to the elegance of determinative explanations. Decades of research have demonstrated [however] that human-environment relations are a complex of intertwining influences and limitations that resist single-factor causal correlations” (Judkins et al. 2008, 27–28).

It is because this dissertation is based on the premise of causal pluralism—a premise derived from research into the subject of complex adaptive systems—that space syntax proves less pertinent as a point of discursive influence. Although the methodology of space syntax has no doubt proved constructive, in various portions of this dissertation, in informing certain parts of the physical-geographic, urban-morphological, and comparative-spatial analyses, the conflict clarified here, is strictly the ideological conflict that arises from the mono-causal determinism underpinning space syntax theory.

The more-relevant fields of urban studies and urban theory, in turn, include environment-behavior theory, urban morphology, and generative-planning theory.

At its ideological bedrock, environment-behavior theory presumes a continuous back-and-forth relationship between human agency and the physical environment (Smith 2011, 173). Its discursive framework tends to focus on three questions: How does human agency impact the built environment? How does the built environment impact human agency? What links human agency and the built environment together? (Rapoport 2006, 59; Smith 2011, 173). While Jacobs (1961) can be seen as one of the seminal works introducing human agency to the discourse of urban theory, it is really in contemporary works such as Kostof (1993), Davis (2012), Burdett et al. (2014), among others, that the reciprocal nature of the relationships between human agency and the urban fabric begins to be addressed with greater depth. The works of Holzner et al. (1967), Sitwell (1974), Peet (1985), Gaspar et al. (1998), Nash (2005), and Wacquant (2010), among others, can also be included in the realm of environment-behavior theory.

Urban morphology, rooted in the physical-geographic scholarship of Conzen (1968), begins with the premise that societal changes leave behind "material residues," thus forming "culturally distinct 'morphological period[s]'" over time (Nasser 2004, 79). It is through the scrutiny of the physical structure of the urban fabric, the materiality and style of the buildings in the urban fabric, the uses of spaces, etc., that the Conzenian method seeks to achieve in-depth descriptions, and subsequent analyses, of these specific morphological periods. While there are still adamant followers of this strictly-physical, and largely-macro approach to urban analysis, the Conzenian approach has, over time, given way to studies delving into "urban micromorphology (detailed studies of urban house-lots and townscapes)," historico-geographical urban studies, and studies adopting an environment-behavioral theoretical underpinning (Whitehand 1977, 400-401; Whitehand 1978, 94; Smith 2011, 176-177). Along with those mentioned above, the works of Dickinson (1934), Sargent (1972), Ford (1985), Siksna (1997), Conzen (2001), Tsukamoto et al. (2008), to name a few, fall into this category of discourse. The later work of Whitehand (1988) and Whitehand and Morton (2003) in turn, are examples from the urban-morphological discourse wherein the physical-geographic approach has also begun to achieve deep socioeconomic rigor in the description and analysis of various urban phenomena that were, just a few decades ago, often discussed in strictly physical terms.

Within generative-planning theory, the works of Alexander et al. (1977; 1987), Rapoport (1988; 1990), and Oliver (1997) take on predominantly influential roles (Smith 2011, 179). The general premise of generative-planning theory is that bottom-up methods of urban development, far from being chaotic and haphazard, as often assumed by theories espousing the merits of centralized planning regimes, "can achieve outcomes that are more [societally] beneficial than can be achieved by the heavy hand of central planners" (Smith 2011, 179). The works of Hayek (1944; 1960) appear to be seminal precursors to this discursive lens. The overarching principle of such a generative-planning process, in turn, is echoed in one of the underlying premises of this dissertation—that buildings and urban fabrics constructively mature, in terms of their physical and spatial intelligence, by being continuously acted upon by the bottom-up activities of layers upon layers of human socioeconomic agency.

There are, of course, two more discursive realms of importance—normative theory, and city-size theory. In the context of the former, it is important to note that there is indeed a normative component to this dissertation. That is to say, there is an effort to weigh, speaking bluntly, better and worse urban fabrics. Unlike the efforts of Lynch (1961) and Rapaport (1993) however, who attempt to weigh the quality of a city based on its meaning, sense of place, or cosmological ideology (Smith 2011, 180), or the works of Parolek et al. (2008) or Duany et al. (2009), who take on a strictly formal-aesthetic evaluation, this research seeks to analyze the better versus worse urban fabric based on the degree to which said urban fabric supports or hinders the development and maintenance of cross-scalar human socioeconomic agency, and subsequently, urban resilience.

City-size theory in turn, while not being applicable to the more-detailed portions of the research, can still serve to frame the dissertation in a broader theoretical as well as historic narrative. This potential for discursive framing is largely due to the scale at which city-size theory operates—specifically, in that it investigates the broader-scale societal forces involved in urbanization, the establishment of intercity hierarchies, and the nature of initial settlement patterns. The works of Christaller (1966), Berry (1967), and Fletcher (1986; 1995), among others, are often cited as the dominant pieces relating to city-size theory (Smith 2011, 182). The work of Burgess and Park (1925) and the broader Chicago School is often also included in the discourse of city-size theory, but it should be noted that their work also has deep overlaps with urban morphology discourse, environment-behavior theory, and generative-planning theory.

As aforementioned, of the eight categories outlined by Smith (2011), the discursive realms that are more-deeply attached to this dissertation include environment-behavior theory, urban morphology, and generative-planning theory. While other portions of the broader literature certainly serve to frame or root the dissertation in a wider theoretical or historic lens, these three specific realms of discourse are asserted as being of greater relevance due to their understanding of the reciprocal relationship between human agency and the urban fabric, and their avoidance of mono-causal explanations, descriptions, or theories concerning the behavior of cities.

Given this background, the overarching theoretical assertion which this dissertation seeks to test, can be broken down into the following three macro hypotheses:

(1) The interaction between the physical environment and socioeconomic agency is of a complex and reciprocal nature. Leaning on the discursive precedents of Jacobs (1961), Kostof (1993), Brand (1995), Davis (2012), Burdett et al. (2014), among others, this assertion contrasts with the physical-deterministic biases which can be found within various realms of architecture, urban, and physical-geographic theory, and also sits in refutation of the economic-deterministic bias found within various realms of economic geography and urban economics.

(2) These reciprocal relationships form critical parts of a layered process that inclines the built world to become more responsive to the physical needs of a wider range of socioeconomic actors, and inclines socioeconomic structures to become more responsive to the advantages and disadvantages inherent to the physical limitations of the urban fabric. In many respects, this is a hybridization of Conzenian urban-morphological theory and generative-planning theory. Via the Conzenian lens, there are two suppositions that unfold: First, that the urban built world will exhibit physical characteristics and configurations that have been significantly influenced by the layered decision-making processes of socioeconomic actors over time; and second, that urban economies will exhibit structural characteristics and configurations that have been significantly influenced by the layered narratives of physical and socioeconomic change in which they have operated over time. Via the generative-planning lens, it is subsequently argued that these characteristics and configurations will exhibit a quality of physical / spatial or socioeconomic-structural refinement, having been produced through layers upon layers of trial and error. In terms of urban economies, in turn, these structural refinements refer to the development and reinforcement of compensatory

relationships and relationships of productivity and efficiency, as discussed in Section 2.2, and also to the fine tuning of the physical / spatial and architectural / urban scales, locations, and configurations at and with which socioeconomic actors choose to operate.

(3) Informing future architectural and urban projects with the physical / spatial commonalities, patterns, and configurations discerned via the testing of these aforementioned hypotheses, will positively influence the capacity of the built world to attract, maintain, and be acted upon by, a localized diversity of socioeconomic actors. These patterns may include, among others, that certain locations, or combinations of locations within the urban fabric may consistently attract a cross-scalarly more-diverse range of socioeconomic actors over others; that certain building types or clusters of building typologies may consistently support a wider cross-scalar diversity of socioeconomic actors, over others; that certain floor-to-floor height ranges may appeal to a wider range of socioeconomic actors; that certain types of vertical circulation placements in a building's floor plate may allow for a greater diversity of cross-scalar tenants to occupy a floor, without compromising fire or egress codes; that certain interior materials may prove easier to edit by lower-budgeted socioeconomic actors; that certain structural grids may allow for easier and more diverse programmatic sub-divisibility; and so on.

1.3. METHODOLOGY

The following sections include: (1) a brief synopsis of the reasoning behind focusing on the Midtown Garment District for the period of 1930–1980 (Section 1.3.1); (2) the methodological specifics of the research that was undertaken (Section 1.3.2); and (3) the broader methodological discourse under which this research operates (Section 1.3.3).

1.3.1. THE GARMENT DISTRICT

The mid-twentieth century narrative of the Midtown Garment District of Manhattan essentially offers a condensed microcosm of how urban physical and socioeconomic fabrics grow, adapt, decay, change, or at least have observably done so in the relatively-modern day. The story of the Garment District for this time period, as such, contains a set of urban, architectural, economic, social, and political conditions and narratives that correspond with the broader movements of mid-twentieth-century American urban history quite succinctly. Even the historic chronology of the garment industry, with its initial localized economic clustering; followed by the rise of marketing and advertising as a dominant force in the garment economy; the offshoring of apparel manufacturing; the gradual replacement of spaces serving labor-intensive manufacturing with spaces supporting service, financial, and legal industries; the eventual return of home-based garment manufacturing; and so on (Green 1997), though perhaps better documented within the garment industry than most others, is by no means a garment-specific socioeconomic narrative. It is because of this concentrated, yet relatively-comparable history, in turn, that the study of New York City's Garment District proves to be a particularly fertile discursive realm, specifically when dealing with the relationship between the built world and urban socioeconomic structures.

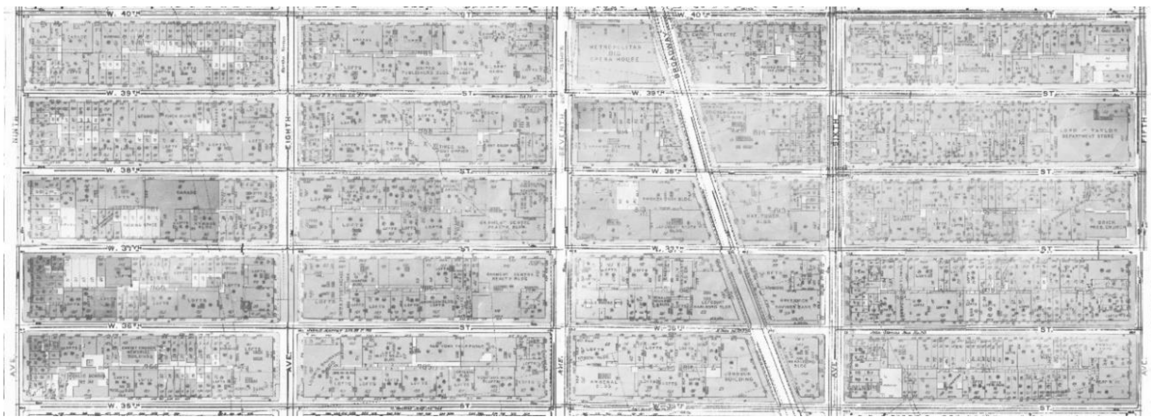


Figure 1: Research area: The Midtown Garment District as bound by 9th Avenue on the west, 5th Avenue on the east, W 40th Street on the north, and W 35th Street on the south.

The decision to focus this research on the Midtown Garment District of New York City, for the period of 1930–1980, is primarily due to: (1) the relatively controlled architectural / urban testing conditions that the Garment District offers, as a platform for understanding and analyzing the relationship between the built world and socioeconomic agency in the context of a global city; (2) the high volume of accessible raw data and published literature concerning both the built world and the socioeconomic structures functioning in the Garment District during the proposed time period; and (3) despite this high volume of data and literature, the lack of research attempting to rigorously understand and analyze the fine-grained reciprocal relationship existing between the physical urban fabric and the urban socioeconomic structures of the Garment District during this time period. The lack of critical research in this specific area in turn frames a much larger discursive gap in the realm of architectural / urban history and theory—a gap which this dissertation endeavors to bridge.

The Garment District presents a considerably clean slate of architectural and urban development, with its larger-scale building stock being rapidly constructed in the 1920s and 30s, and the district's rise to economic power finding root in the same time period (Dolkart 2011, 14). A study of the Garment District starting in the 1930s as such, presents a rather unique opportunity to see how a building stock, the larger-scale portion of which was relatively new, has been edited by, and has influenced, human socioeconomic agency, over several decades—decades during which significant changes in the macro- and micro-scale socioeconomic structure of the garment industry were observed (Green 1997). The choice to extend the period of study to 1980, in turn, has a practical as well as an historic underpinning logic.

In the realm of practicality, the early 1980s are when much of the availability of historic architectural as well as socioeconomic data begins to diminish. This is the primary reason for having to stop the research at this point in time. The data privatization in question is due partially to the general trend that as one gets closer to the current day, what was historic public data naturally starts to become contemporary private data. This trend towards data privatization in the latter decades of the proposed research period however, is also intensified by the various state and federal privacy laws erected during this time, beneath the shadow of widespread and rapid corporate globalization, specifically protecting the financial information of private corporations far more stringently than in prior decades.

The historic reasoning for pushing the research up to 1980 rather than ending it sooner, in turn, is due to the fact that this allows for the inclusion of a critical era in the history of the garment industry in the United States. For, it is in the 1970s that the beginning of the large-scale emigration of the garment industry from the Midtown Garment District is observed. The impact of the radical and rapid restructuring of an industry upon the built world, and in turn what role the built world had to play in this rapid change—these are critical points that were attempted to be addressed by extending the research up to 1980.

While the emigration of urban manufacturing is often pinned to broader forces of economic globalization, it actually appears that there is a much more intricate narrative behind this historic movement. For instance in the late 1980s, the garment industry did in fact begin to trickle back to the New York City area in some form, but it did not predominantly return to the Midtown Garment District. It rather relocated largely to Chinatown, the Lower East Side, Brooklyn, and parts of New Jersey (Soyer 1999, 42). The question is, why did the returning garment industry begin to exclude the Garment District from its process of relocation? Were there architectural and urban factors influencing the initial process of emigration, as well as the process of return? If so, what architectural / urban and physical / spatial differences, as well as shifts in municipal policies, can be observed in the urban fabric of the Garment District in the 1930s, compared to that of the 1970s and 80s? Did these changes support this geographic shift of economies?

These latter unanswered questions begin to point to a relatively-large gap in the overall literature concerning Garment-District studies focused on the built world and socioeconomic structures, despite the discursive depth existing in both realms taken in isolation. In the context of architectural and urban history for instance, works such as that of Dolkart (2011) do indeed provide critical insight into the physical history of the Garment District. In the context of socioeconomic structures, in turn, works such as that of Green (1997) do similarly offer rigorous analyses of the micro- and macro-scale socioeconomic narratives of the garment industry. Despite this depth of information on both the physical and socioeconomic structures of the Garment District however, there is very little written on the robust relationship existing between, on the one hand, the story of the built world of the Garment District, and on the other, the story of the socioeconomic actors that formed its intricate socioeconomic fabric. It is this discursive gap, ultimately, that this dissertation seeks to address.

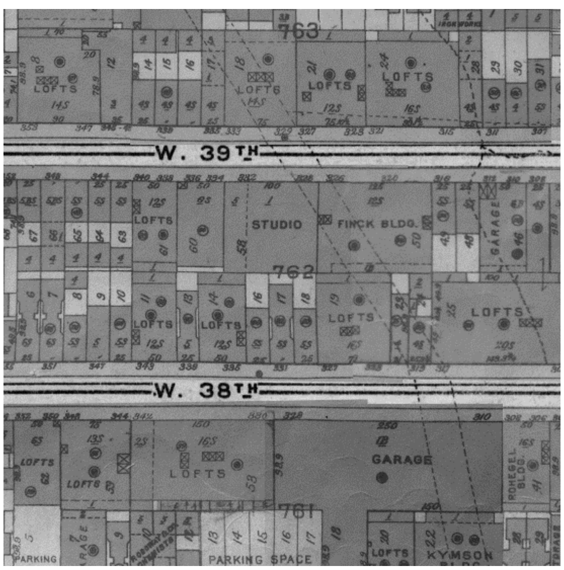
1.3.2. RESEARCH PHASES

Initially, this research was structured around two main phases: (Phase I) A mixed-method study looking into the physical and socioeconomic changes observed in the Garment District over the period of 1930–1980; and (Phase II) a mixed-method study looking at the physical and socioeconomic narratives of a smaller sample of buildings that consistently supported a higher diversity of socioeconomic actors for the given time period, as derived from the first phase. Upon completion of Phase II, one further research phase was undertaken in order to further test the findings of Phase II—namely: (Phase III) a mixed-method study looking at the physical and socioeconomic narratives of a smaller sample of buildings that consistently supported a lower diversity of socioeconomic actors for the given time period. The following two sections outline the specific details involved in these three research phases (Section 1.3.2.1 and 1.3.2.2).

1.3.2.1. PHASE ONE

Phase I of this research was formulated as a mixed-method study focused on the documentation and analysis of the physical and socioeconomic changes observed in the Garment District from 1930–1980 at a macro level. The objective was: (1) to understand how the physical and socioeconomic fabrics of the Midtown Garment District changed during this period; (2) to begin to analyze how architectural / urban characteristics, typologies, and configurations historically influenced the development and composition of the socioeconomic fabric, and vice versa; and (3) to begin to analyze whether certain commonalities, patterns, and overarching processes could be discerned via the historic study of these narratives of physical and socioeconomic change at the district scale.

The data collected, coded, and analyzed during this phase included the physical and socioeconomic specifics concerning a total of 2,280 buildings and 53,493 socioeconomic actors, over the years of 1934, 1942, 1958, 1963, and 1973. The New York Public Library, the Library of Congress, the Cornell University Library, and the Boston Public Library were the four main resources utilized during this research phase. Substantial quantities of microfiche and physical archival sources were examined, documented, and recoded, with Sanborn fire insurance maps and reverse business directories being of particularly high utility[1]. The digital archives of the New York Times, as well as the works of some key authors within the discourse of garment manufacturing, namely Belfer (1954) Waldinger (1986), Green (1997), Soyer (2004), Chin (2005), among others, also proved of great use, specifically in understanding the broader historic narratives underpinning the Garment District during this time period.



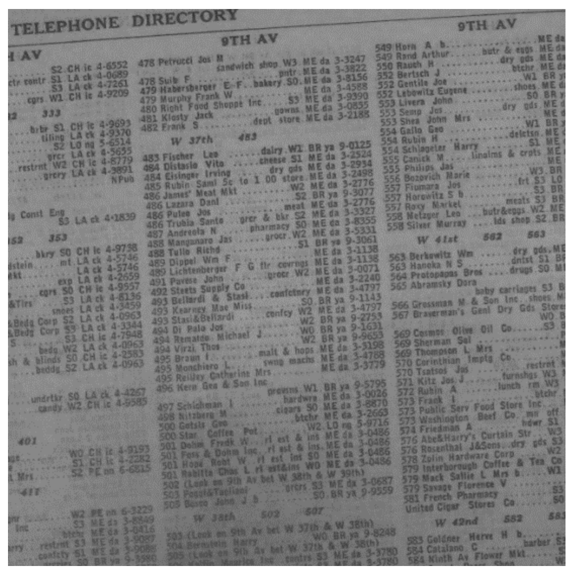


Figure 2, 3: Examples of raw data. (Left) Excerpt from a 1934 Sanborn map of the area; (right) excerpt from a 1958 reverse business directory for the area.

[1] In May of 2017, the New York Public Library was contacted in regard to the microfiche examined for this time period, and it has been verified that all of the reverse business directories for these year sets have been updated in full and are now in Room 119 of the NYPL, with 1934 documented on reels 10–11, 1942 on reels 26–27, 1958 on reel 47, 1963 on reel 52, and 1973 on reel 64.

The main questions that were asked within Phase I were:

- How did the physical- and socioeconomic-geographic maps of the Garment District change during this period?
- Did specific architectural / urban characteristics, typologies, and configurations consistently support, and subsequently influence the development of specific socioeconomic compositions and configurations, and vice versa?
- What were the broader historic forces underpinning the physical and socioeconomic changes observed in the Garment District from 1930–1980?

1.3.2.2. PHASES TWO AND THREE

Phase II and Phase III of this research were structured as mixed-method studies further analyzing the physical and socioeconomic specifics of a smaller sample of buildings that consistently supported a higher (Phase II) and lower (Phase III) diversity of socioeconomic actors from 1930–1980 in the Midtown Garment District of New York City, as determined through the data uncovered in Phase I. The objective was: (1) to understand how the buildings in question changed, internally and externally, during this time period; (2) to understand how the socioeconomic fabrics supported by these buildings changed during this time period; and (3) to analyze whether certain commonalities or patterns became visible when comparing these narratives of change.

A total of fifteen buildings were studied during Phase II, and a total of five buildings were studied during Phase III. While it would have been ideal to study a greater number of buildings in Phase III, it is important to keep in mind that Phase III was organically developed, mid-research, as a method for further testing some of the findings unveiled during Phase II. In order to obtain the same depth of information per building as was obtained in Phase II, while still remaining within a viable research timeline therefore, an overall reduction of sample size had to be pursued in Phase III, with a systematized-randomization process being put into place in order to avoid selection bias. In any case, for each building that was studied in Phase II and Phase III, the following information was obtained, compiled, analyzed, and reproduced in a legible format: (1) Two sets of architectural drawings, documenting the physical / spatial conditions of the building as close to 1930 and 1980 as was possible to obtain information for; and (2) the detailed occupant listings for each building from 1933, 1942, 1958, 1963, and 1973.

In order to unveil the intricacies of the architectural narratives being pursued during these phases, a range of resources had to be utilized. New York City's Department of Buildings provided a significant portion of this architectural information, namely through their extensive digital and analog archives which contained detailed originals of New Building Permits, Demolition Permits, Alteration Permits, Certificates of Occupancy, among other such critical building documents. A range of architectural, engineering, and real estate offices in Manhattan also provided critical data for the buildings being studied. The large majority of the documents obtained from these latter sources however were hand-drawn plans, elevations, and sections, often covering only portions of the buildings being studied. A substantial degree of compilation was thus required prior to re-drafting all of the architectural drawings for the buildings into a legible and consistent format. In terms of architectural information, for each of the twenty buildings studied, two complete sets of plans were produced (from a date as close as possible to 1930 as well as 1980), along with one street-front façade (from a date as close as possible to 1980).

In regard to the socioeconomic narratives in question, detailed occupant listings were obtained through the New York Public Library, the Library of Congress, and the Boston Public Library. Extensive amounts of microfiche and physical archival sources were examined, documented, and recoded. After this process, some socioeconomic information still remained missing, either due to the illegibility of the initial archival documents, or due to data points simply being absent from the sources used. Much of these gaps in data were subsequently filled through research done in local newspaper archives. The digital archives of the New York Times proved of great substance in this regard. In the end, for each of the twenty buildings studied, a complete and detailed occupant list was produced for the years of 1933, 1942, 1958, 1963, and 1973.

Detailed historic narratives were also compiled and produced for each building during the aforementioned newspaper archival work, but since it was required that the building addresses themselves be anonymized due to various non-disclosure agreements signed while obtaining the necessary architectural / spatial information, these narratives were omitted from the research.

During Phase II and Phase III, the broader questions that were asked included:

- Which buildings in the Garment District consistently supported a higher and lower diversity of socioeconomic actors throughout the period of 1930–1980?
- How did the physical and socioeconomic characteristics and configurations of these buildings change over time?

- What deep- and surface-structural commonalities, patterns, and processes of change can be discerned in studying these parallel narratives of physical and socioeconomic change?
- What were the broader historic narratives surrounding these buildings? Were there overlaps, among the buildings examined, in the context of these narratives?

1.3.3. UNDERPINNING METHODOLOGICAL DISCOURSE

In reviewing the literature inquiring into the relationships between systemic structures and systemic actors, one uncovers a series of recurring methodological shortcomings, with theoretical implications. These include: (1) the macro v. micro dilemma; (2) the object v. motion dilemma; and (3) the reality v. ideology dilemma.

(1) The macro v. micro dilemma: Descriptive thickness of the macro scale is achieved while the descriptive thickness of the micro scale is neglected, or vice versa. Clarkson (1970), in attempting to bridge the "macro-micro dichotomy," asserts that both scales of inquiry must be embraced in order to establish more-cumulative and -robust observations, understandings, and analyses of phenomena (Clarkson 1970, 716). Clark (1998), echoes this argument in contending that economic geography, when looked at from the macro-scale alone, can readily lead towards oversimplified and idealized problems, and "stylized facts," and rather, that a "fine-grained, substantive appreciation of [economic] diversity" must be used to counterbalance this tendency (Clark 1998, 75). Ghilarov (2001) points to a similar dilemma in the field of ecological studies, wherein details have often historically been "sacrificed" in the pursuit of stylized laws (Ghilarov 2001, 360). Dikshit (1977) points to the inverse of this phenomenon within the history of political geography, wherein the field, in order to distance itself from the "tainted" macro-oriented study of "Geopolitik," pursued a "blanket ban on generalization," focusing more on micro phenomena, and thus effectively began to lose the discursive criticality that the macro approach could provide (Dikshit 1977, 235+237–239).

(2) The object v. motion dilemma: Descriptive thickness of the static or synchronic state of a system is achieved, while the descriptive thickness of its dynamic or diachronic behavior is neglected, or vice versa. Fortin et al. (2003) summarize this dichotomy quite succinctly, in observing the two commonly-found discursive poles in the realm of ecological studies—with the study of spatial patterns occupying one side, and the study of dynamic mechanisms the other (Fortin et al. 2003, 204). They assert, ultimately, that the two are not as incompatible as is often assumed (Fortin et al. 2003, 205-206). Similarly, Clarkson (1970) emphasizes the need to adopt an "ecological approach"

to geographic studies in order to attain a more "process-oriented" frame of inquiry towards spatial studies (Clarkson 1970, 716). Barnes (1998), taking on the context of historiographic studies, argues that observations of, or theories based upon, a deep description of the paused state of a societal phenomenon must be grounded in observed historic processes in order to avoid floating above the actual fabric of history (Barnes 1998, 95). Massey (1999), in turn, offers a clarification of the other side of this dilemma, asserting that the object-oriented study of spatial phenomena, and the theorization of place dependence, must be used to balance the process-oriented study of chronological processes, and the theorization of path dependence (Massey 1999, 273). Lichstein et al. (2002) summarize these points quite well, in stating that "attention to spatial pattern can lead to insights that would have been otherwise overlooked, while ignoring space may lead to false conclusions about ecological relationships" (Lichstein et al. 2002, 445).

(3) The reality v. ideology dilemma: Systems are observed and analyzed through ideological or theoretical biases, resulting in hyper-simplified and unrealistic systemic models which tend, in turn, to reflect ideology, rather than explain observed reality. Austin (1999), focusing on the "clash of paradigms" within the field of ecological studies, emphasizes the innate discursive insularity produced by such ideologically-blinded research (Austin 1999, 170). Bauer (1999) points to a similar polarization between physical geography and human geography (Bauer 1999, 677). Barney (2001) echoes this sentiment in analyzing the ideological differences underpinning neoclassical microeconomics v. resource-based microeconomics. Sloep (1993) in turn asserts that while the unveiling of ideological biases behind seminal theories may lead to a healthy scrutiny of the existing discourse, the extreme shift towards purely-descriptive endeavors is "an overshoot" (Sloep 1993, 232). Rather, it is suggested, predictive theory and normative philosophy should be pursued, but only when anchored upon a robust "descriptive base" (Sloep 1993, 232).

In the context of these three methodological dilemmas, this dissertation was structured in the following manner in order to overcome these common discursive gaps:

(1) The macro v. micro dilemma. Although the quantitative research component of this dissertation largely operated on the sub-district scale, a significant amount of time was dedicated to establishing qualitative analyses at a broader geographic scale. While it was impossible, due to time constraints, to achieve descriptive thickness on both micro and macro scales of analysis, the objective of this dissertation was to frame, or situate, the micro-level analyses within the economic, social, and political developments operating at a larger scale of the urban fabric.

(2) The object v. motion dilemma. This was addressed on two levels: (1) Rather than attempting to achieve descriptive hyper-thickness solely for a single point in history (as is often the case within singularly cross-sectional or synchronic studies), the quantitative research component of this dissertation was opened up in order to collect data and perform analyses over a series of historic points (as is done within longitudinal or diachronic studies); and (2) this quantitative research, looking at the period from 1930–1980 over ten-year segments, was situated within the broader qualitative history of the Midtown Garment District.

(3) The reality v. ideology dilemma. While this research does frame specific hypotheses in regard to the nature of the relationships between the built world and socioeconomic agency, there is no preset theoretical bias that this dissertation is attempting to forcibly rationalize—that is to say, these hypotheses serve as discursive points to be tested, rather than as dogmatic constraints upon which to blindly build the eventual conclusions and points of discussion of this text. What has been attempted therefore, in this critical study of the Midtown Garment District, is the unfettering of any ideological blind-spots that may have been loitering behind the methodological and theoretical underpinnings of this research topic, in order to gain a robust and accurate view of the physical and socioeconomic narratives inherent to the urban condition in question.

CHAPTER II

PHASE ONE: INTRODUCTION

Phase I of this research was framed as a mixed-method study focused on the documentation and analysis of the physical and socioeconomic narratives observed in the Midtown Garment District over the period of 1930–1980, over ten-year increments, at a macro level. The objective was: (1) to understand how the physical and socioeconomic fabrics of the Garment District changed during this period; (2) to begin to analyze how architectural / urban characteristics, typologies, and configurations historically influenced the development and diversity of the socioeconomic fabric, and in turn how socioeconomic structures historically influenced the development of architectural / urban characteristics, typologies, and configurations; and (3) to assess the commonalities, patterns, and overarching processes that could be discerned via the historic study of these narratives of physical and socioeconomic change at the district scale.

The data collected, coded, and analyzed during this phase encompassed the physical and socioeconomic specifics of a total of 2,280 buildings and 53,493 socioeconomic actors, over the years of 1934, 1942, 1958, 1963, and 1973. The New York Public Library, the Library of Congress, the Cornell University Library, and the Boston Public Library were the four main resources utilized during this research phase. Substantial quantities of microfiche and physical archival sources were examined, documented, and recoded, with Sanborn fire insurance maps and reverse business directories being of particularly high utility[2]. The digital archives of the New York Times, as well as the works of some key authors within the discourse of garment manufacturing, namely Belfer (1954) Waldinger (1986), Green (1997), Soyer (2004), Chin (2005), among others, also proved of great use, specifically in understanding the broader historic narratives underpinning the Garment District during this time period.

In the following sections (Sections 2.1 through 2.5), one will find: (1) a brief overview of the intricacies of the garment industry, and some of the narratives underpinning contemporary smaller-scale garment production in New York City; (2) detailed information regarding the nature of, and changes observed within, the physical fabric of the Midtown Garment District, for the years of 1934, 1942, 1958, 1963, and 1973; (3) detailed information regarding the nature of, and changes

[2] In May of 2017, it was verified that all of these reverse business directories are now in Room 119 of the NYPL, with 1934 documented on reels 10–11, 1942 on 26–27, 1958 on 47, 1963 on 52, and 1973 on reel 64.

observed within, the socioeconomic fabric of the Midtown Garment District for this same time period; (4) a further analysis of the physical and socioeconomic fabrics of the Garment District, framed in the two sections prior, utilizing a more robust analytical method; and (5) a brief conclusions and discussion section serving to summarize the findings of the prior sections of this research phase.

2.1. INTRICACIES OF THE GARMENT INDUSTRY

The invention and subsequent global popularization of the sewing machine in the mid-to-late nineteenth century can be rightfully conceptualized as the revolutionizing moment within the history of contemporary garment production (Green 1997, 36–37). Light, mobile, and adaptable to both small- and large-scale production runs, this rather fundamental advance in mechanized sewing technology supported the activation of a range of socioeconomic and spatial niches within the urban fabric to the potentials of modern garment manufacturing (Green 1997, 37). By the 1900s, the ready-made garment industry found itself occupying a dominant economic role within the urban economy (Chin 2005, 7).

Figure 4: "Devushki Tatari:" Tatar women with singer sewing machine, early Soviet period, est. 1918–1934.[3]

[3] New York Public Library, Slavic and East European Collections

Unlike heavier industries however, the potential impacts of technological innovation within the garment industry, as within other comparable light industries, remained inherently limited:

> "Stitch-per-minute figures alone are misleading. Speed in sewing is only one part of the production process (37 percent of total work time, according to one study). Cutting and pressing, and especially cloth handling, and preparation and movement of goods, are time-consuming activities" (Green 1997, 39)

For similar reasons, the capacity to adapt garment production to contemporary assembly-line manufacturing processes, and potentially move such processes beyond the complex socioeconomic fabric of the city into the rural, suburban, or international realm, has remained constrained. Historically, only garments that have featured more standardized characteristics, and have remained predictably staple goods within an inherently seasonally-volatile fashion market, were able to be absorbed into the global assembly line—e.g., "coats, men's clothing, and undergarments" (Green 1997, 39; Waldinger 1986, 139).

Given these constraints, the economic fabric of modern garment production has tended to lend itself to bifurcation—composed of the large-scale manufacturer focused on standardized staple garments on the one hand, and the small-scale manufacturer focused on short-run seasonal items, with the flexibility "to absorb the instability in the market" on the other (Waldinger 1986, 95). The middle-sized factory in turn has often found itself in a rather difficult position, with neither the economies of scale of the larger-scale producer, nor the flexibility, speed, and minimal inventory requirements of the small-scale producer (Waldinger 1986, 95).

That one side of this bifurcated economy, the smaller-scale garment factory, tends to consistently occupy the urban fabric, in turn, does not appear to be a spontaneous phenomenon, for the fact remains that the density and socioeconomic complexity of the city offer a range of advantageous relationships for the smaller-scale production setup. Specifically in the context of New York City for instance, a garment entrepreneur can readily find: (1) a substantial and varied supply of rental factory space, oftentimes already equipped with the basic furnishings needed for a garment factory (Waldinger 1986, 140; Chin 2005, 68); (2) access to a vast supply of affordable labor, consistently refreshed via new waves of immigration (Waldinger 1986, 97); (3) a stable stock of discounted, slightly-obsolete garment machinery, well-suited for smaller-scale manufacturing setups focused on "styled items that cannot be worked on at high speeds" (Waldinger 1986, 137); and (4) a "unique concentration of designing, merchandising, supplying, and wholesaling activities" already anchored within the urban fabric (Waldinger 1986, 97).

In terms of startup costs for a smaller-scale manufacturing operation, which based on the work of Waldinger (1986) and Chin (2005) one can assume to be somewhere between a twenty-five- and forty-person factory, these urban parameters lend the garment entrepreneur very concrete economic benefits. Chin (2005) for instance, based on her survey of thirty garment-factory owners in the early 2000's, estimates that an investment of around $50,000–$100,000 would have sufficed for a contemporary garment production startup in New York City during that time period (Chin 2005, 68). Waldinger (1986) similarly, estimated that around $25,000 (or around $50,000–$60,000 in the current day, when adjusted for inflation) would be what was required for purchasing the equipment needed for a manufacturing facility of such a scale, located in the same locale during the 1980s—an initial expenditure that would be further reduced by the low down payments ($6,000–$7,000, 1986 dollars) and sub-market interest rates apparently often provided by equipment sellers in New York (Waldinger 1986, 138).

In regard to funding structures therefore, one finds that smaller-scale garment production tends to "lie outside the network of big business, the security markets and investment banks" with each manufacturing enterprise being typically anchored around one to three partners (Belfer 1954, 189). Whether it be via money pooled through a group partnership, funds borrowed from close socio-cultural ties, small loans acquired from local banks, or gradually accrued individual savings, the small-scale garment entrepreneur tends to utilize eclectically-sourced financing in order to break into the inherently low-capital territory of the garment industry (Chin 2005, 68; Waldinger 1986, 137).

The character of the smaller-scale garment factories that arise, in turn, tend to have a wide range of variability, whether it be in terms of factory culture, its architectural qualities, the socioeconomic relationships formed and supported, etc. The work of Chin (2005) goes into robust detail as to the two basic polarities that one tends to encounter. The first being exemplified by the following description of a Chinese-owned garment factory:

> "[…] I climb up the dark and dusty stairways to the garment shops […] these buildings have been around for at least one hundred years. […] The windows are huge, allowing for plenty of natural light. On all the landings, doors are thrown open. When I peek in, I see rows and rows of sewing machines, set three or four feet apart. On one side of the shop by the windows are two pressing machines used for ironing. In another little area is a family altar with offerings. And in yet another area are about a half-dozen large rice cookers, which are steaming rice for lunch. […] Each little area is personalized. Each woman has placed a black

> cushion on her chair. Each woman has brought snacks, ranging from crackers to candy to dried plums arranged in a tin on her sewing table. […] Some women are discussing their children. Some have already started working. Some are getting ready to work—gathering threads and opening up their bundles. […] Some are still coming in […] No one uses the punch clock. […] Over by the pressers is a finishing area where the garments are hung, bagged, and tagged. […] Bundles of cloth are all over. The space seems tight for forty workers and materials. The owner's office is close to the entranceway—no one is there yet—but I notice that the office is small and cramped, dominated by a huge calendar that lists orders and due dates.'" (Chin 2005, 28+30)

The second polarity, on the other hand, is epitomized by the following description of a Korean-owned garment shop:

> "Many workers wait to ride up in the freight elevators. Workers seem to get off at almost every floor. […] There are large open loft spaces, but these buildings are not as old. The elevators are more modern, and the spaces appear to have been renovated. There are tiles on the floor and on the ceiling. The workers file in, line up to punch their time clock, and sit down at their machine. Each worker's space is larger than the space given to the Chinese workers but less personalized. The work has already been distributed. A bell rings at 8:30 and all the machines begin. At the sound of the bell all chit-chat suddenly ends, and all one can hear is the loud whir of the machines. […] The Korean owner's office is near the entrance. […] The office is large with a big desk and a rack with samples of the clothes that the factory is producing." (Chin 2005, 30)

In terms of hiring, wage structures, and work expectations too, there are rather-striking differences that Chin (2005) observes in comparing these two types of manufacturing setups. Chinese-owned garment factories for instance tend to: (1) use socio-cultural referral networks rather than direct advertising, as a means of employee acquisition; (2) pay workers based on number of garments produced, i.e., piecework; (3) actively support apprenticeship; (4) offer flexible working hours to employees; and (5) indirectly or directly utilize the socio-cultural presuppositions tied into this economic framework as a means of keeping demands for higher wages inhibited (Chin 2005, 31+72+120). Korean-owned garment factories on the other hand, tend to: (1) use direct advertising for employee acquisition, and actively avoid social or kinship referrals; (2) pay workers based on an hourly rate; (3) actively avoid apprenticeship; (4) frame a very specific and inflexible workday;

and (5) indirectly or directly utilize the lack of interpersonal relationships within the firm as a means of keeping labor costs low (Chin 2005, 31+109–112). In the end, both systems offer specific advantages and disadvantages. They organize their workforces differently, approach hiring differently, approach manufacturing differently, and yet both remain "profitable and competitive with each other" (Chin 2005, 146).

In the end however, as critical and crucial as the seminal works of Belfer (1954), Waldinger (1986), Green (1997), and Chin (2005), among others, are in contributing to the discourse of modern garment production, there is still seemingly a critical part of the narrative that is missing. Namely, there is a false presumption as to what the small scale actually is, that is persistently floating beneath the surface of the literature in question. This presumption in turn has tended to operationalize the strategic erasure of the even smaller scale garment firm from the dominant discourse—that is, by classifying such production operations under the category of informal manufacturing, or sweatshops, the smaller-scale invariably has become ostracized from the discussion of urban economics. It is precisely within this discursive gap, as the following sections and phases of research will continue to show, that this research finds its anchor. The following images, in turn, offer a brief glimpse into the nature of this scale of production.

Figure 5: "'A corner in an old time sweatshop.' Women sewing by hand in the front of the shop. Men using sewing machines in the back of the shop," ca. 1910.[4]

[4] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908–1923.

Figure 6: "'Small garment shop in N.Y. Tenement.' Men and women sewing near the windows in an early garment shop," ca. 1908.[5]

Figure 7: "Cutters, pressers, and other workers in a small garment shop," est. 1910.[6]

[5] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908–1923.
[6] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908–1923.

Figure 8: "Several men sewing garments in factory setting," est. 1910.[7]

Figure 9: "Men and women in a garment shop, hand and machine sewing surrounded by a pile of fabric bolts and floor covered in cloth scraps," est. 1910.[8]

[7] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908–1923.
[8] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908-1923

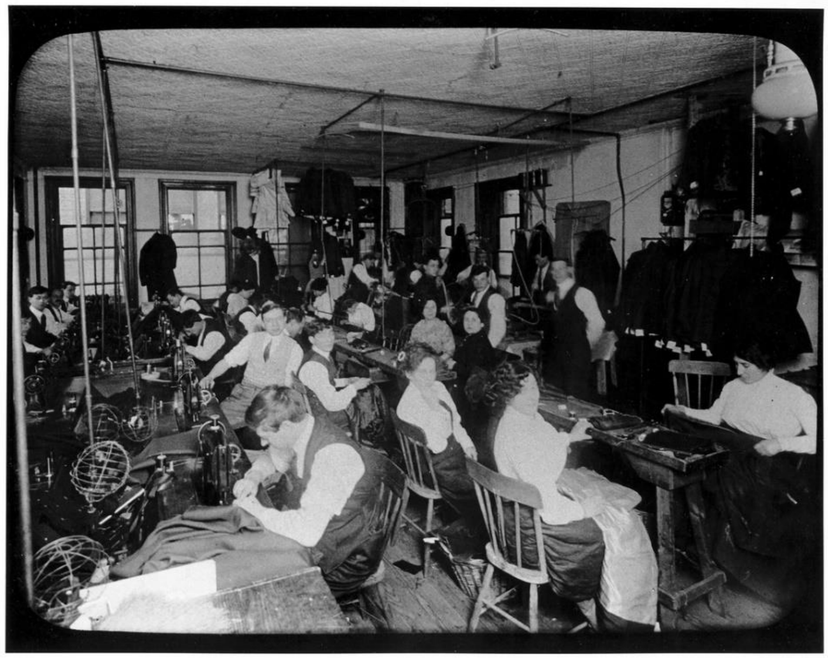


Figure 10: "Long rows of workers in an early shop scene. Men are working by sewing machine, while women are sewing by hand," est. 1910.[9]

Figure 11: "Two women and men working in an early garment shop," est. 1910.[10]

[9] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908-1923
[10] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908-1923

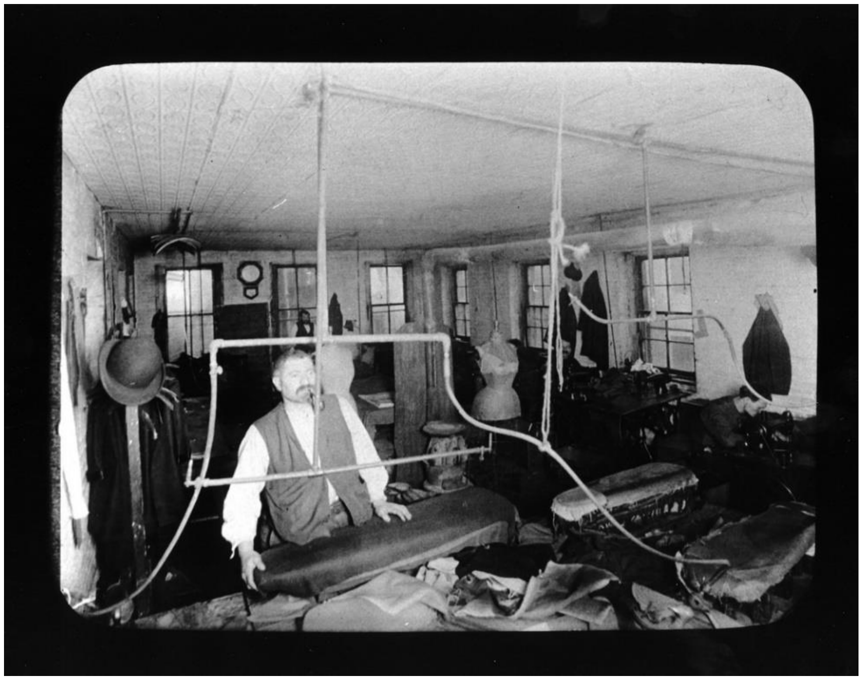


Figure 12: "A man preparing to press a garment in an early garment factory" est. 1910.[11]

2.2. THE PHYSICAL FABRIC AT A MACRO SCALE

Encompassing twenty-five blocks in total, the portion of the urban fabric being studied in this dissertation is located nineteen blocks south of the southern edge of Central Park. Colloquially, this area is known as the Midtown Garment District, or simply, the Garment District.

While it is often implicitly assumed that there are precise and generally accepted borders binding this portion of the Midtown urban fabric, these boundaries in reality seem to be much softer, much blurrier than frequently presupposed. At the smaller scale of buildings and industry for instance, in all the data sets that were examined for this research, a wide range of garment-specific actors and garment-centric structures were observed in the urban fabric lying immediately outside of these twenty-five blocks. Furthermore, aside from this socioeconomic and architectural trickling into the cityscape immediately surrounding the Garment District, it is important to note that there are also garment-centric nodes of significant density in rather close proximity to the Midtown Garment District, with Chinatown, and the Lower East Side for instance also supporting a robust garment-centric physical and socioeconomic fabric, just forty blocks south.

[11] The Kheel Center for Labor-Management Documentation and Archives, New York Call Photographs, ca. 1908-1923

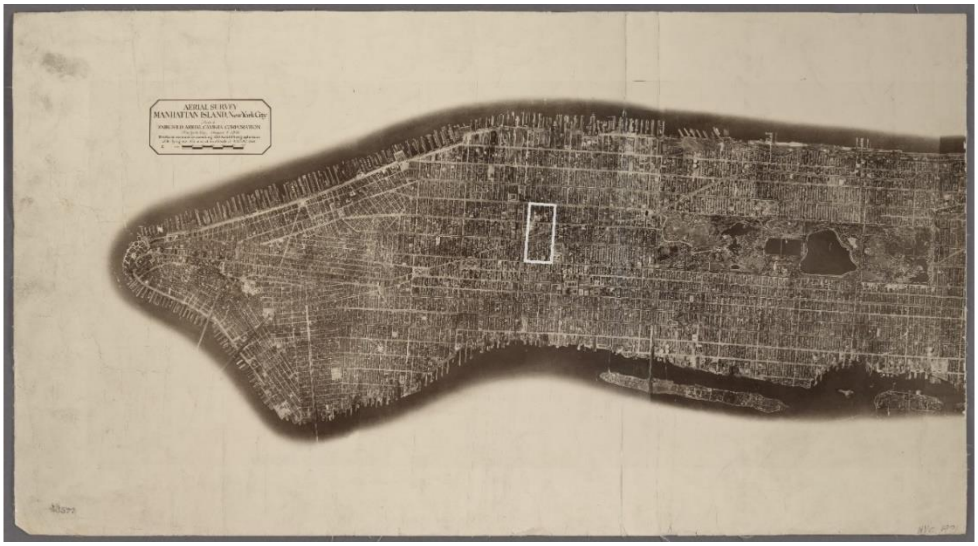


Figure 13: Aerial survey, Manhattan Island, New York City, 1921,[12] with white rectangle indicating area of study added by author. North is right.

That being said, it is undeniable that these twenty-five blocks in question supported, at least for the year sets being studied, an anomalously high concentration of garment-specific actors and garment-centric buildings. A more precise way to understand this locale therefore, seems to be to conceptualize it as a concentrated manufacturing node which naturally trickled, to a degree, into its immediate and extended urban surroundings, and stood connected to a range of similar such nodes of differing scales and densities, within the extended urban fabric. For the purposes of this research, the boundaries established in regard to the Midtown Garment District were: 5th Avenue on the east, 9th Avenue on the west, W 40th Street to the north, and W 35th Street to the south, as seen below.

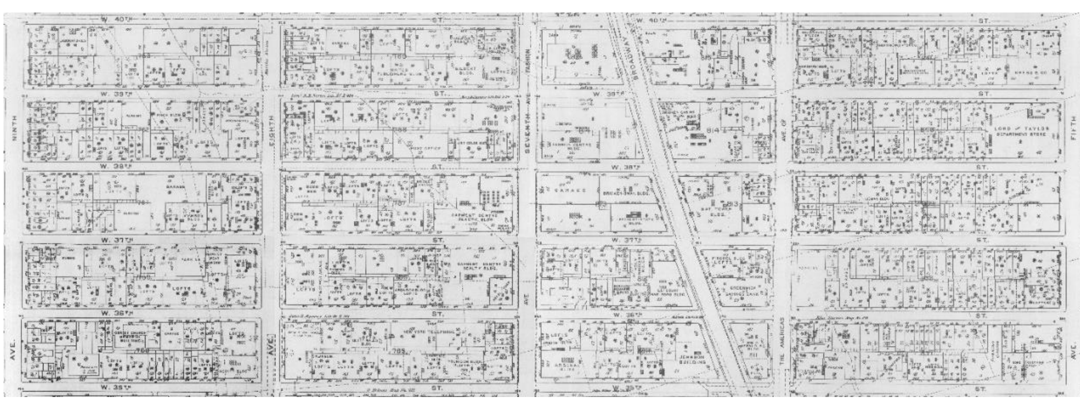


Figure 14: Sanborn Fire Insurance Map, Garment District, 1934. North is up. The easternmost boundary is 5th Avenue, the westernmost is 9th Avenue, the northernmost is W 40th Street, and the southernmost is W 35th Street.

[12] Lionel Pincus and Princess Firyal Map Division, The New York Public Library. "Aerial survey, Manhattan Island, New York City" *The New York Public Library Digital Collections*. 1921. Web.

Within the area in question, the building stock ranged from the very small to the very large, from one story to forty-three stories, and from 2,000 gross square feet to roughly 1,900,000 gross square feet per building. This rather vast range of scale and size is well exemplified by the array of architectural species found in the Garment District, an abbreviated spectrum of which is depicted below.

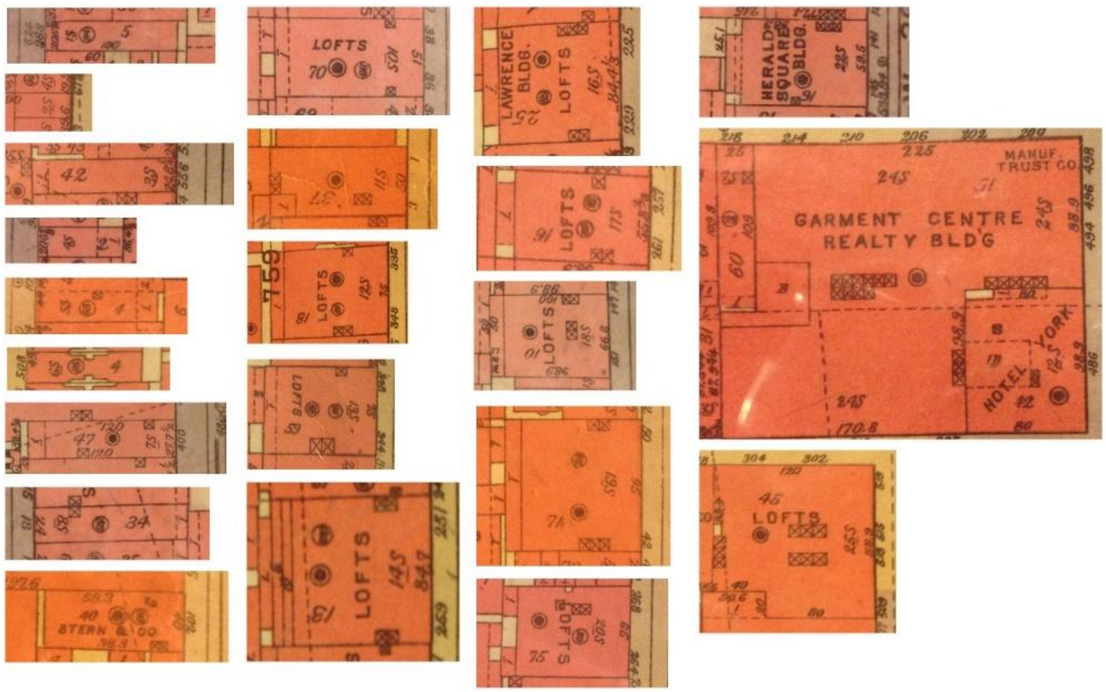
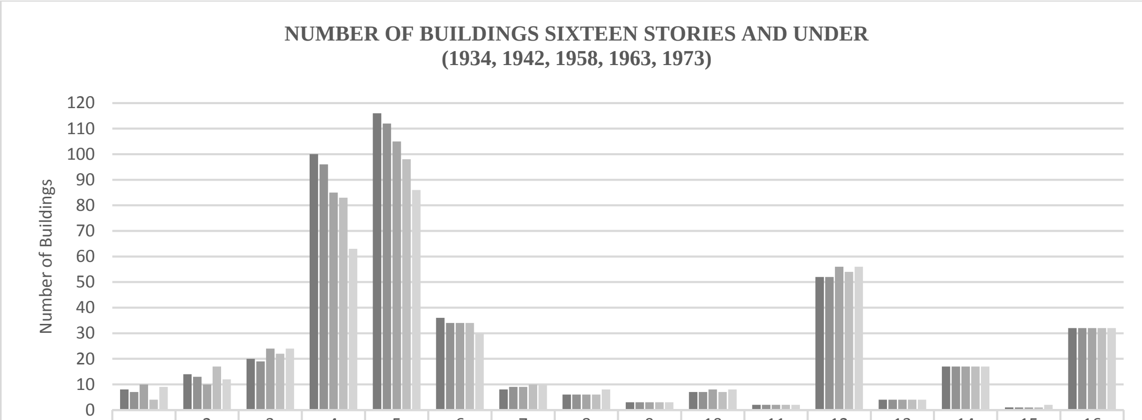
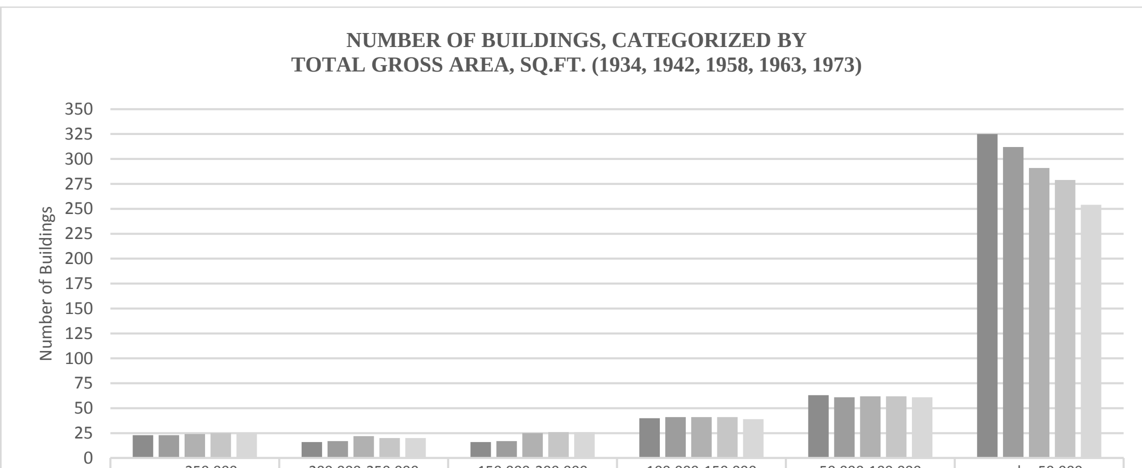


Figure 15: Example range of architectural species in the Garment District, no set scale, but all are set to same scale (1934).

In terms of sheer numbers, there were 483 buildings observed in 1934 in the Midtown Garment District; this number dropped to 471 by 1942, 465 by 1958, 453 by 1963, and had diminished to 425 by 1973. As can be seen in the graphic below, this numeric decline in the building stock occurred primarily in buildings that were between four and five stories tall, and under 50,000 square feet in total gross area.



	1 story	2 stories	3 stories	4 stories	5 stories	6 stories	7 stories	8 stories	9 stories	10 stories	11 stories	12 stories	13 stories	14 stories	15 stories	16 stories
1934	8	14	20	100	116	36	8	6	3	7	2	52	4	17	1	32
1942	7	13	19	96	112	34	9	6	3	7	2	52	4	17	1	32
1958	10	10	24	85	105	34	9	6	3	8	2	56	4	17	1	32
1963	4	17	22	83	98	34	10	6	3	7	2	54	4	17	1	32
1973	9	12	24	63	86	30	10	8	3	8	2	56	4	17	2	32



	over 250,000	200,000-250,000	150,000-200,000	100,000-150,000	50,000-100,000	under 50,000
1934	23	16	16	40	63	325
1942	23	17	17	41	61	312
1958	24	22	25	41	62	291
1963	25	20	26	41	62	279
1973	25	20	26	39	61	254

Figure 16, 17: (top) Number of buildings by number of stories; and (bottom) by total gross area (1934, 1942, 1958, 1963, 1973)

While there was some replacement of this diminishing smaller-scale building stock with the construction of new larger buildings, there was also, between 1934 and 1973, an increase observed in the number of vacant lots and parking lots in the Garment District, as seen in the following maps.

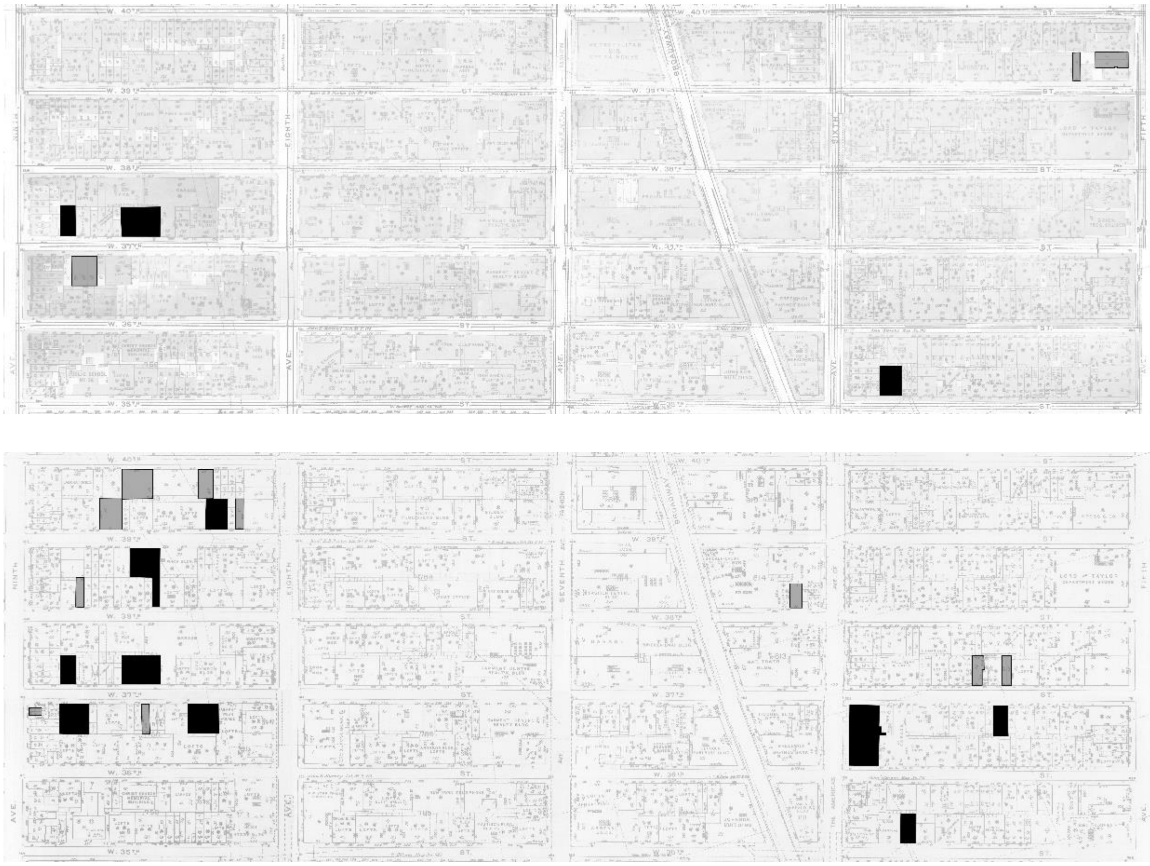


Figure 18, 19: (top, 1934; bottom 1973) Map of the Garment District showing parking lots in black, and vacant lots in grey. North is up.

It is important to note that in parts of the discourse concerning the Midtown Garment District, there is a floating presumption that the building stock that is observed there today, arose from a blank slate in the early twentieth century. For instance Dolkart (2011, 14) asserts, "[The Garment District's] streets are lined with skyscraper industrial lofts and office and showroom buildings, almost all of which were erected in a ten year period following World War I." If this statement is read casually, one can readily fall to the impression that prior to the early 1920s, the Garment District effectively existed as *tabula rasa.* However, the critical point to recognize is that Dolkart (2011) in this case, is referring to the rise of a specific architectural species in the area—namely, building typologies of large and tall character.

As can be seen in the two images on the following page, it is of course true that the overall urban fabric of this area started to become more and more occupied with larger and taller structures over time. However, it is quite false that prior to the 1920s, a blank-slate condition existed there. Similarly false is the notion that the smaller scale architectural species which historically occupied the urban fabric that was to become the Midtown Garment District, simply vanished over the course of time. As shown in the figures prior, structures of this smaller scale did of course diminish in number, but they were not replaced in their entirety by any means. As this dissertation attempts to frame, in fact, these smaller-scale architectural species seem to have played a critical and substantial role in the supporting of a rich and diverse socioeconomic fabric over time. The current discursive neglect from which *the small* suffers, indeed points to a rather significant discursive gap or blind spot—namely, that there is an ingrained or unconscious proclivity to focus on the larger scale, in terms of architecture, urbanism, and socioeconomics; and that there is a similar tendency to simply overlook, or preemptively negate the significance of, the architectural and socioeconomic narrative of the smaller scale, the intricate, and the fine-grained, as mentioned in the concluding paragraph of the previous section.

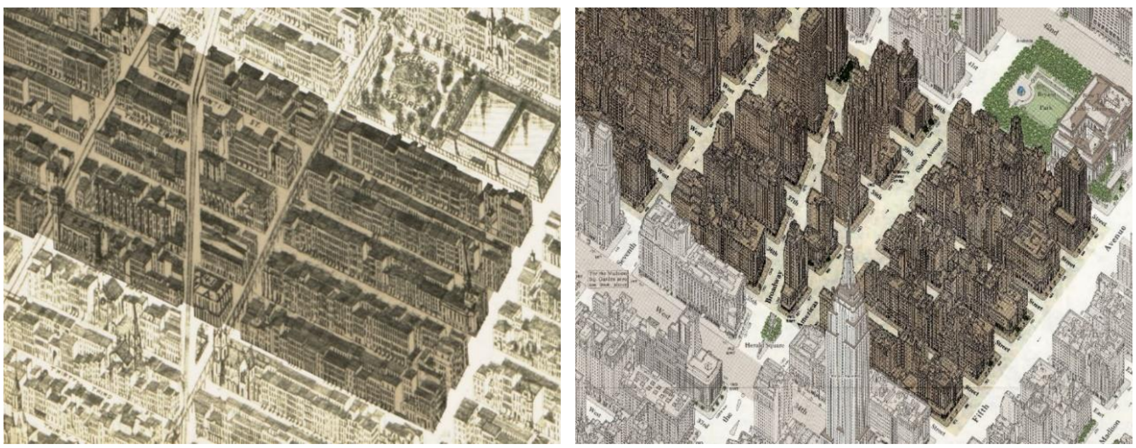


Figure 20, 21: (top) excerpt from Galt & Hoy's (1879) Aerial view of New York[13] *and (bottom) excerpt from Allon et al's (1985) Axonometric Drawing of Midtown*[14] *with the portion of urban fabric being studied highlighted in darker tone by author.*

2.3. THE SOCIOECONOMIC FABRIC

In order to properly analyze the collected data concerning the socioeconomic fabric of the Garment District, two classification groups were established—*macro-categories* and *micro-specializations.* Macro-categories were used to refer to the broader socioeconomic fields within which actors[15] operated (e.g., apparel, import & export, retail, etc.), while micro-specializations were used to refer to the more-specific socioeconomic niches that these actors classified themselves as occupying (e.g., dresses, silk imports, millinery retail, etc.), as was obtained from historic reverse-business

[13] Galt & Hoy (1879)
[14] Allon et al (1985)
[15] For the purposes of this dissertation, the term *actors* refers to businesses, firms, companies, leaseholders, etc., not to be confused with singular employees of such firms. That is to say, a firm with a singular owner and no employees, and a firm with a series of owners and a series of employees, would both be considered singular socioeconomic actors.

directories and archived newspaper advertisements. Overall, there were 28 macro-categories and 1,345 micro-specializations observed. Below is a listing of all of the macro-categories, as well as some examples of the micro-specializations falling within their taxonomic borders, the only exception being the macro-category of *Resident*, which innately cannot have a further-detailed micro-scale socioeconomic classification.

Adjustment

Buttonholes, hemstitching, pleating, scalloping, trimming, tucking, etc.

Agency

Consulting agency, employment agency, millinery union, social workers, etc.

Apparel

Aprons, berets, blouses, cloaks, coats, dresses, gloves, hat bodies, waistcoats, etc.

Beauty

Barber shop, beauty salon, hair dyeing perfume shop, masseuse, wig making, etc.

Brokerage

Appraiser, auctioneer, apparel buyer and seller, apparel trading, etc.

Contractors

Carpenter, cleaner, electrical contractor, floor waxing, painting, plumbers, etc.

Decorative & Notions

Beads, brocades, buttons, fasteners, feathers, piping, tinsels, zippers, etc.

Distribution & Storage

Delivery terminal, moving services, packaging & shipping, storage, trucking, etc.

Finance & Insurance

Accounting, bank, check cashing, pawn shop, mortgages, retirement funds, etc.

Food

Bakery, coffee house, confectionery, delicatessen, pub, vegetarian restaurant, etc.

Goods

Marble, metal, plastic, rubber, steel, stone, straw goods, etc.

Hardware & Machinery

Cabinets, mannequins, millinery blocks, sewing machines, shoe blocks, etc.

Import & Export

Exporting & storage, imitation stone importing, knit apparel importing, etc.

Jewelry

Bracelets, electrolysis, pearl necklaces, stone setting, watch bands, watches, etc.

Law

Attorney, estate planning, notary, stenographer, etc.

Media and Communications

Advertising, broadcasting, merchandising, messenger service, etc.

Medical

Chiropodist, dentistry, nursing, optician, orthopedist, pharmaceuticals, etc.

Manufacturing[16]

Sheet metal production, textile converting, textile dyeing, wire manufacturing, etc.

Miscellaneous

Cork insulation, golf balls, locksmiths, pianos, wall paper, window shades, etc.

Offices & Showrooms

Apparel executive office, building support office, textile showroom, etc.

Publishing

Newspaper editor, magazine publication, newspaper publication, etc.

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[16] Following the lead of Warlinger (1986), for the purposes of this dissertation the macro-category of *Manufacturing* refers to socioeconomic actors that "design clothing, purchase the textiles out of which clothes are made, merchandise the clothes, but generally do not engage in the actual production of clothing" (Waldinger 1986, 17).

Realty

Building management, leasing, real estate, real estate & construction, etc.

Recreation

Billiards, gym, opera, theatre, etc.

Resident

Retail

Apparel retail, blouse retail, men's shoe retail, millinery retail, textile retail, etc.

Stationery & Printing

Envelopes & tags, monograms, pens, stamps, stereotypes, typography, etc.

Studio

Commercial artist studio, apparel design studio, jewelry design studio, etc.

Textiles

Chiffons, felts, linens, printed textiles, rayon, raw silks, satins, velvets, etc.

As observed in the graphic below, in terms of sheer numbers at the scale of the macro, the socioeconomic fabric of the Midtown Garment District consistently maintained a composition between 10,300 and 10,600 actors for the year sets studied, with the exception being the year of 1958, during which a peak count of 11,429 actors was documented. As aforementioned, *actors* refers to businesses, firms, companies, and leaseholders, and thus ought not to be confused with singular employees.

In terms of micro-specializations, a slightly different narrative is observed—in that the diversity of micro-specializations within the socioeconomic fabric of the Garment District notably and consistently declined from year to year, reaching a peak of 704 micro-specializations in 1934, and realizing a low of 593 micro-specializations by 1973, representing a 15.8% loss in overall diversity.

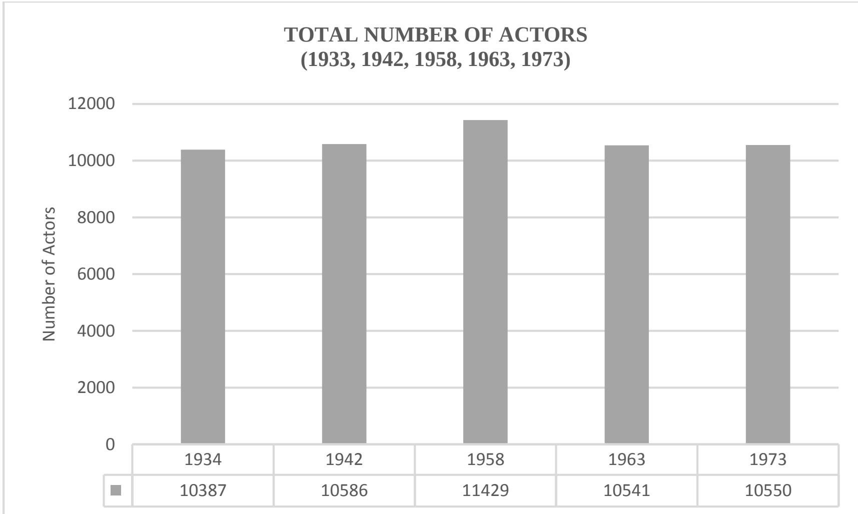


Figure 22: Number of actors within the socioeconomic fabric of the Garment District (1933, 1942, 1958, 1963, 1973)

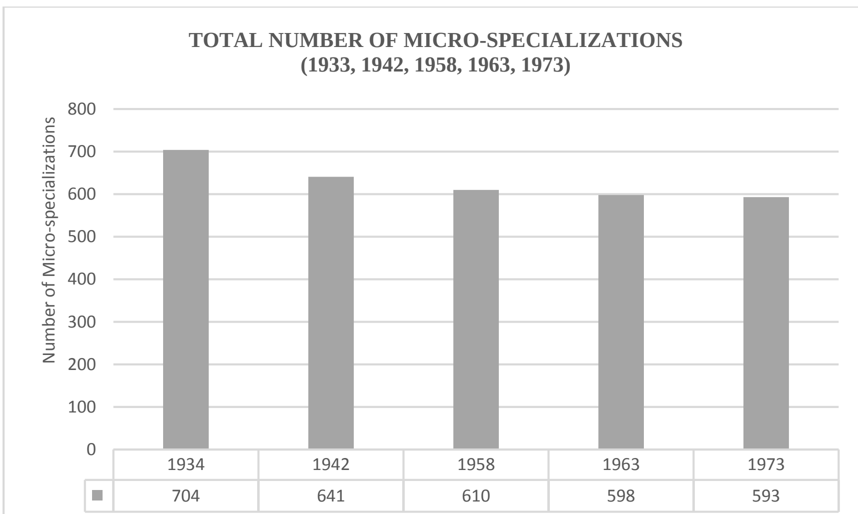


Figure 23: Number of micro-specializations within the socioeconomic fabric of the Garment District (1933, 1942, 1958, 1963, 1973)

In the more-detailed graphic on the following page in turn, the number of actors have been broken down by macro-category, in order to further clarify the socioeconomic composition of the Garment District for the five year sets that were examined. There are some narratives that begin to materialize while delving into this more-detailed socioeconomic depiction:

- *Apparel* remains the more-dominant macro-category throughout all the year sets studied, peaking at 5,175 actors in 1942, and dropping consistently through the following three year sets to a low of 3,274 actors in 1973.

- *Miscellaneous* appears to be the second-most prominent macro-category, being represented by 1,064 actors in 1934, and consistently growing to a peak of 2,824 actors by 1973.
- *Decorative & Notions* is the only other macro-category to be represented by over 1,000 actors in any of the five year sets studied, with an observed count of 1,048 and 1,064 actors in 1942 and 1958, respectively.
- *Textiles,* in turn, is the only other macro-category to be represented by over 500 actors—achieving this count in all five year sets, with an observed peak of 763 and 756 actors in 1958 and 1973, respectively.
- The macro-category of *Manufacturing*, consistently represented around 400 actors throughout all five year sets, peaking at 424 actors in 1958, and realizing a low of 384 actors in 1942.
- Within the other macro-categories present, *Resident* is the only one to surpass a count of 300 actors, peaking at 393 actors in 1958, and gradually declining to 352 actors by 1973. *Adjustment*, *Food, Hardware & Machinery,* and *Offices & Showrooms* are the four macro-categories to be represented by over 200 socioeconomic actors within at least one of the five year sets studied. *Brokerage, Contractors, Distribution & Storage, Goods, Import & Export*, *Jewelry, Media & Communications*, *Realty*, *Retail,* and *Studio* are the other macro-categories to peak at a count of over 100 socioeconomic actors within at least one of the five year sets studied.

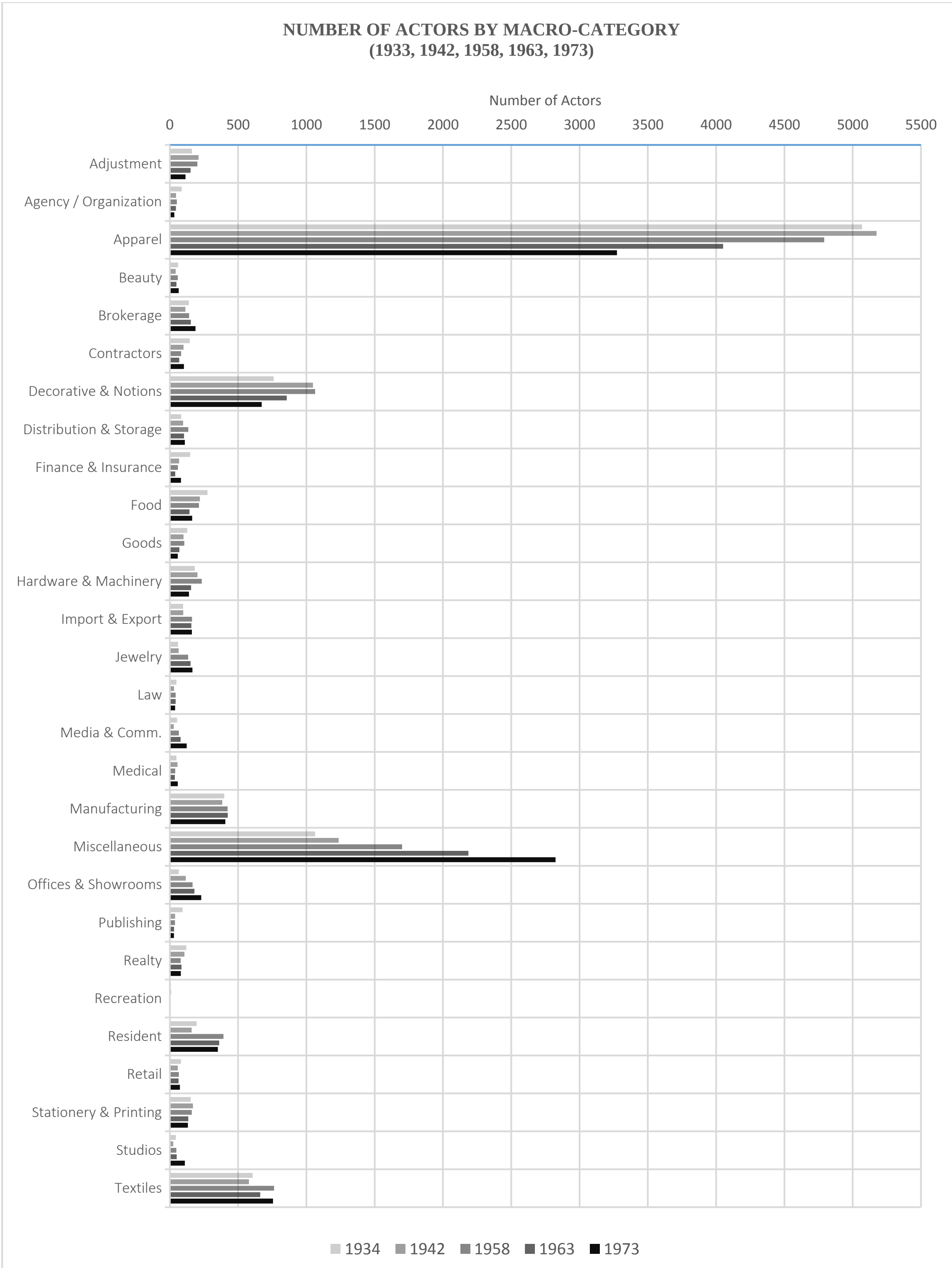


Figure 24: Number of actors according to macro-category within the socioeconomic fabric of the Garment District (1933, 1942, 1958, 1963, 1973).

There are, however, more robust ways of looking at the socioeconomic fabric that begin to open up when the physical and the socioeconomic are looked at in tandem—namely, if one begins to break down the socioeconomic composition in question according to the various scales of architectural species within the urban fabric of the Garment District. For instance:

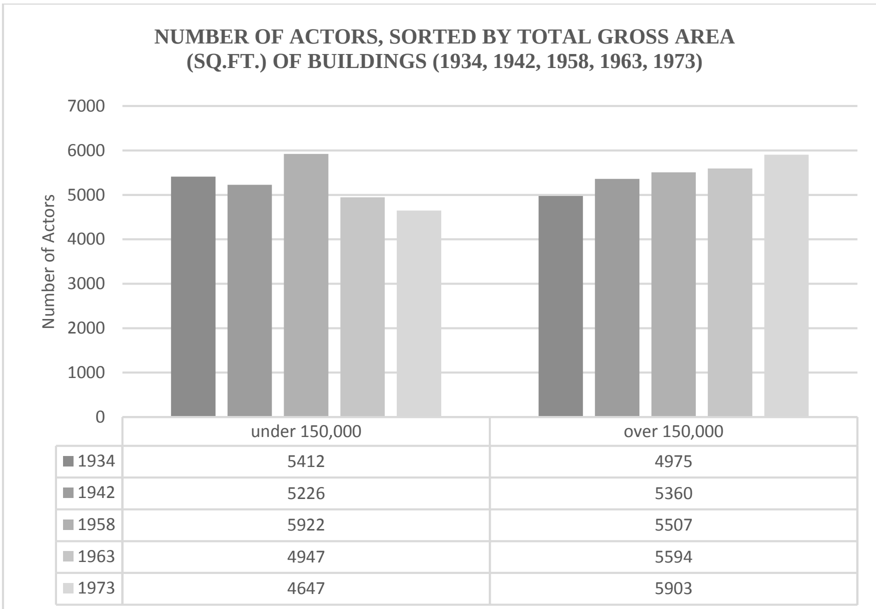


Figure 25: Number of actors within the socioeconomic fabric, sorted by total gross area (sq.ft.) of buildings (1933, 1942, 1958, 1963, 1973)

As can be seen above, while buildings over 150,000 square feet in total gross area consistently saw an increase in the number of actors being supported over all five year sets, the socioeconomic fabric supported by buildings under 150,000 square feet inversely witnessed a consistent decline (except for 1958, during which a sudden peak of actors, at a count of 5,922 was observed)—starting at 5,412 actors in 1934 and dropping to 4,647 actors by 1973.

The direct comparison of actors supported by buildings under versus over 150,000 gross square feet is also interesting to note. In 1934 and 1958, the smaller scale is documented as actually supporting more actors than the larger scale—specifically, 437 and 415 more actors, respectively, when compared to their larger counterparts. However in 1963 and 1973, a marked inversion in this relationship is observed, with buildings over 150,000 square feet supporting 647 and 1256 more actors, respectively, when compared to their smaller architectural counterparts. In 1942 in turn, a relative balancing between the two scales is witnessed, with the large supporting only slightly more actors than the small.

In the graphic below, which deals with micro-specializations similarly sorted according to building area, a different narrative is detected. While buildings both under and over 150,000 square feet tended to exhibit decreased numbers of micro-specializations from year set to year set (except for the period from 1934–1942 for buildings under 150,000 square feet), the smaller set of buildings are seen to consistently support a significantly higher number of micro-specializations than their larger counterparts. The difference being 531 micro-specializations versus 372 micro-specializations for 1934 (a gap of 259 micro-specializations), 543 versus 330 for 1942 (a gap of 213 micro-specializations), 517 versus 319 in 1958 (a gap of 198 micro-specializations), 487 versus 276 for 1963 (a gap of 211 micro-specializations), and 456 versus 253 for 1973 (a gap of 203 micro-specializations). In terms of percentages, this translates to smaller buildings supporting between 42.7% (for 1934) to 80.2% (for 1973) greater numbers of micro-specializations than larger buildings. When keeping in mind that for buildings over 150,000 square feet, the number of actors was consistently increasing from year to year, this consistently declining micro-specialization count (and increasing gap in terms of percentages between what was supported by the small versus the large) is particularly noteworthy.

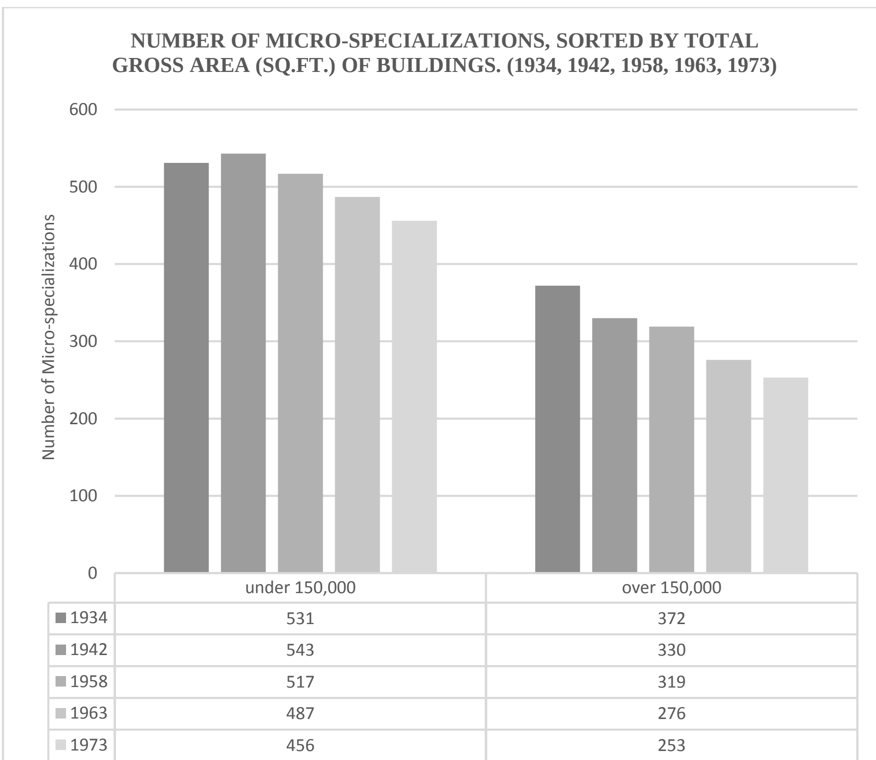
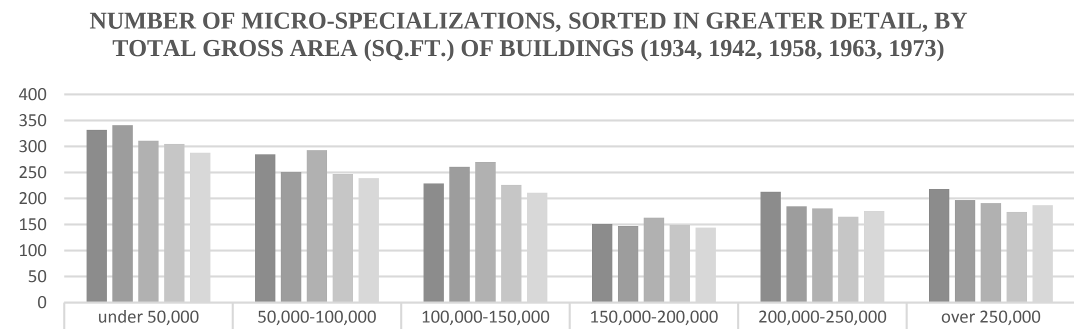


Figure 26: Number of micro-specializations within the socioeconomic fabric, sorted by total gross area (sq.ft.) of buildings (1933, 1942, 1958, 1963, 1973)

A more detailed look at this pattern can be observed in the graphic below.



	under 50,000	50,000-100,000	100,000-150,000	150,000-200,000	200,000-250,000	over 250,000
1934	332	285	229	151	213	218
1942	341	251	261	147	185	197
1958	311	293	270	163	181	191
1963	305	247	226	149	165	174
1973	288	239	211	144	176	187

Figure 27: Number of micro-specializations within the socioeconomic fabric, in greater detailed, sorted by gross area of buildings (1933, 1942, 1958, 1963, 1973).[17]

In the graphics on the following six pages in turn, the number of actors have been broken down by macro-category and by incremental building scales, in order to convey a more dynamic image of the Garment District's socioeconomic composition. In examining these varying socioeconomic composition and distributions, there are some narratives that begin to materialize:

- *Apparel* remains the more dominant macro-category throughout all the year sets studied, for all scales of buildings.
- The smaller building scales tend to exhibit less-lopsided socioeconomic compositions.
- It is only in buildings under 50,000 square feet in total gross area that *Resident* begins to appear with noteworthy numbers, breaking a count of 250 actors for 1958, 1963, and 1973.
- For buildings under 50,000 square feet in total gross area, the macro-categories of *Apparel*, *Decorative & Notions*, *Miscellaneous*, and *Resident* are the only macro-categories to surpass a count of 250 socioeconomic actors. For the first three year sets for this scale of building, *Apparel* actually floats around a count of 400 socioeconomic actors, peaking at 447 in 1934, and dropping to 377 by 1958. Its lowest count of 183 actors, in turn, was realized in 1973. Beyond this, the only other two macro-categories to be represented by over 100 actors in the

[17] To clarify a seeming discrepancy: The sum of the number of micro-specializations supported in 1934 by buildings under 50,000 square feet, and between 50,000 and 100,000 square feet, and between 100,000 and 150,000 in Figure 27, comes to a total of 846 micro-specializations. This sum is greater than the number of micro-specializations supported by all buildings under 150,000 square feet in 1934 (531 micro-specializations) shown in Figure 26. This is due to the fact that if the same micro-specialization is supported in two building scales in Figure 27, it will count once in each category; however in Figure 26, if these two building scales are both under or over 150,000 square feet, then the overlapping micro-specialization will only be counted once.

year sets studied were *Food*, peaking at 175 actors in 1934 and dropping to a low of 76 actors by 1973, and *Textiles*, peaking at 160 actors in 1958 and achieving a low of 60 socioeconomic actors in 1942.

- For buildings between 50,000 square feet and 100,000 square feet in total gross area, *Apparel* is the more dominant macro-category, peaking at 948 socioeconomic actors in 1958, and realizing a low of 379 actors in 1973. Similar to buildings under 50,000 square feet in total gross area, *Decorative & Notions* and *Miscellaneous* appear as macro-categories that surpass a count of 250 actors in at least one of the year sets being studied. *Textiles* in turn is the only other macro-category to break a count of 100 socioeconomic actors for this building scale, peaking at 144 actors in 1973, and realizing a low of 82 actors in 1958. This is similar to the prior building scale as well, except for the fact that *Textiles* is not joined by *Food* in meeting this criteria.
- For buildings between 100,000 square feet and 150,000 square feet in total gross area, a markedly similar composition to the prior building scale is observed. *Apparel* is again the more dominant macro-category, achieving a peak of 978 socioeconomic actors in 1934, and a low of 387 in 1973. *Decorative & Notions* and *Miscellaneous* are the only two macro-categories to surpass a count of 200 actors, with the former achieving a peak of 231 actors in 1958, and the latter a peak of 345 actors in 1973. And again, *Textiles* is observed as the only other macro-category to break a count of 100 actors, peaking at 159 in 1973.
- For buildings between 150,000 square feet and 200,000 square feet, *Apparel* is the only macro-category to surpass a count of 500, peaking at 538 and 537 socioeconomic actors in 1934 and 1942, respectively. Beyond that, *Decorative & Notions* (peaking at 108 actors in 1942), *Miscellaneous* (peaking at 198 actors in 1973) and *Textiles* (peaking at 106 actors in 1973) appear as the only other macro-categories to surpass a count of more than 100 socioeconomic actors.
- For buildings between 200,000 square feet and 250,000 square feet in total gross area, a nearly identical socioeconomic composition to the building scale prior, is observed. *Apparel* peaks at a count of 566 actors in 1934 (compared to 538 in the scale prior), and achieves a low of 230 in 1973 (compared to 233 in the scale prior). *Decorative & Notions* (113 actors in 1958), *Miscellaneous* (215 actors in 1973), and *Textiles* (136 actors in 1934), again appear as the second-most populated macro-categories.
- For buildings over 250,000 square feet in total gross area, *Apparel* is the only macro-category to surpass a count of 2,000 actors, peaking at 2,117 in 1958, and achieving a low of 1627 in 1934. *Miscellaneous* is the only other macro-category to break a count of 1,000 socioeconomic

actors for this building scale, peaking at 1,327 actors in 1973. Beyond that, *Textiles* achieves a peak of 204 actors in 1934 and a low of 136 in 1973, while *Manufacturing,* the only other macro-category to break a count of 100 actors, peaks at 147 in 1934, and achieves a low of 122 actors in 1958.

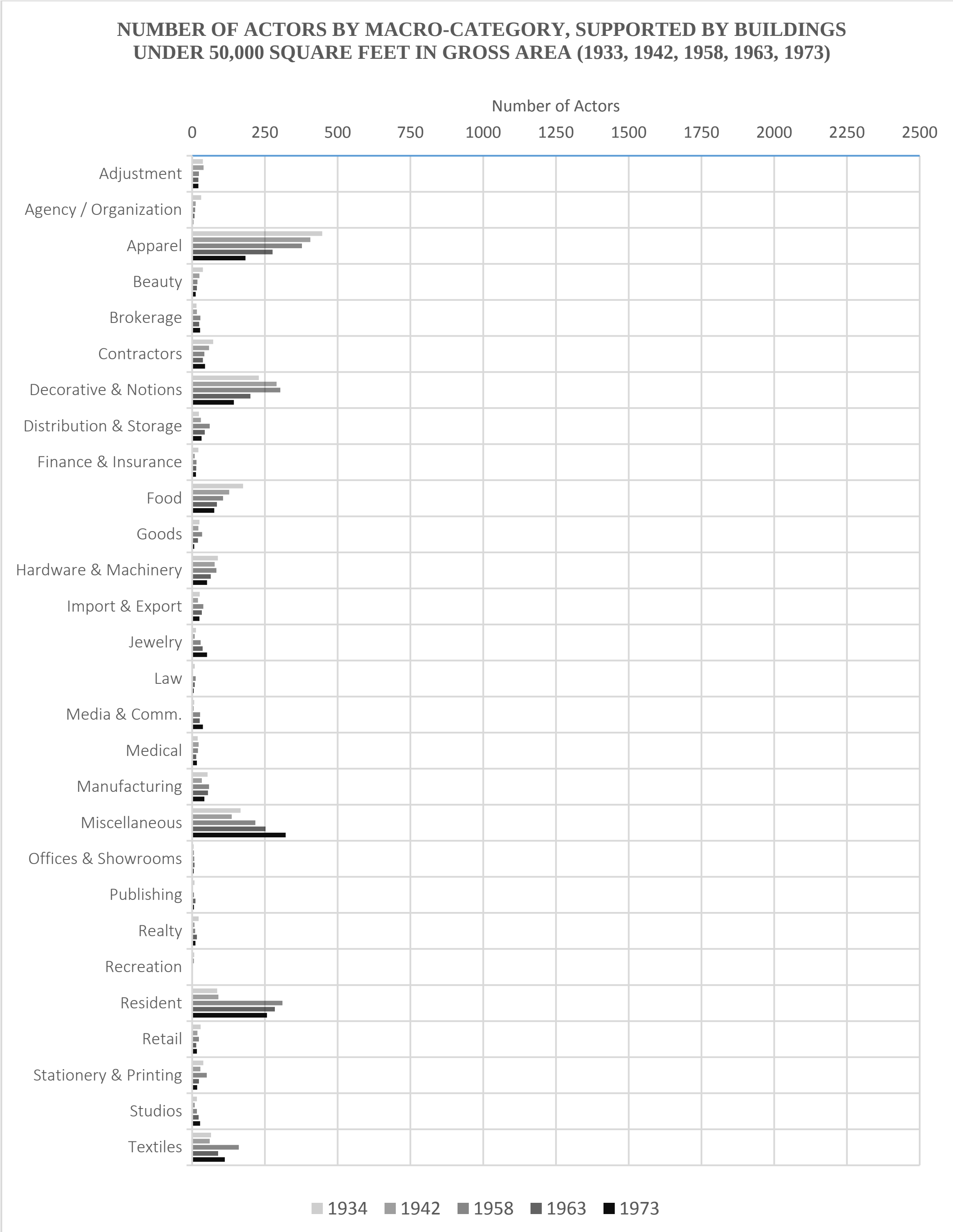


Figure 28: Number of actors according to macro-category within the socioeconomic fabric of the Garment District, supported by buildings under 50,000 square feet, total gross area (1933, 1942, 1958, 1963, 1973)

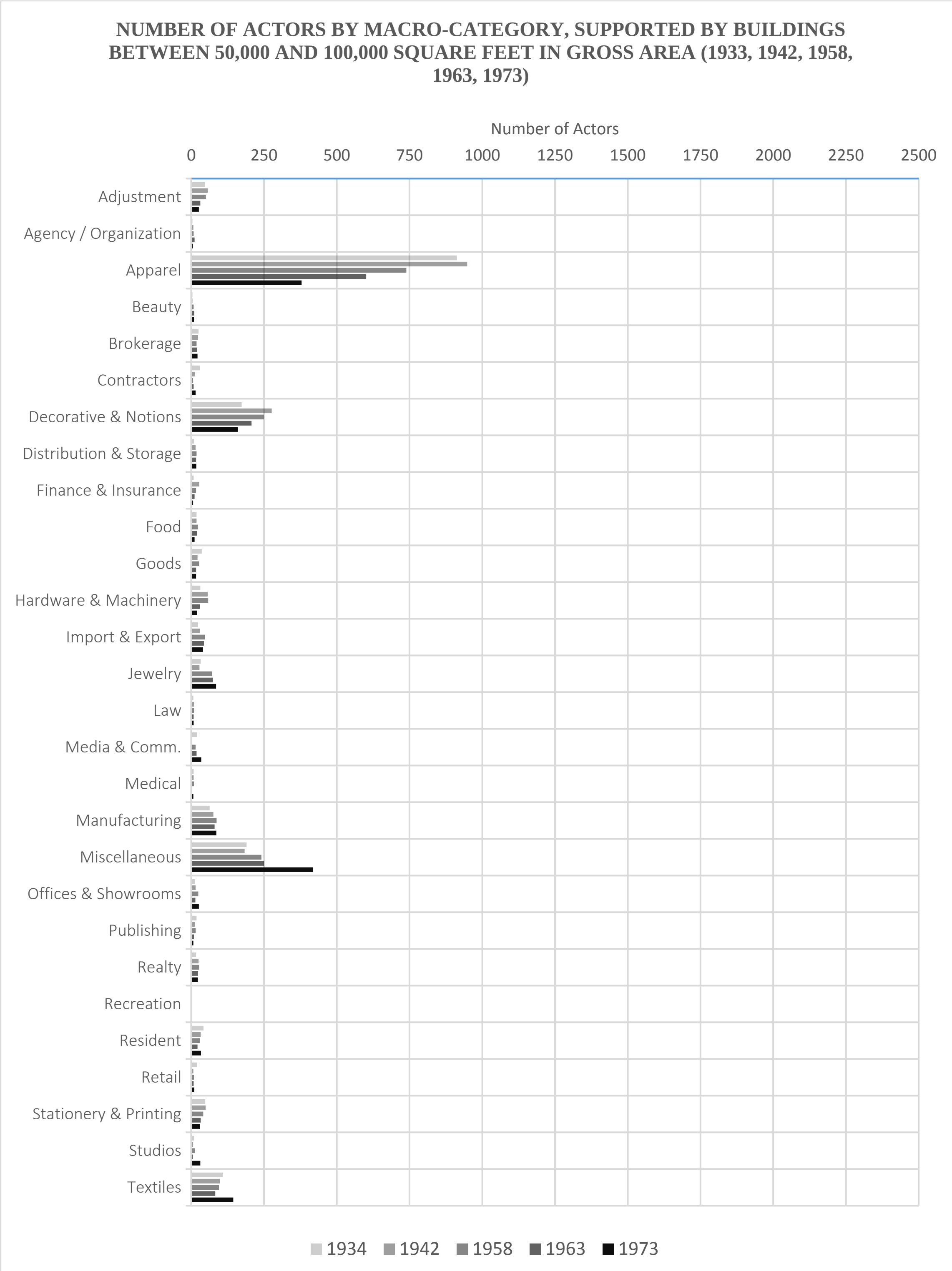


Figure 29: Number of actors according to macro-category within the socioeconomic fabric of the Garment District, supported by buildings between 50,000 and 100,000 square feet, total gross area (1933, 1942, 1958, 1963, 1973)

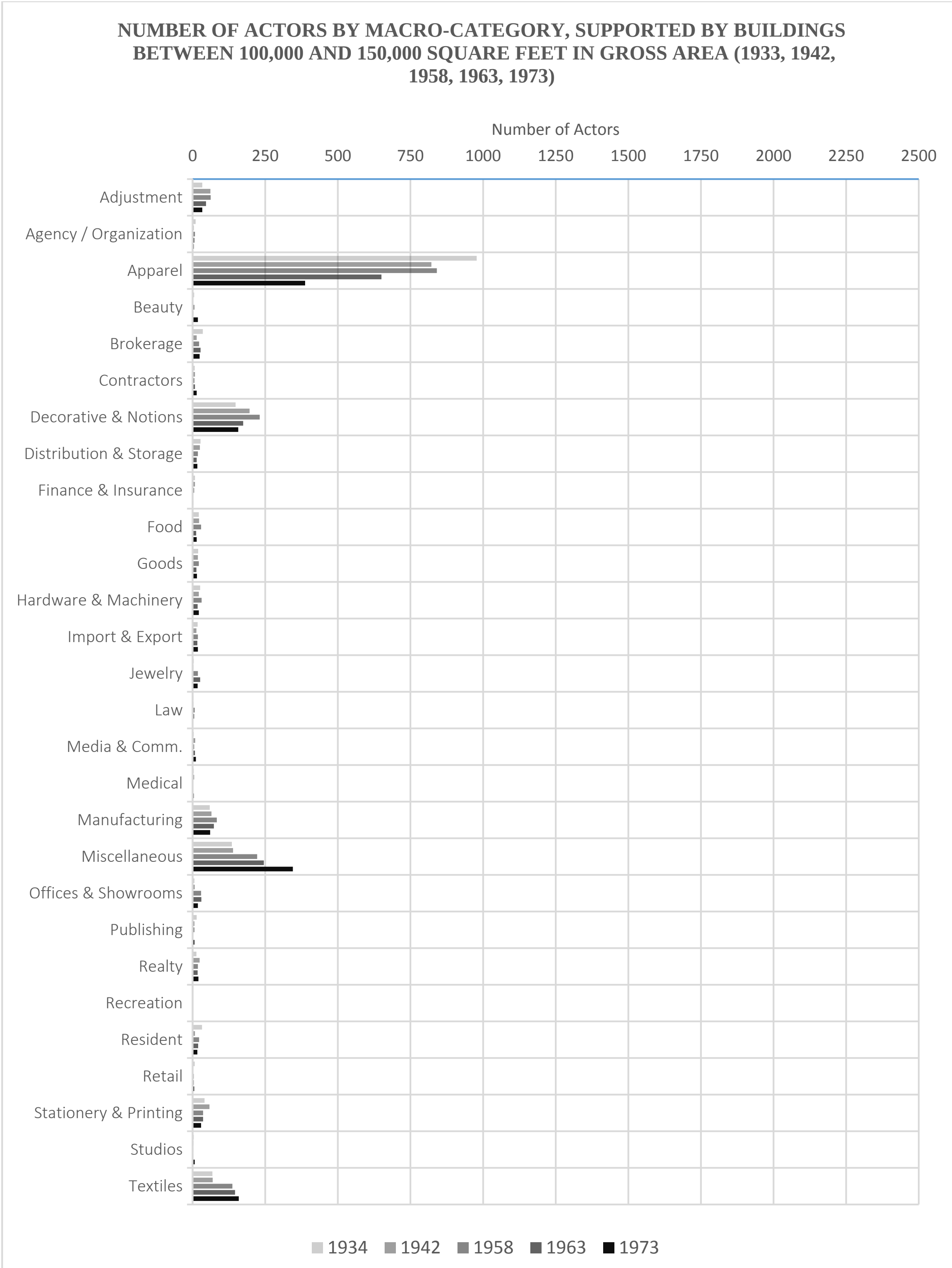


Figure 30: Number of actors according to macro-category within the socioeconomic fabric of the Garment District, supported by buildings between 100,000 and 150,000 square feet, total gross area (1933, 1942, 1958, 1963, 1973)

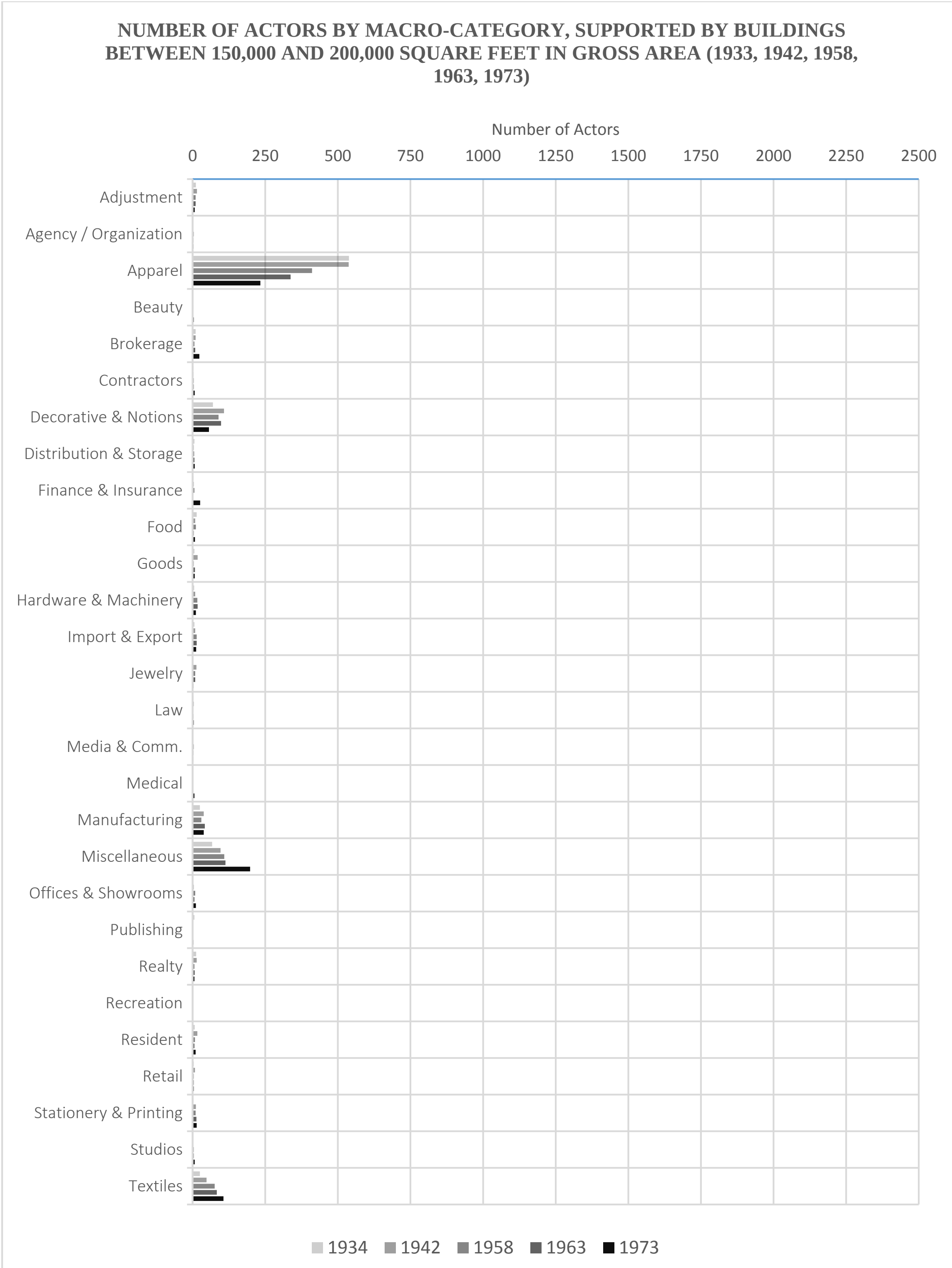


Figure 31: Number of actors according to macro-category within the socioeconomic fabric of the Garment District, supported by buildings between 150,000 and 200,000 square feet, total gross area (1933, 1942, 1958, 1963, 1973)

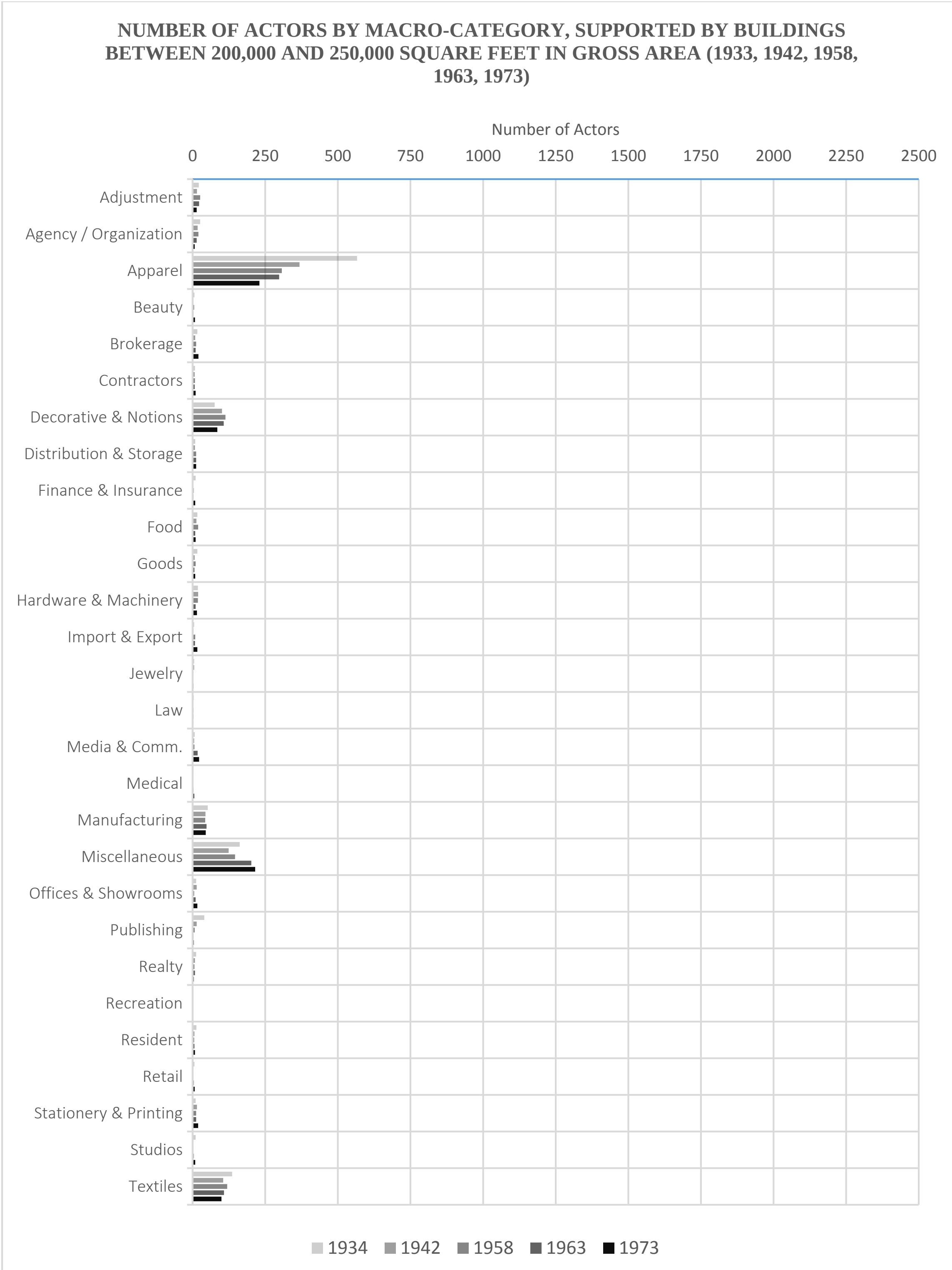


Figure 32: Number of actors according to macro-category within the socioeconomic fabric of the Garment District, supported by buildings between 200,000 and 250,000 square feet, total gross area (1933, 1942, 1958, 1963, 1973)

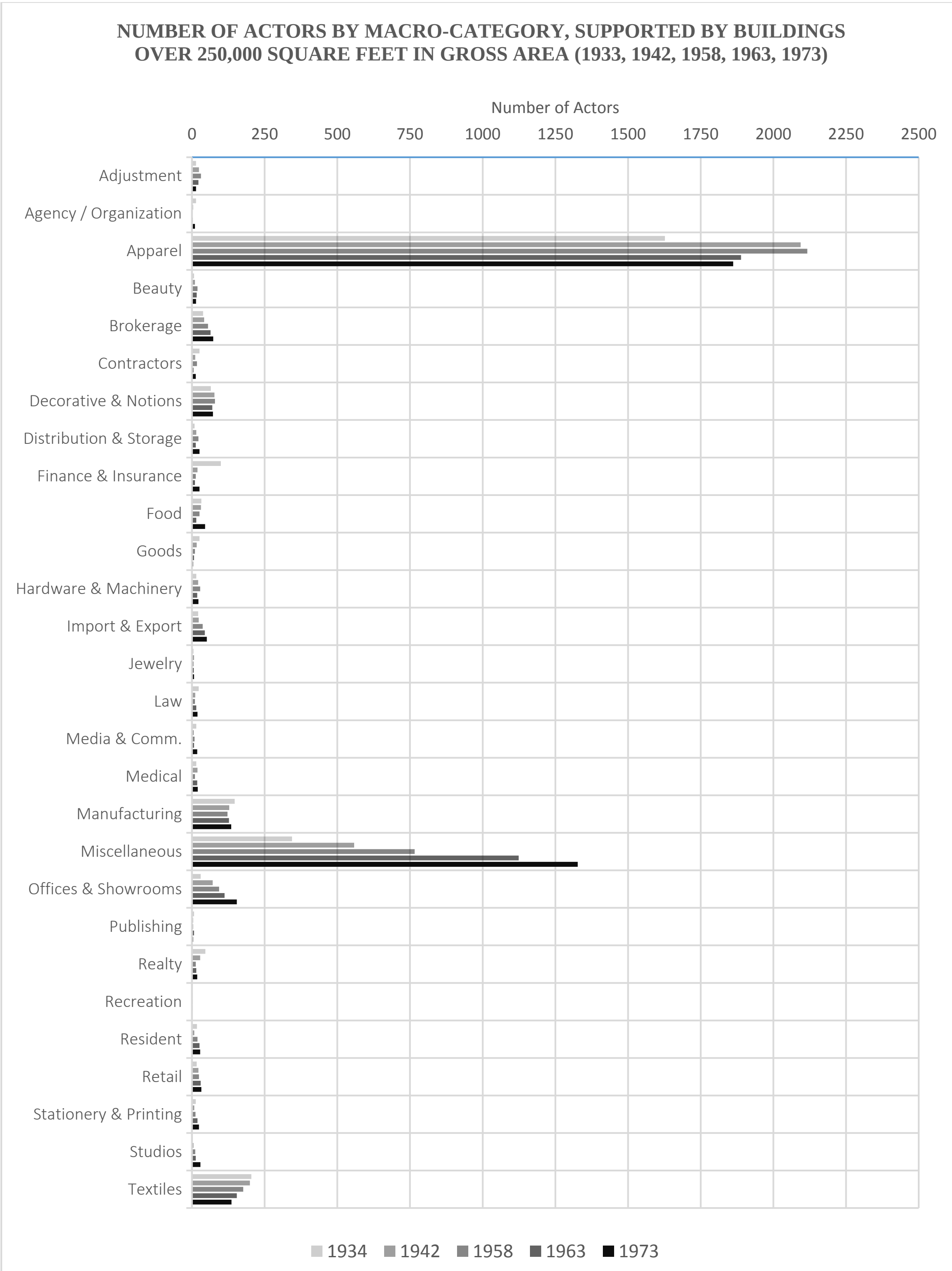


Figure 33: Number of actors according to macro-category within the socioeconomic fabric of the Garment District, supported by buildings over 250,000 square feet, total gross area (1933, 1942, 1958, 1963, 1973)

In the pages prior, aside from the socioeconomic information being provided, what is being exemplified is how the history of the Garment District exhibits a clearer narrative when physical parameters are used as a filtering mechanism for the socioeconomic fabric. A similar end can be achieved, if the process is inverted—that is, if socioeconomic parameters are used as a filter for the physical. For instance, the following two maps show the highest performing fifty buildings, for 1934 and 1973, in terms of density of actors according to lot area—i.e., by the number of actors supported per square foot of lot area.

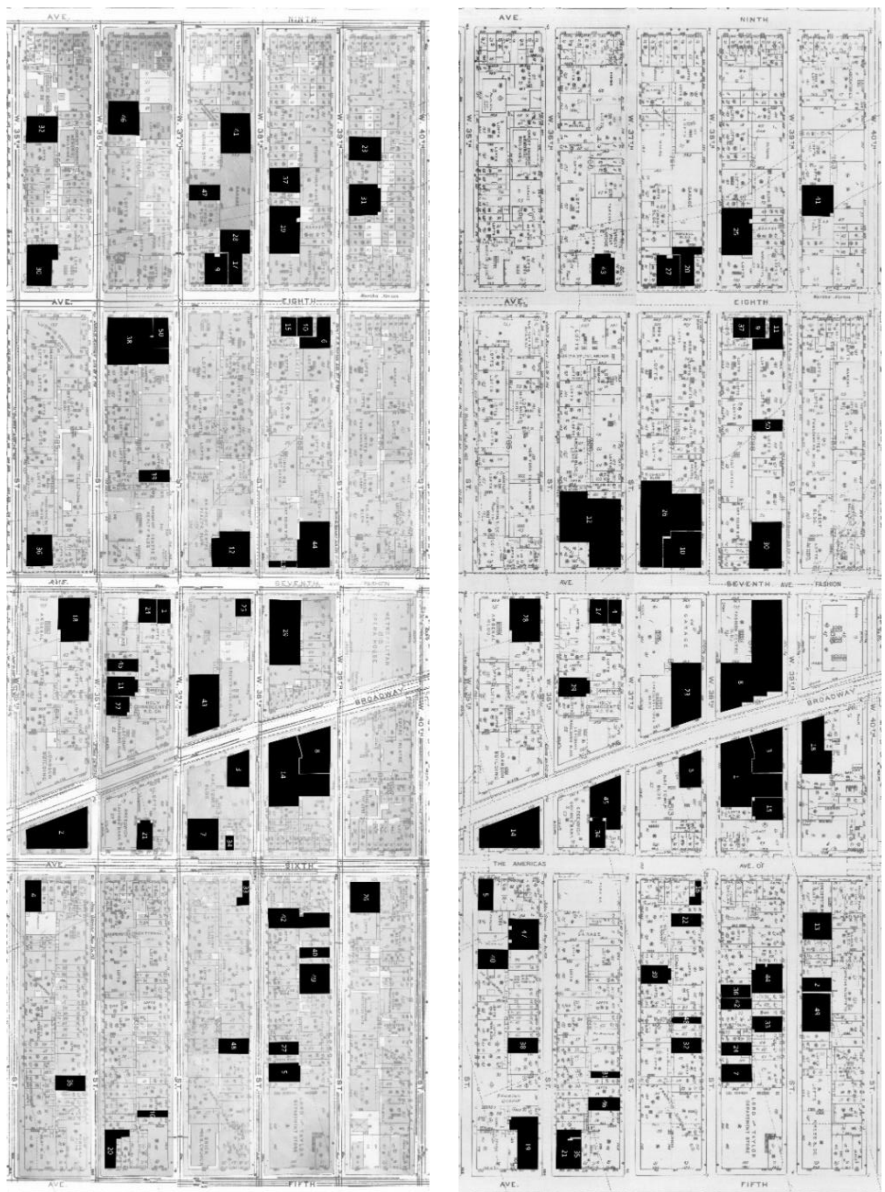


Figure 34, 35: 1934 (left) and 1973 (right) map of the Garment District, showing the highest performing fifty buildings in terms of number of actors supported per square foot of lot area. North is right.

Density, however, can be looked at in a variety of ways. For instance, note the different narrative that appears when the Garment District is mapped according to the fifty highest performing buildings in terms of density of actors supported per square foot of gross building area, as opposed to lot area, below:

Figure 36, 37: 1934 (left) and 1973 (right) map of the Garment District, showing the highest performing fifty buildings in terms of number of actors supported per square foot of gross building area. North is right.

For the purposes of this dissertation, however, what is being pursued isn't the density of actors, but rather the density of diversity. In this light, below is the mapping of the Garment District according to the fifty highest performing buildings in terms of number of micro-specializations supported per square foot of gross building area, for 1934 and 1973.

Figure 38, 39: 1934 (left) and 1973 (right) map of the Garment District, showing the highest performing fifty buildings in terms of number of micro-specializations supported per square foot of gross building area. North is right.

There are some key differences that begin to appear in looking at these varying narratives—varying due simply to the underlying definitions of density used. The most crucial difference, however, in comparing the highest performing buildings in terms of densities of actors by lot area (Figures 34 and 35) versus the highest performing buildings in terms of densities of diversity by gross building area (Figures 38 and 39), is that in the latter figures, the buildings being highlighted are radically smaller in terms of their scale.

The question that remains then, is whether there is in fact a correlation between building scale and densities of diversity. In looking at these prior maps, it seems that a rather clear hypothesis can be made that there is in fact such a correlation, however, a few further analyses of the aggregate data that was collected can be helpful here. Below, for instance, is a comparison of the densities of diversity supported by all the buildings in the Garment District, for all year sets combined, in relation to the heights of said buildings.

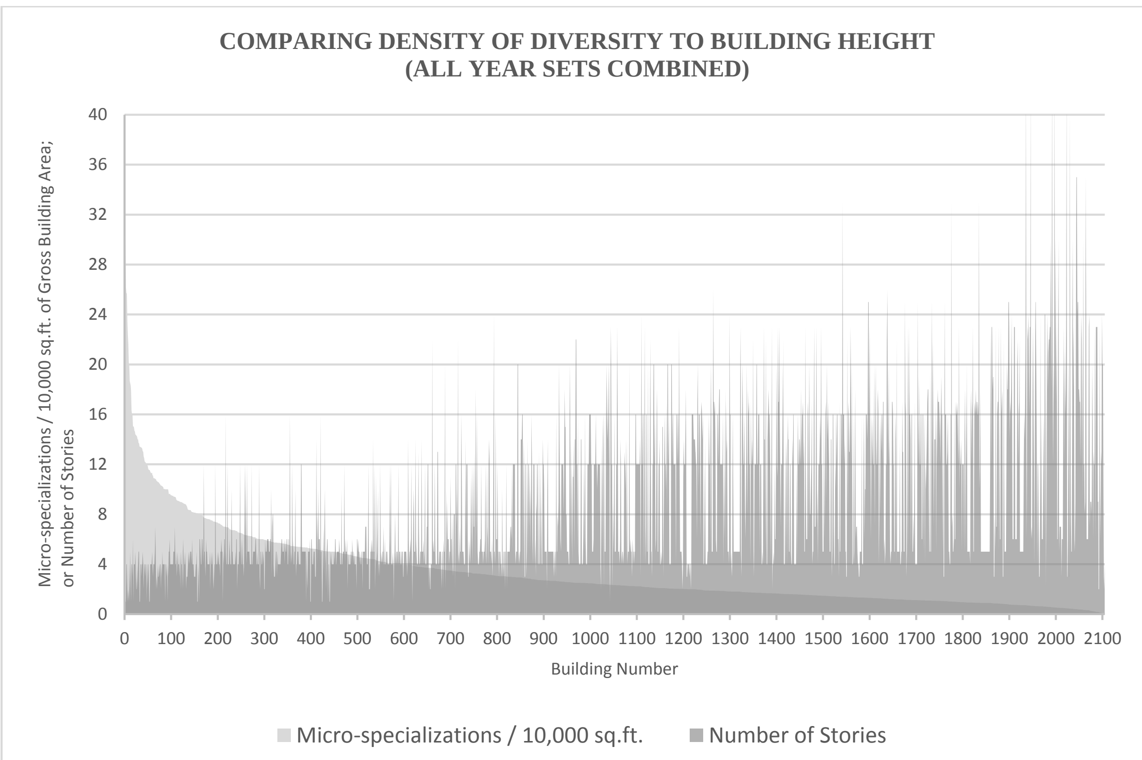


Figure 40: Area chart comparing densities of diversity to building heights, for all year sets combined.

However, given that what is of interest is gross building area, rather than building height, perhaps the following graphic can be of greater value.

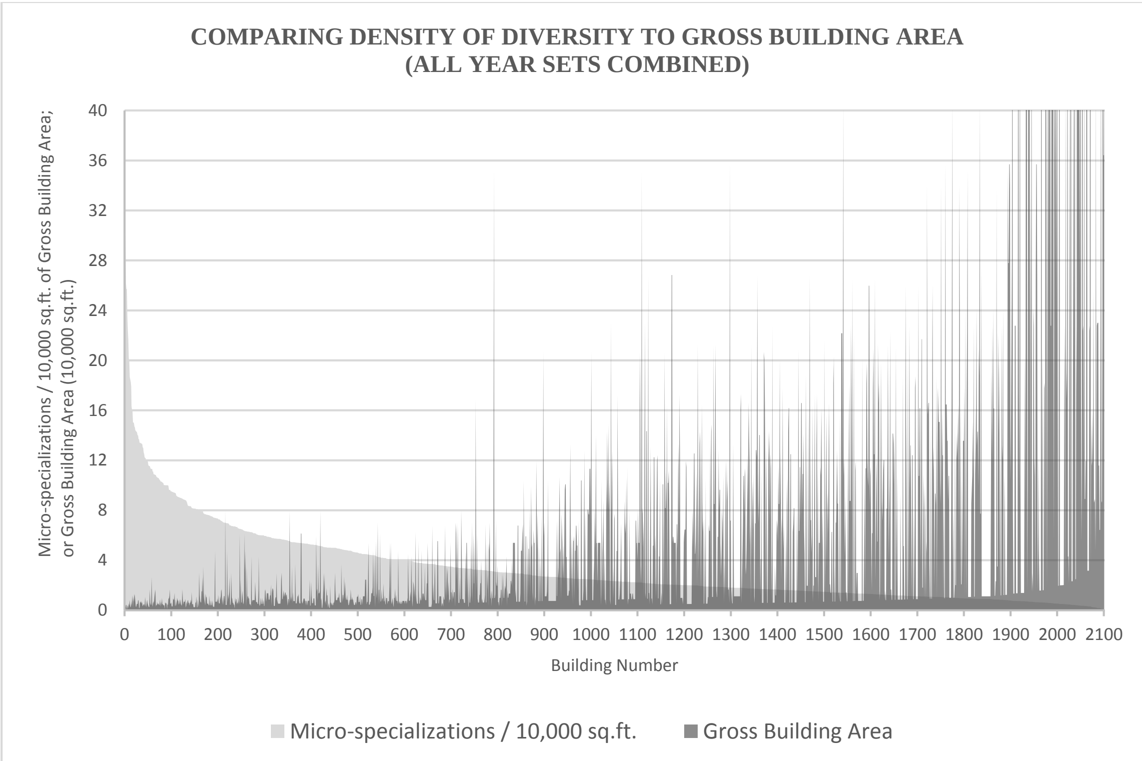


Figure 41: Area chart comparing densities of diversity to gross building areas, for all year sets combined.

In looking at these area charts, a clear negative correlation seems to be observed—that is, that a contrary or negative relationship between gross building area and densities of diversity (in terms of micro-specializations by gross building area), can be detected. Or put in more-practical terms, for the period of 1930–1980 in the Garment District, smaller buildings tended to support higher densities of diversity, when compared to their larger architectural counterparts.

The question that arises, is whether there was a causal mechanism at play in the context of this relationship. To begin to address this question of a causal mechanism however, some further filtering is necessary. What needs to be pursued, is not the narrative underpinning buildings that merely supported greater densities of diversity, but rather the narrative underpinning buildings that *consistently* supported greater densities of diversity, and that could grant insights into the more-extensive physico-socioeconomic relationships at play in the broader building stock. Keeping this in mind, the following filters or constraints were used to further frame the collected data sets, establishing the specific buildings honed in on during Phase II and III of this research.

The buildings to be studied must: (1) have been in the top 100 highest performing buildings in terms of densities of diversity supported for 1934, 1958, and 1973;[18] (2) be non-corner buildings—i.e., structures that don't occupy any of the corners of their respective urban blocks;[19] and (3) have supported four or more socioeconomic actors for 1934, 1958, and 1973.[20] Among the 2,280 buildings studied, only fifteen structures were uncovered that fit within these constraints. Due to the non-disclosure agreements signed during Phase II of this research, unfortunately these buildings cannot be visualized here in the form of a map. However, their physical and socioeconomic narratives are detailed in full in the research phase that follows.

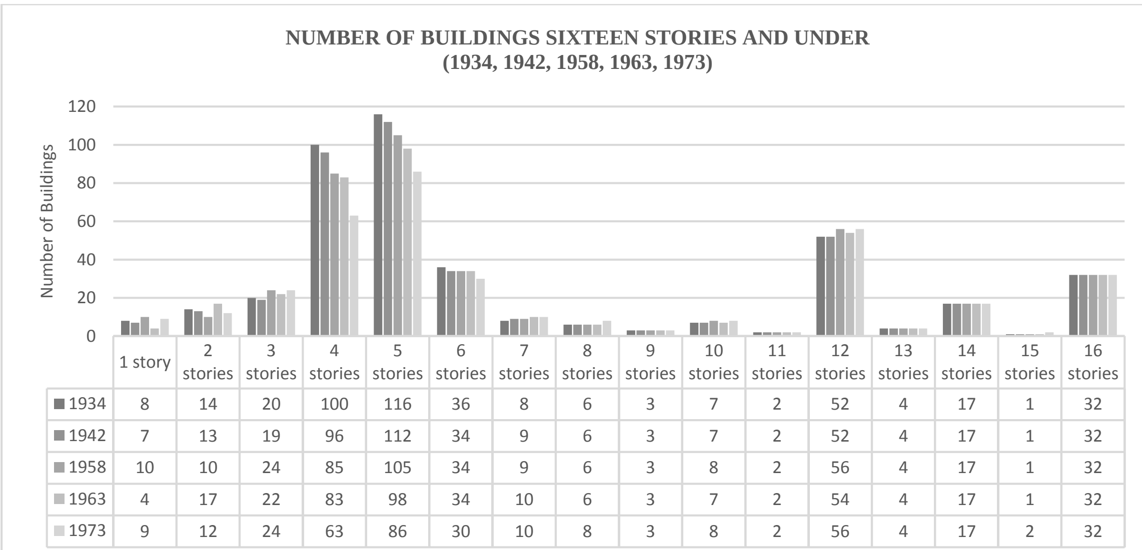
A secondary set of buildings that fit the same criteria as above, with the exception that they consistently were to fall in the 100 lowest-performing buildings (rather than highest-performing) in terms of densities of diversity supported for 1934, 1958, and 1973, was also established. Twenty-two buildings emerged that fit this criteria, out of which five were selected via systemic random sampling, in order to form the sample of buildings that was analyzed in Phase III of this research.

[18] 1942 and 1963 were not included in this first constraint, since these datasets had to be obtained from a wide range of sources, and were collected and coded in tandem with Phase II and Phase III of this research.
[19] In order to control against the anomalously higher foot traffic that such corner lots tend to innately possess.
[20] In order to control against hyper-small buildings that appeared to support high densities of diversity not due to the number of micro-specializations actually supported, but rather simply due to their anomalously small gross square footage.

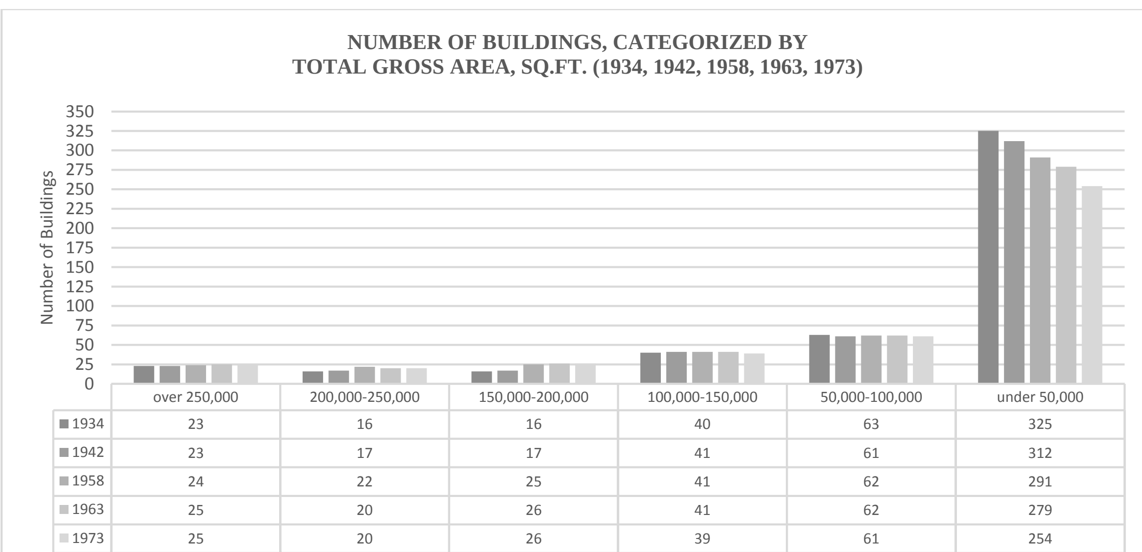
2.5. CONCLUSIONS AND BRIEF DISCUSSION

In delving into the macro-level physical and socioeconomic narratives framed in regard to the Garment District as it existed from 1930–1980, a series of critical observations and queries were unveiled. While these points will be discussed in greater detail in the context of the final conclusions and discussion sections of this dissertation (Section 5.0 and 5.1), they have been framed briefly, below.

(1) *SELECTIVELY-DWINDLING BUILDING STOCK:* The decline of urban manufacturing, and its relationship to changes in the physicality of the urban fabric.



	1 story	2 stories	3 stories	4 stories	5 stories	6 stories	7 stories	8 stories	9 stories	10 stories	11 stories	12 stories	13 stories	14 stories	15 stories	16 stories
1934	8	14	20	100	116	36	8	6	3	7	2	52	4	17	1	32
1942	7	13	19	96	112	34	9	6	3	7	2	52	4	17	1	32
1958	10	10	24	85	105	34	9	6	3	8	2	56	4	17	1	32
1963	4	17	22	83	98	34	10	6	3	7	2	54	4	17	1	32
1973	9	12	24	63	86	30	10	8	3	8	2	56	4	17	2	32



	over 250,000	200,000-250,000	150,000-200,000	100,000-150,000	50,000-100,000	under 50,000
1934	23	16	16	40	63	325
1942	23	17	17	41	61	312
1958	24	22	25	41	62	291
1963	25	20	26	41	62	279
1973	25	20	26	39	61	254

Figure 42, 43: (top) Number of buildings by number of stories; and (bottom) by total gross area (1934, 1942, 1958, 1963, 1973)

While the nature of the urban building stock is on occasion granted some credit for supporting the potentials of production in the city (e.g., Waldinger 1986, 140; Chin 2005, 68), in discussing the decline of urban manufacturing, the parameters and realities of the built world appear to be frequently omitted from the discourse. Particularly in the case of the decline of garment manufacturing in the Midtown Garment District, this seems to be quite a critical discursive gap, in that a clear and significant decline in smaller-scale architectural species is observed between 1930 and 1980 (e.g., the very era of urban manufacturing decline) as is depicted in the two figures above. As aforementioned, this decline in the building stock seems to have occurred primarily in buildings four to five stories in height, and under 150,000 square feet in total gross area, with the heaviest losses being in the decline of the number of structures under 50,000 square feet in total gross area.

(2) *THE IMPORTANCE OF PHYSICO-SOCIOECONOMICS:* How do the socioeconomic narratives underpinning the Garment District begin to shift, when physical and socioeconomic parameters are considered in tandem?

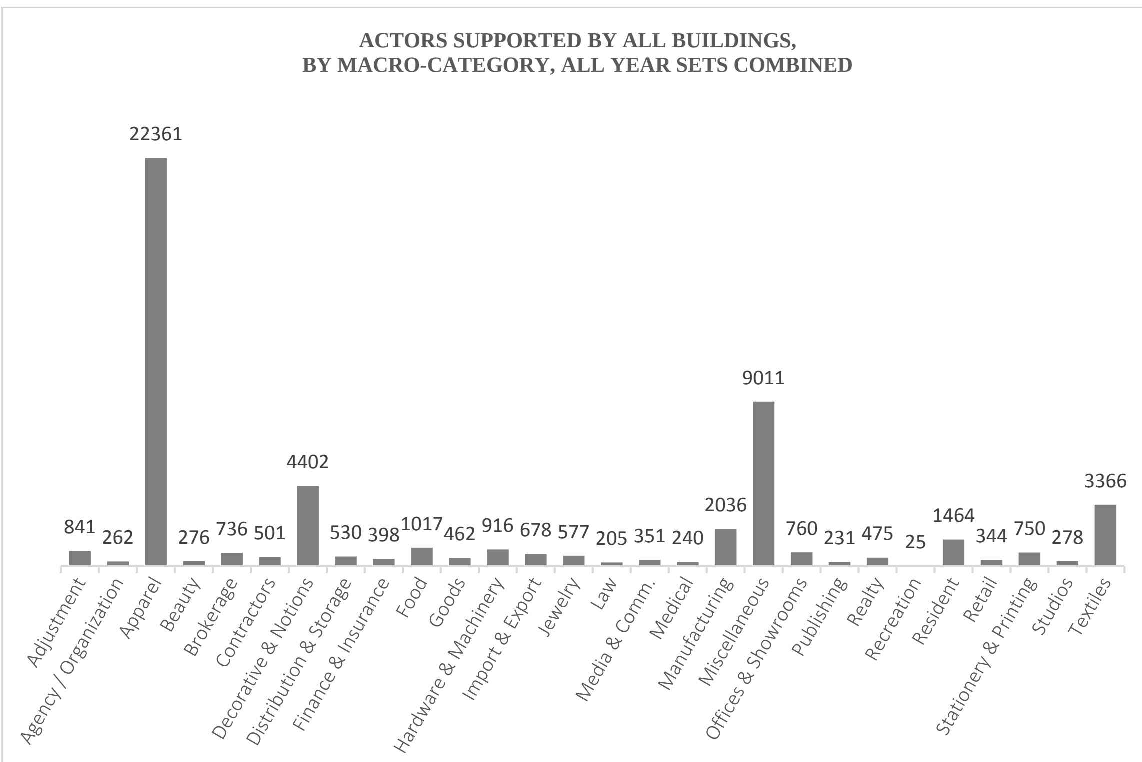


Figure 44: Actors supported by all buildings of the Garment District, for all year sets combined.

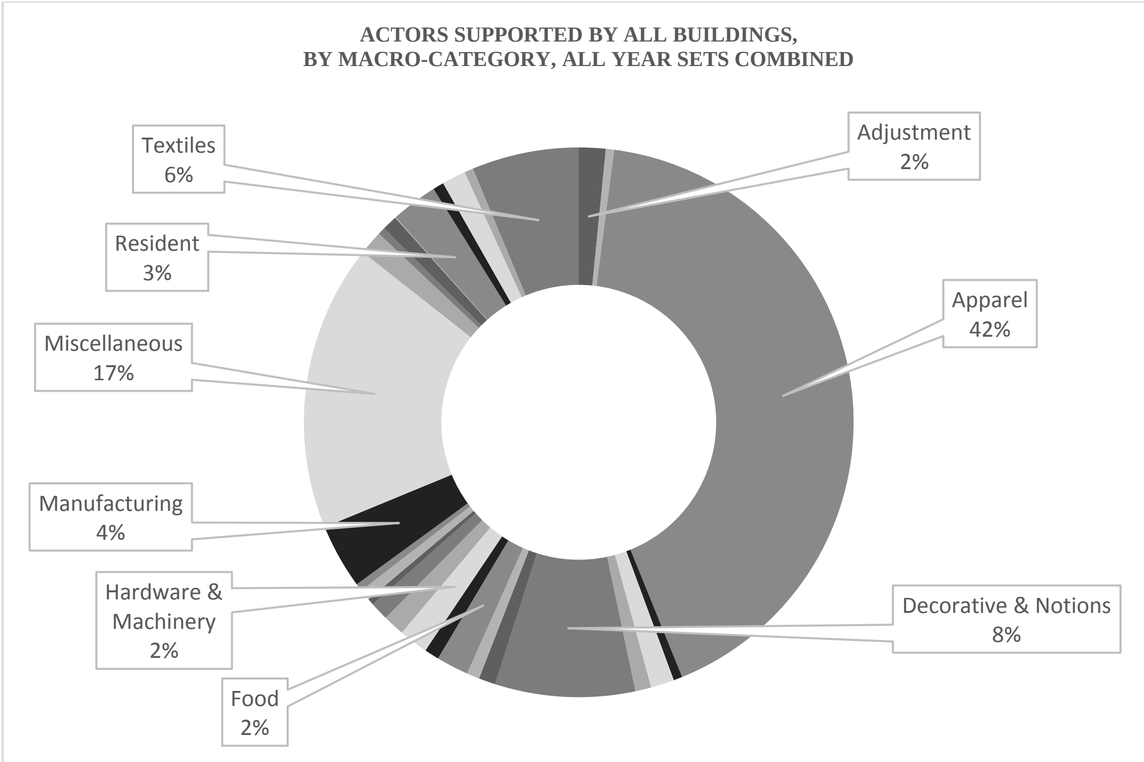
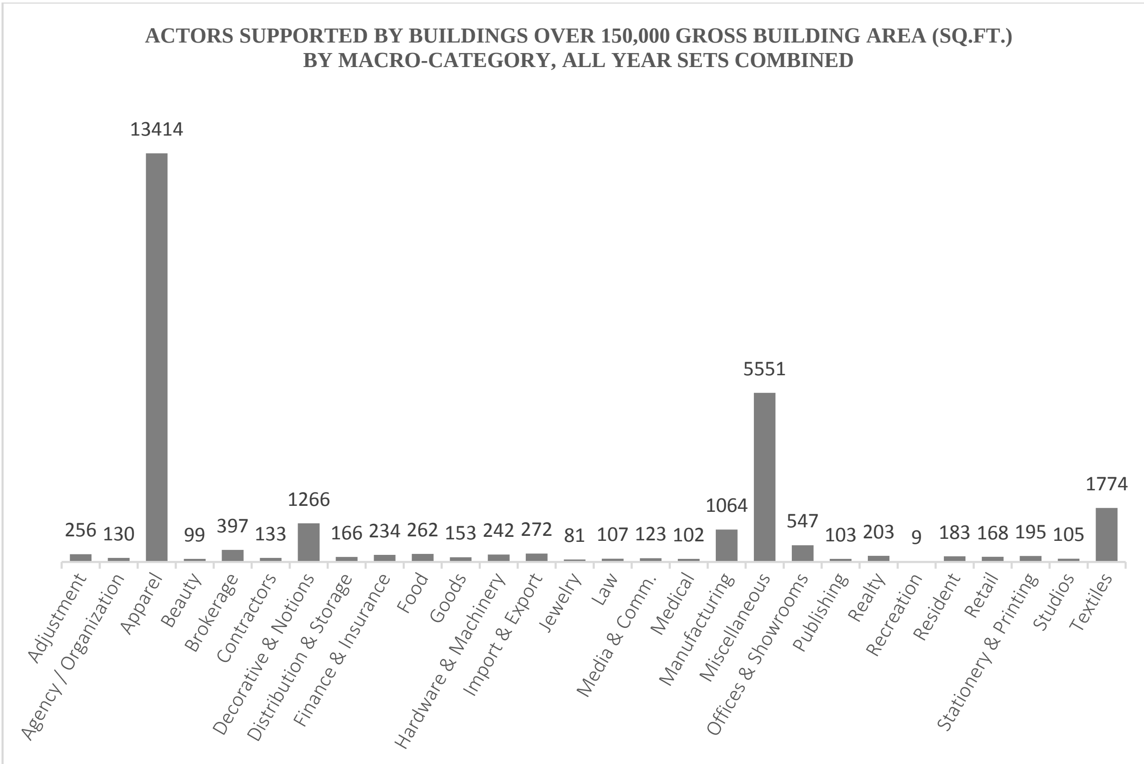


Figure 45: Pie chart showing same data as Figure 44, with only macro-categories representing 2% or more of the total actor pool, labeled.

Above are two figures showing the distribution of all the actors supported by the Garment District of New York City, taken in aggregate for the year sets of 1934, 1942, 1958, 1963, and 1973 combined. When the socioeconomic fabric is summarized in this manner, what is depicted is a socioeconomic composition primarily dominated by the macro-category of *Apparel* (at 42%), followed by *Miscellaneous* (at 17%), *Decorative & Notions* (at 8%), *Textiles* (at 6%), and the remaining five categories, as seen in Figure 45 above, representing 2–4% of the total pool of actors. Put simply, what is visualized is an inherently apparel-centric socioeconomic fabric.

If one begins, however, to utilize the physical parameters of the Garment District as a secondary-filtering mechanism for the collected socioeconomic data, a more-robust narrative begins to unfold. For instance, the following two graphics depict the distribution of actors by macro-category for buildings over 150,000 square feet in gross building area.



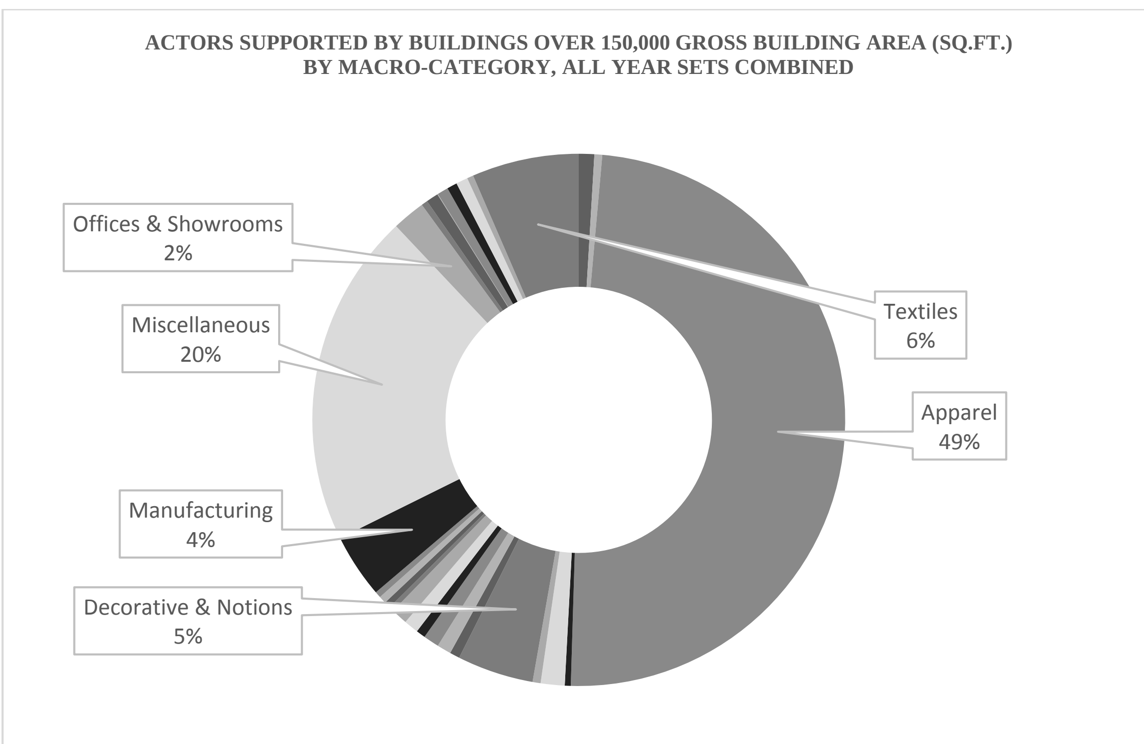
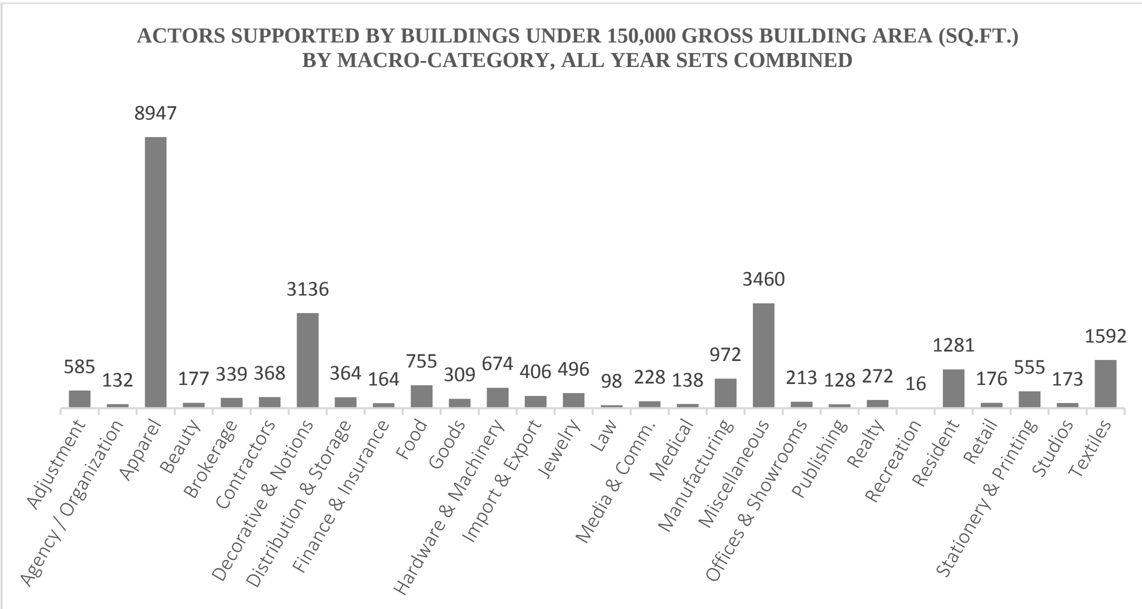


Figure 46, 47: (top) Actors supported by all buildings over 150,000 square feet of gross building area, for all year sets combined; (bottom) pie chart showing same data, with only macro-categories representing 2% or more of the total actor pool, labeled.

Upon initial inspection, this socioeconomic distribution does not seem entirely different than that presented in Figures 44 and 45. Observe though, the differing narrative that is framed when the socioeconomic fabric represented by buildings less than 150,000 square feet in gross building area, is visualized:



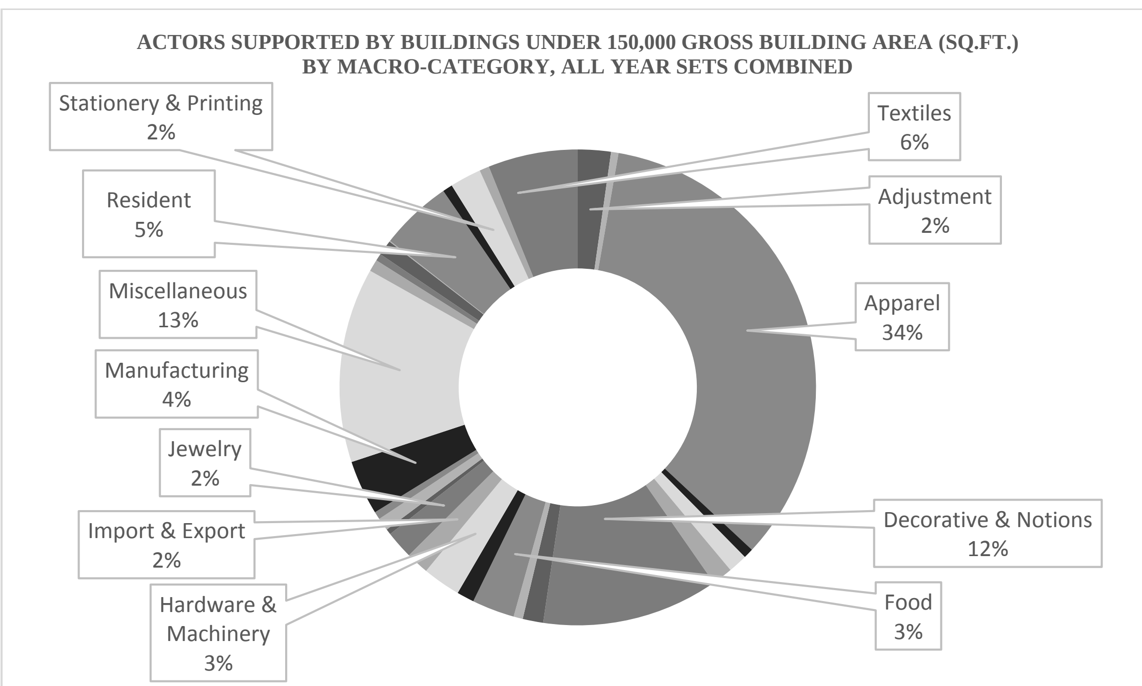


Figure 48, 49: (top) Actors supported by all buildings under 150,000 square feet of gross building area, for all year sets combined; (bottom) pie chart showing same data, with only macro-categories representing 2% or more of the total actor pool, labeled.

As can readily be seen, what is framed in Figures 48 and 49 is a much more diverse socioeconomic composition, with the macro-category of *Apparel* at 34% of the total actor pool (compared to 49% in Figure 47), *Miscellaneous* at 13% (compared to 20% in Figure 47), *Decorative & Notions* at 12% (compared to 5% in Figure 47), *Textiles* at 6% (also at 6% in Figure 47), *Resident* at 5% (not listed in Figure 47), *Manufacturing* at 4% (same as in Figure 47), *Hardware & Machinery* at 3% (not listed in Figure 47), *Food* at 3% (not listed in Figure 47), and the remaining four macro-categories, *Stationery & Printing, Jewelry, Import & Export,* and *Adjustment* at 2% (all unlisted in Figure 47)

What this brings to the forefront, is a question that is subsequently echoed in the following two research phases as well—namely, *what was the Garment District?* That is to ask, *compared to the socioeconomic fabric supported by big buildings, what narrative does the slightly-more diversified socioeconomic fabric supported by smaller buildings, begin to frame?*

(3) *THE VARYING DEFINITIONS OF DENSITY:* What does the filtering of the physical with the socioeconomic, and vice versa, begin to produce, in regard to the discussion of density?

Using this process of filtering discussed above, wherein physical and socioeconomic parameters are used to inform one another, a discursive depth and richness also begins to be achieved in the context of how density is defined and analyzed. For instance, one definition of density is the total number of actors per square foot of a building's footprint or lot area. If this definition is used in order to map the fifty buildings of highest density in the Garment District for the year of 1973, the following visualization is produced.

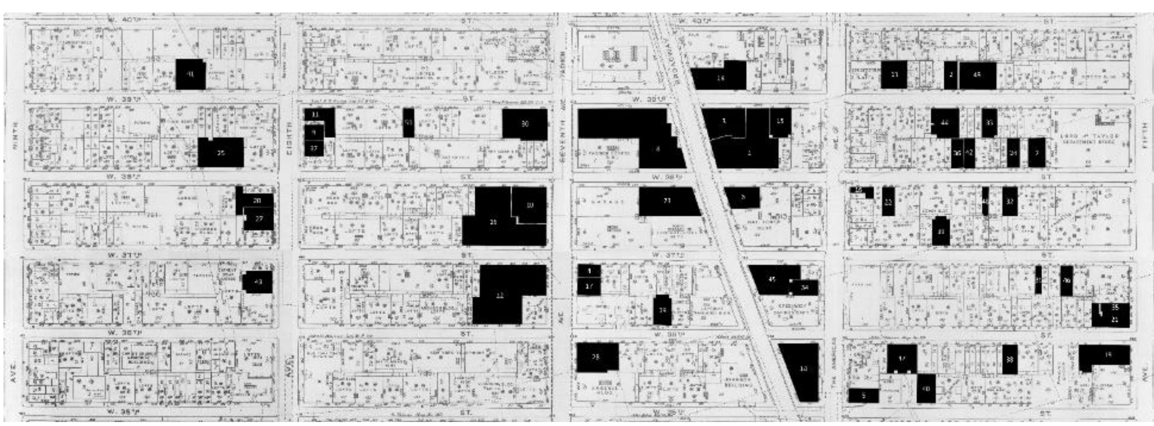


Figure 50: 1973 Map of the Garment District, showing the highest performing fifty buildings in terms of number of actors supported per square foot of lot area. North is up.

There are, though, different definitions that can be put into motion. For instance, in looking at the highest-performing buildings in terms of the number of micro-specializations supported per square foot of gross building area for 1973—i.e., in terms of densities of diversity—a rather different visualization is produced:

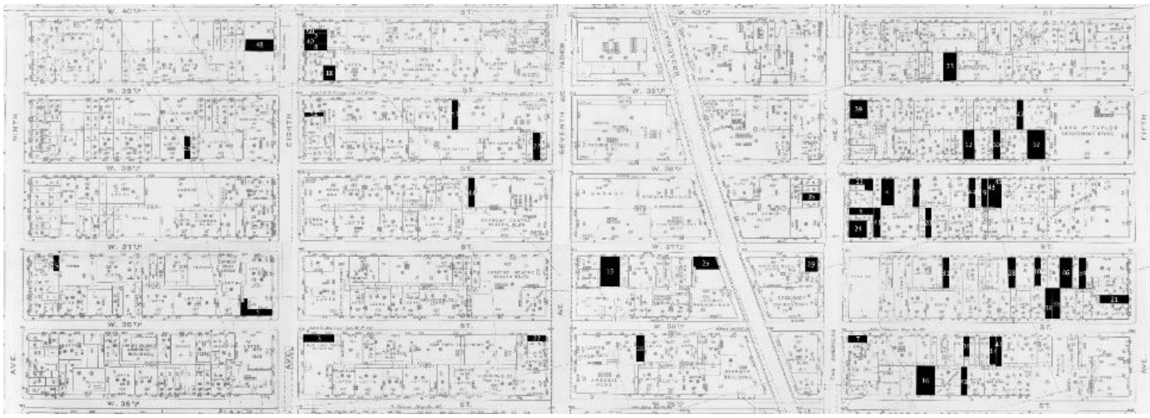


Figure 51: 1973 map of the Garment District, showing the highest performing fifty buildings in terms of number of micro-specializations supported per square foot of gross building area. North is up.

What begins to unfold, in adopting this broader analytical framework, is not only a more dynamic and more robust narrative concerning the Garment District, but more broadly, the operationalization of an overlapping physico-socioeconomic lens through which to apply a deeper rigor to the observation and analysis of the various phenomena of the urban fabric.

(4) *DENSITIES OF DIVERSITY AND BUILDING SIZE:* A physico-socioeconomic correlation and the beginning of a possible question concerning causal mechanisms within the urban fabric.

In looking at the Garment District via this physico-socioeconomic lens, one particular phenomenon comes to the forefront in the analyses produced in this research phase. That is, that there appears to be a distinct, negative correlation, or contrary relationship between gross building area on the one hand, and densities of diversity (number of micro-specializations by gross building area) on the other. In palpable terms, what this means is that within the fabric of the Garment District, smaller buildings tended to support higher densities of diversity, when compared to their larger architectural counterparts, as seen in Figure 52 on the page that follows.

The question of course, is *why? What is the basis of this correlation?* And more importantly, *is there a causal mechanism at play here?* To begin to address this question, some further filtering was necessary—namely, what was needed was the establishment of a concise sampling of buildings that could serve as a framework to be able to begin to investigate the nature of this observed relationship. The sample was to be composed of buildings that: (1) had been in the top 100 highest performing buildings in terms of densities of diversity for 1934, 1958, and 1973;[21] (2) didn't occupy corners of urban blocks;[22] and (3) had supported four or more socioeconomic actors for 1934, 1958, and 1973.[23]

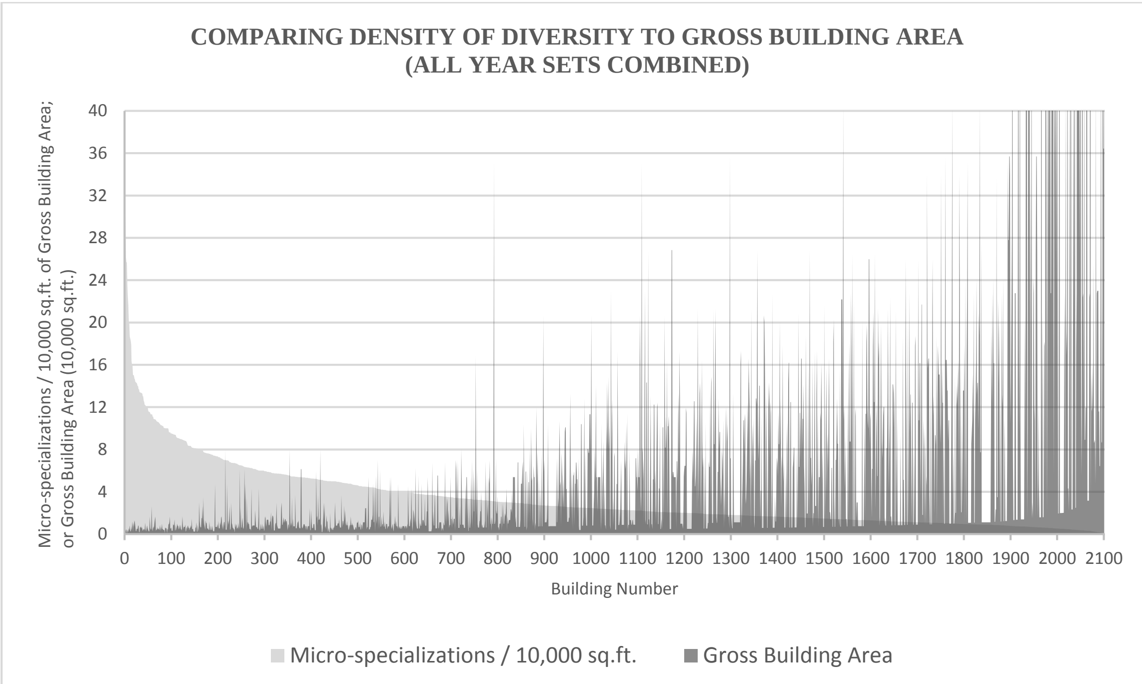


Figure 52: Area chart comparing densities of diversity to gross building areas, for all year sets combined.

Of the entire building stock, 2,280 buildings in total, fifteen emerged that fit within these established parameters. It is this set of fifteen buildings, in turn, that was utilized for Phase II of this research. A secondary set of buildings that fit the same criteria as above, with the exception that they consistently should fall in the 100 lowest-performing buildings (rather than highest-performing) in terms of densities of diversity for 1934, 1958, and 1973, was also established. Twenty-two buildings emerged that fit this criteria, out of which five were selected via systemic random sampling, in order to form the sample of buildings that was to be used in Phase III of this research.

[21] 1942 and 1963 were not included in this first constraint, since these datasets had to be obtained from a wide range of sources, and were collected and coded in tandem with Phase II and Phase III of this research.
[22] In order to control against the anomalously higher foot traffic that such corner lots tend to innately possess
[23] In order to control against hyper-small buildings that appeared to support high densities of diversity not due to the number of micro-specializations actually supported, but rather simply due to their anomalously small gross square footage.

CHAPTER III

PHASE TWO: INTRODUCTION

Phase II of this research was framed as a mixed-method study further analyzing the set of buildings that consistently supported a higher diversity of socioeconomic actors from 1930–1980 in the Midtown Garment District of New York City, as determined in Phase I. The objective was: (1) to understand how the buildings in question changed, internally and externally, during this time period; (2) to understand how the socioeconomic fabrics supported by these buildings changed during this time period; and (3) to analyze whether certain commonalities or patterns became visible when comparing these narratives of change.

A total of fifteen buildings were studied during this phase. For each building, the following information was obtained, compiled, analyzed, and reproduced in a legible format: (1) Two sets of architectural drawings, documenting the physical / spatial conditions of the building as close to 1930 and 1980 as was possible to obtain information for; and (2) the detailed occupant listings for each building from 1933, 1942, 1958, 1963, and 1973.

In order to obtain the information required to produce the architectural drawings for this phase, various resources proved beneficial. Through New York City's Department of Buildings, a substantial amount of architectural information was obtained, namely through the examination of various historic records, ranging from New Building Permits, Demolition Permits, Alteration Permits, and Certificates of Occupancy. An unexpected array of architectural, engineering, and real estate offices in Manhattan, all of whom chose to remain anonymous, also provided critical information in regard to the buildings being studied. The large majority of the obtained documents however were hand-drawn plans, elevations, and sections, often covering only portions of the buildings being studied. A substantial degree of compilation was thus required prior to re-drafting all of the architectural drawings for the buildings into a legible and consistent format. In the end, for each of the fifteen buildings, two complete sets of plans were produced (from a date as close as possible to 1930 as well as 1980), along with one street-front façade (from a date as close as possible to 1980).

In order to obtain the information required to produce the detailed occupant listings, the New York Public Library, the Library of Congress, and the Boston Public Library were the three main resources utilized. Extensive amounts of microfiche and physical archival sources were examined, documented, and recoded. After this process, some socioeconomic information still remained missing, either due to the illegibility of the initial archival documents, or due to data points simply being absent from the sources used. Much of these gaps in data were subsequently filled through research done in local newspaper archives. The digital archives of the New York Times also proved of great substance during this phase. In the end, for each of the fifteen buildings, a complete and detailed occupant list was produced for the years of 1933, 1942, 1958, 1963, and 1973.

Detailed historic narratives were also compiled and produced for each building during the aforementioned newspaper archival work, but since it was required that the building addresses themselves be anonymized due to various non-disclosure agreements signed while obtaining the necessary architectural / spatial information, these narratives were omitted from the research.

In the following fifteen sections (Sections 3.1 through 3.15), one will find the following provided for each building: (1) a brief description of the building on an architectural and urban-contextual level; (2) detailed information regarding the changes observed in the internal spatial composition of the building; and (3) detailed information regarding the changes to the socioeconomic fabric supported by the building, observed between 1933–1973. Section 3.16 in turn is a brief discussion section that serves to summarize these findings through a more analytical framework, seeking to uncover whether certain commonalities or patterns could be observed through the collective narratives of physical / spatial and socioeconomic change exhibited by these buildings.

3.1. BUILDING 1

3.1.1. ARCHITECTURE AND URBAN CONTEXT

Building 1 is a four-story structure built in 1923. It is 21’-0” wide and 75’-0” deep on all four floors. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has no elevator, one set of stairs, and two fire escapes—one located on the rear façade and one on the street front façade.

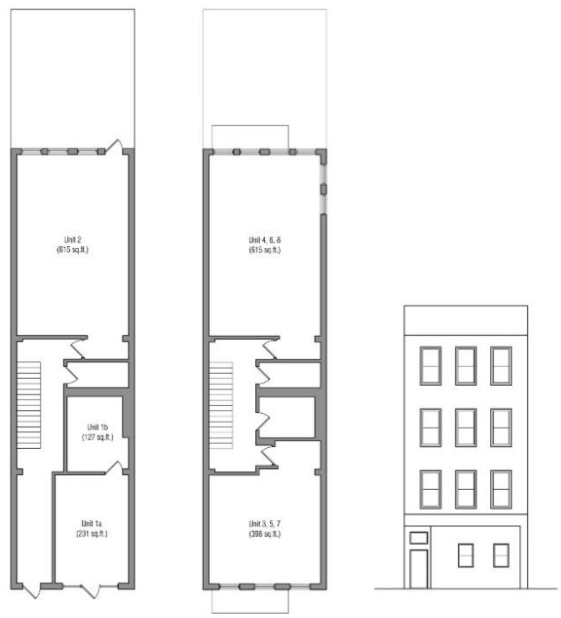


Figure 53, 54, 55 (left to right): Building 1, first (ground) floor (1932); floors 2–4 (1932); street-front elevation (1983). For plans, north is up.

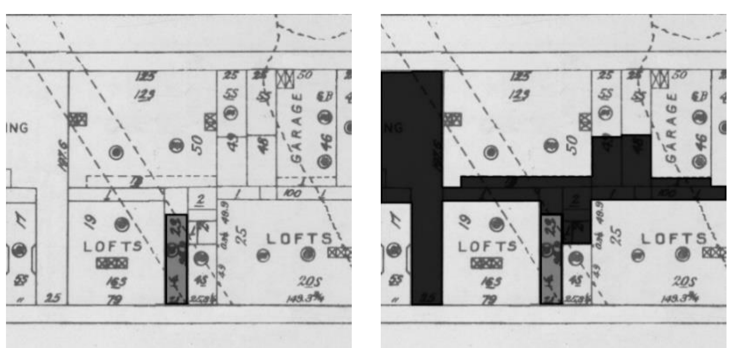


Figure 56, 57: Excerpt from Sanborn Map from 1976, with Building 1 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 1 highlighted in further darker tone. No set scale. North is up.

The street-front façade of Building 1 faces south. In the rear (northern) portion of the site, Building 1 also has more access to air and northern light than what would have been provided if only the minimum rear setbacks required by code had been achieved. This degree of openness found in the rear of Building 1, is documented in the rightmost graphic below.

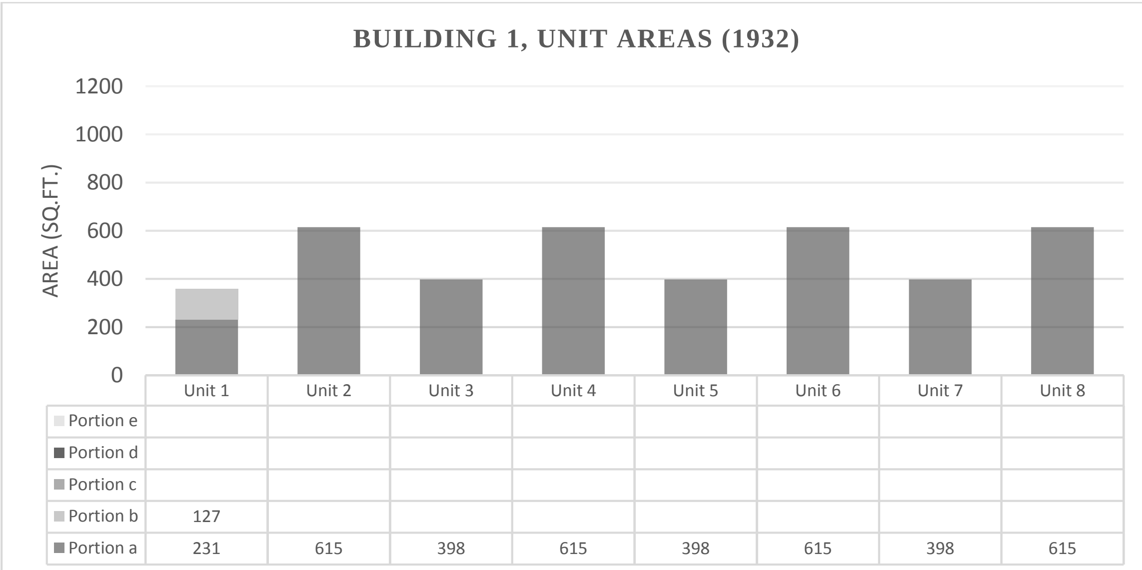
3.1.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 1 obtained for 1932 and 1983, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 58, 59, 60, 61 (left to right): Building 1, first floor (1932); same floor (1983); Building 1, second floor (1932); same floor (1983). 1" = 32'. North is up.

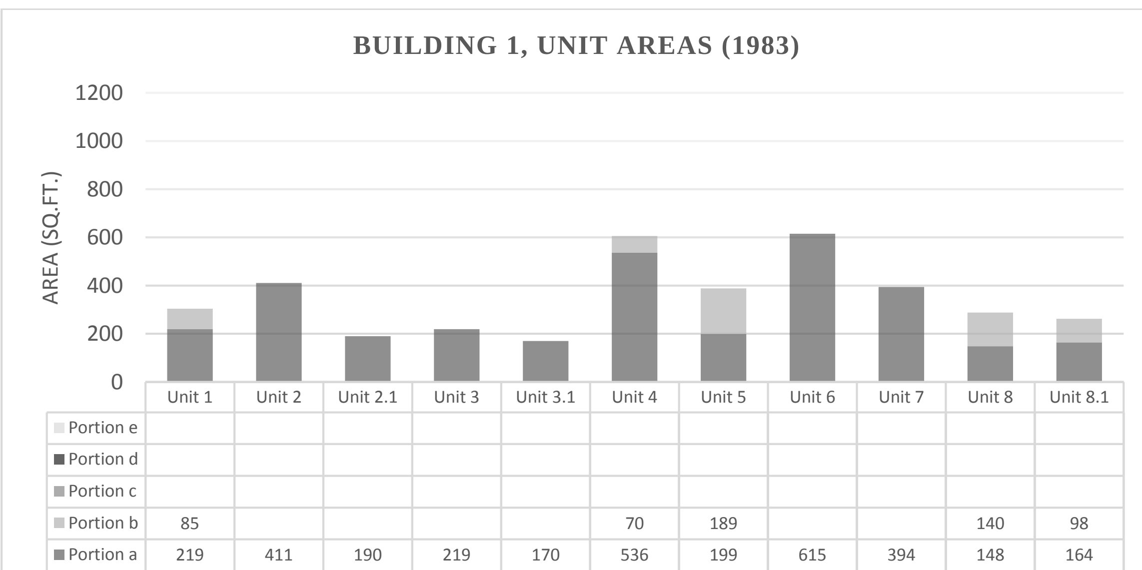
Figure 62, 63, 64, 65 (left to right): Building 1, third floor (1932); same floor (1983); Building 1, fourth floor (1932); same floor (1983). 1" = 32'. North is up.

In 1932, Building 1 had 8 units, with 2 units on the first (ground) floor, and 6 units on the three floors above. In 1983 by comparison, Building 1 had an increased total unit count of 11, with 3 units on the first floor (1 more than in 1932) and 8 units on the three floors above (2 more than in 1932). As can be observed in the graphics below, the 1983 state of Building 1 exhibits greater internal spatial diversity than its 1932 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Portion e								
Portion d								
Portion c								
Portion b	127							
Portion a	231	615	398	615	398	615	398	615

Figure 66: Unit areas for Building 1 for 1932, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 3.1	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 8.1
Portion e											
Portion d											
Portion c											
Portion b	85					70	189			140	98
Portion a	219	411	190	219	170	536	199	615	394	148	164

Figure 67: Unit areas for Building 1 for 1983, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1932, among the 6 units above the first (ground) floor, the average unit size was 507 square feet, with the smallest unit being 398 square feet and the largest being 615 square feet. In 1983 by comparison, among the 8 units above the first floor, the average unit size had shrunk to 368 square feet, with the smallest unit similarly falling to 170 square feet and the largest remaining at 615 square feet.

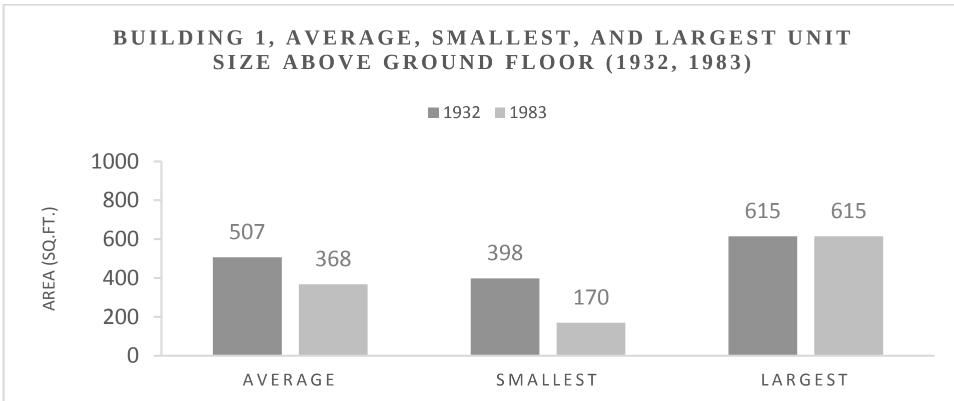


Figure 68: Building 1, average, smallest, and largest unit size above first (ground) floor for 1932 and 1983.

Below is a visualization showing the changes to the internal arrangement of Building 1, floor by floor. One observes that the new units documented in the 1983 plans for Building 1 are located in the topmost floor and the bottommost two floors of the structure, but not on the third floor. However, if one looks at the 1983 floor plan of the third floor (two pages prior) as well as the chart showing unit areas for 1983 (one page prior), one will see that the third floor does witness some changes between 1932 and 1989, with Unit 8 being divided internally into roughly equal portions by the latter date, seemingly reminiscent of a waiting room and office layout.

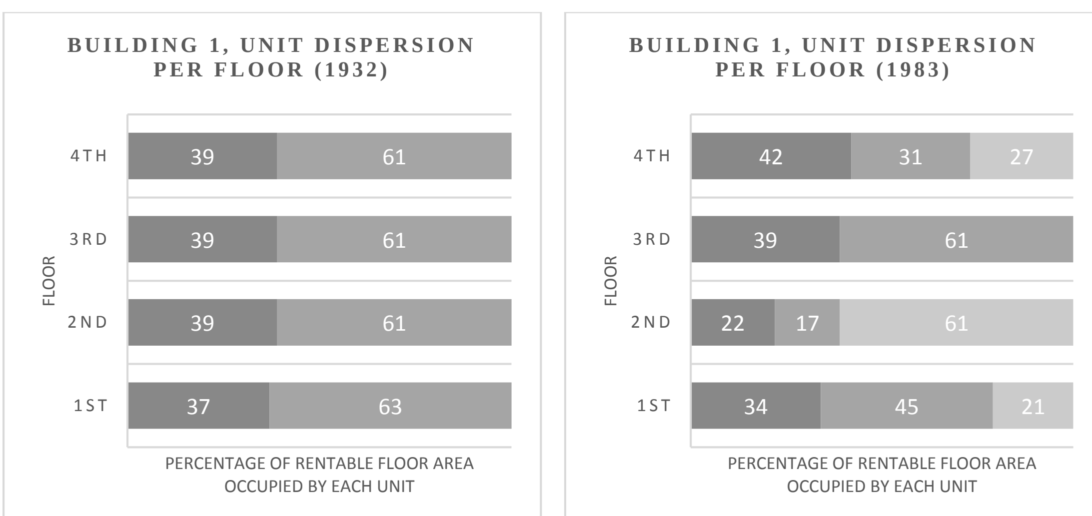


Figure 69, 70: Building 1, unit dispersion per floor, 1932 and 1983.

3.1.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 1 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Cloaks / Suits	Cutting Mach. (1)	Cutting Mach.(2)	Cutting Mach. (3)	Cutting Mach. (4)
Coats	Sewing Mach.	Sewing Mach. (1)	Sewing Mach. (2)	Sewing Mach. (3)
Cutting Mach.	Resident	Contractor	Contractor (1)	Contractor (2)
Electrical Equip.	Silks	Misc. Business	Partitions (1)	Misc. Business (1)
Machinist		Partitions	Resident (1)	Brokerage
Machinist		Resident	Misc. Business	Resident
Moving / Trucking		Resident	Resident	Resident
Partitions / Racks			Resident	Resident
				Resident

Figure 71: Changing socioeconomic composition of Building 1 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 1 had 8 tenants, totaling 7 micro-specializations. In 1942, this fell to 4 tenants and 4 micro-specializations.[24] In 1958, there was an increase to 7 tenants and 6 micro-specializations. In 1963, total occupancy rose slightly to 8 tenants, still totaling however, 6 micro-specializations. And in 1973, a rise to 9 tenants was observed, although micro-specializations remained at 6.

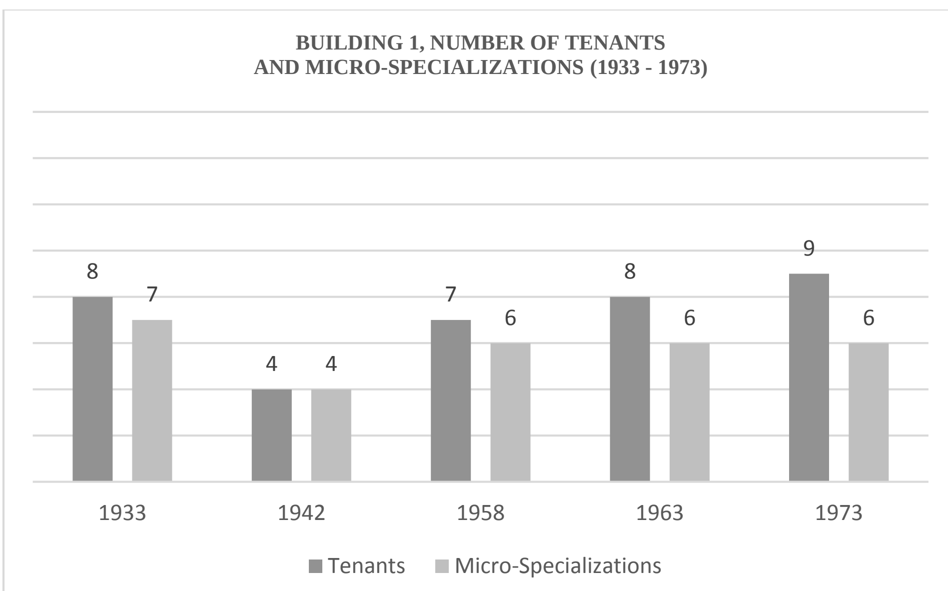
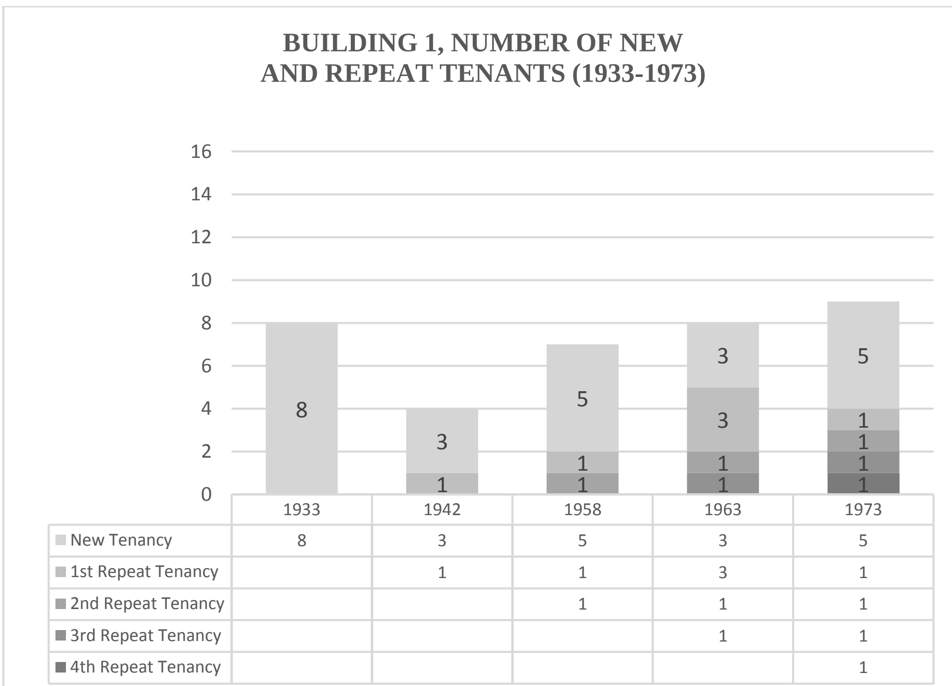


Figure 72: Building 1, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

[24] One historic contextual factor to keep in mind when observing this shortage is the impact World War II on the broader American economic fabric.

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 1, as listed in detail in the first table shown in the page prior, is presented below. In 1942, there is 1 repeat tenant listed. In 1958, 2 repeat occupants are observed, 1 of which, a cutting machine company, is renewing for a second consecutive year set. In 1963, 5 repeat tenants are observed, with the cutting machine company having renewed for a third consecutive year set, and a sewing machine firm being a second-time repeat tenant. In 1973, among the 4 repeat tenants, both the cutting machine company and the sewing machine firm from the years prior are listed as repeat tenants for a fourth and third consecutive time, respectively. One contractor has also renewed tenancy for a second consecutive year set, and there is also 1 miscellaneous business listed as a repeat tenant for the first time.



	1933	1942	1958	1963	1973
New Tenancy	8	3	5	3	5
1st Repeat Tenancy		1	1	3	1
2nd Repeat Tenancy			1	1	1
3rd Repeat Tenancy				1	1
4th Repeat Tenancy					1

Figure 73: Building 1, number of new and repeat tenants from 1933–1973

It is important to note briefly here that Building 1's observed repeat tenancy patterns seem to be significantly more established when compared to the other fifteen buildings studied in this section. In addition to Building 1, only Building 10, which was a twelve-story structure (compared to Building 1 being a four-story structure), supported a four-time and three-time repeat tenant simultaneously in 1973. Similarly, in addition to Building 1, only Building 6 (a six-story structure) and Building 10, supported a three-time and two-time repeat tenant simultaneously in 1963.[25]

[25] Building 8 (another twelve-story structure) would have likely also qualified for these distinctions, however since one year set of economic data was irretrievable for said building, this could not be verified in full.

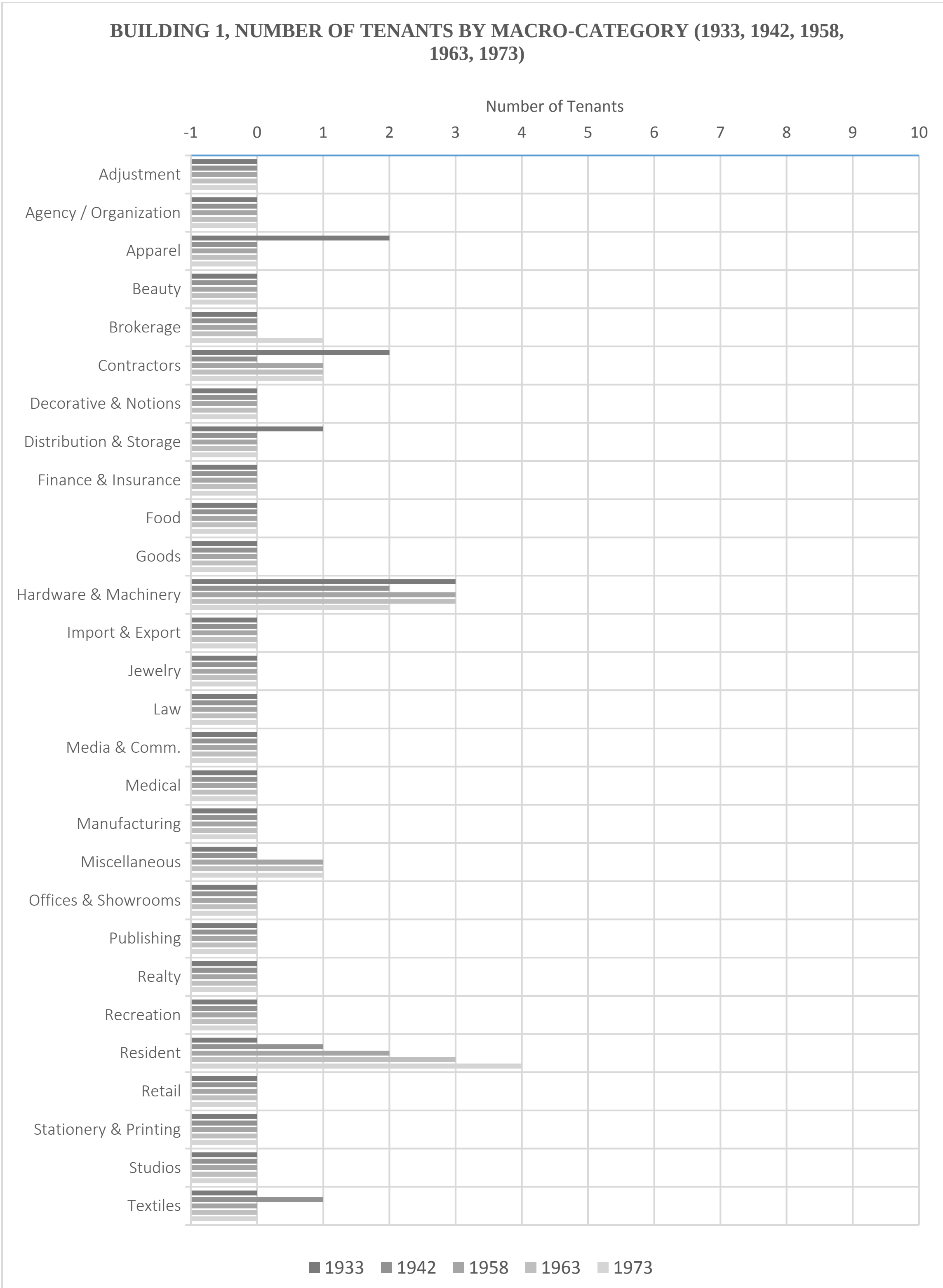


Figure 74: Building 1, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

Some narratives to note, in looking at the figures relating to socioeconomic composition, above:

- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 1 in 1933 and 1972, one finds that only 2 macro-categories are shared by the year sets (*Hardware & Machinery* and *Contractors)*, although 1933 and 1973 supported 4 and 5 macro-categories, respectively. *Hardware & Machinery* appears in all year sets for Building 1, represented by 2–3 tenants on each occasion. This consistency is anchored around a sewing machine company and a cutting machine company being long-term tenants of the building. Similarly, Building 1 consistently supports 1–2 contractors in each year set, except for in 1942 which as a year overall exhibits a shortage of tenants. Again, the impact of World War II might be important to keep in mind in regard to this diminished tenancy observed in 1942.
- The *Resident* category continues to grow in number starting from a single observance in 1942, rising to 4 residents by 1973. It is important to recognize though that in 1973, although residents form a substantial percentage of the tenants for Building 1, there is still a noteworthy degree of diversity in the socioeconomic fabric at that point, with 5 macro-categories (including *Resident*) and 6 micro-specializations being represented in the building, compared to the 4 macro-categories and 7 micro-specializations supported in 1933.
- It is only in 1933 that the macro-category of *Apparel* is observed, represented by a cloaks & suits firm, and a coat company.

3.2. BUILDING 2

3.2.1. ARCHITECTURE AND URBAN CONTEXT

Building 2 is a four-story structure built in 1920. It is 34’-2” wide and 50’-0” deep from the second floor up, and 98’-9” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has no elevator, one set of stairs, and one fire escape on the rear façade.

Figure 75, 76, 77 (left to right): Building 2, first (ground) floor (1927); floors 2–4 (1927); street-front elevation (1979). For plans, north is up.

The street-front façade of Building 2 faces south. In the rear (northern) portion of the site, Building 2 also has more access to air and northern light than what would have been provided if only the minimum rear setbacks required by code had been achieved. This degree of openness found in the rear of Building 2, is documented in the rightmost graphic below.

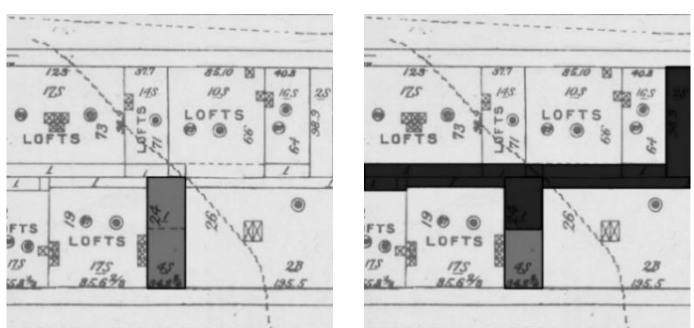


Figure 78, 79: Excerpt from Sanborn Map from 1976, with Building 2 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 2 highlighted in further darker tone. No set scale. North is up.

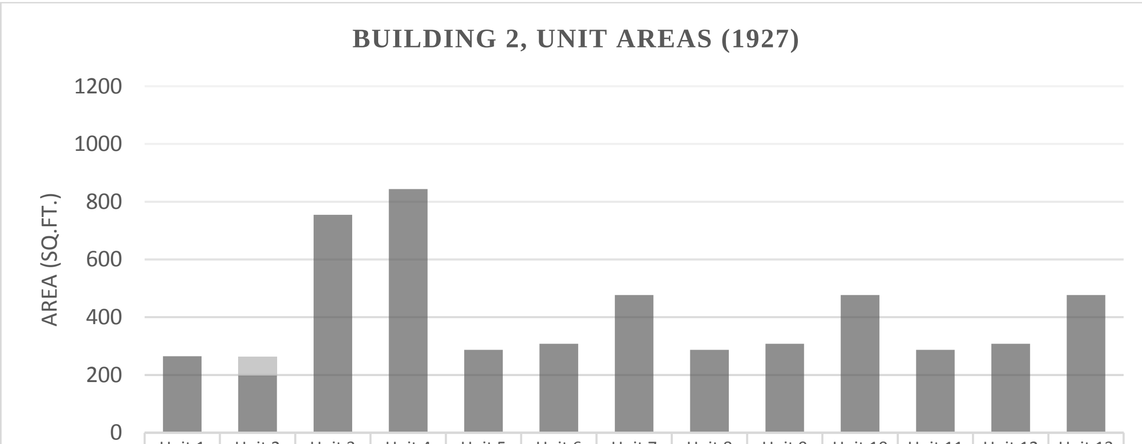
3.2.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 2 obtained for 1927 and 1979, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

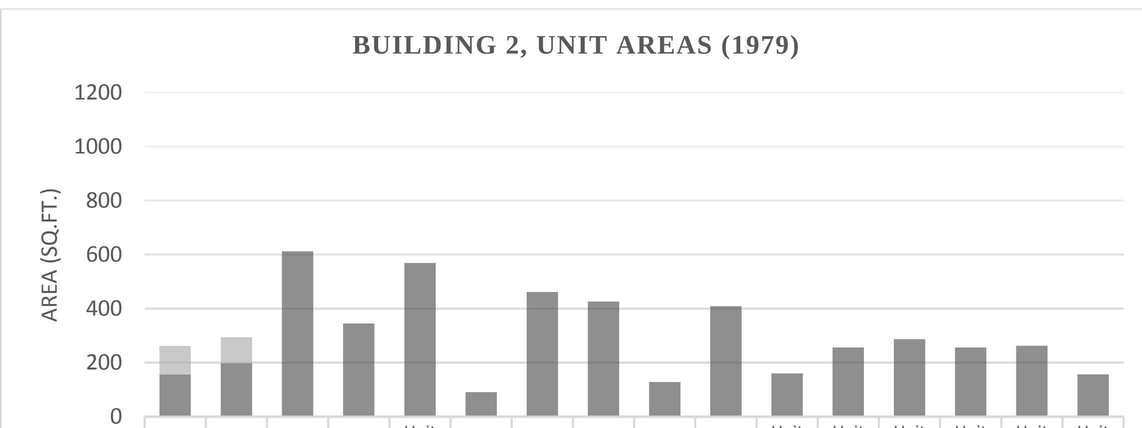
Figure 80, 81, 82, 83 (left to right): Building 2, first floor (1927); same floor (1979); Building 2, second floor (1927); same floor (1979). 1" = 32'. North is up.

Figure 84, 85, 86, 87 (left to right): Building 2, third floor (1927); same floor (1979); Building 2, fourth floor (1927); same floor (1979). 1" = 32'. North is up.

In 1927, Building 2 had 13 units, with 4 units on the first (ground) floor, and 9 units on the three floors above. In 1979 by comparison, Building 2 had an increased unit count of 16, with 5 units on the first floor (1 more than in 1927) and 11 units on the three floors above (2 more than in 1927). As can be observed in the graphics below, the 1979 state of Building 2 exhibits greater internal spatial diversity than its 1927 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13
Portion e													
Portion d													
Portion c													
Portion b		65											
Portion a	265	198	755	844	287	308	477	287	308	477	287	308	477



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 4.1	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 10.1	Unit 11	Unit 12	Unit 13	Unit 13.1
Portion e																
Portion d																
Portion c																
Portion b	105	96														
Portion a	157	198	612	345	569	91	462	426	128	409	160	256	287	256	263	157

Figure 88, 89: Unit areas for Building 2 for 1927 and 1979, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1927, among the 9 units above the first (ground) floor, the average unit size was 357 square feet, with the smallest unit being 287 square feet and the largest being 477 square feet. In 1979 by comparison, among the 11 units above the first floor, the average unit size had shrunk to 263 square feet, with the smallest unit similarly falling to 91 square feet and the largest diminishing slightly to 462 square feet.

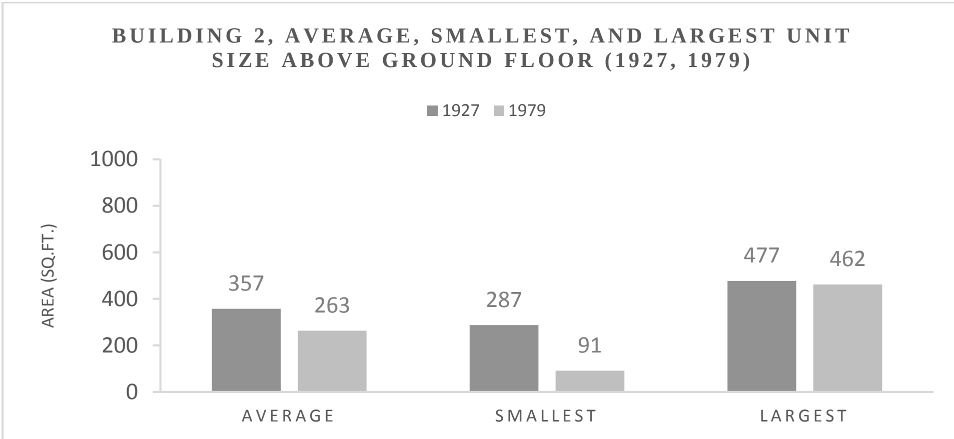


Figure 90: Building 2, average, smallest, and largest unit size above first (ground) floor for 1927 and 1979.

Below is a visualization showing the changes to the internal arrangement of Building 2, floor by floor. Two points worth noting: (1) on Floor 2, although the unit count remains the same, Unit 6 expands significantly, occupying 47% of the rentable floor area in 1979, from its previous 29% in 1927; and (2) the new units documented in the 1979 plans are located in the topmost two floors and the ground floor of Building 2, but not on the second floor.

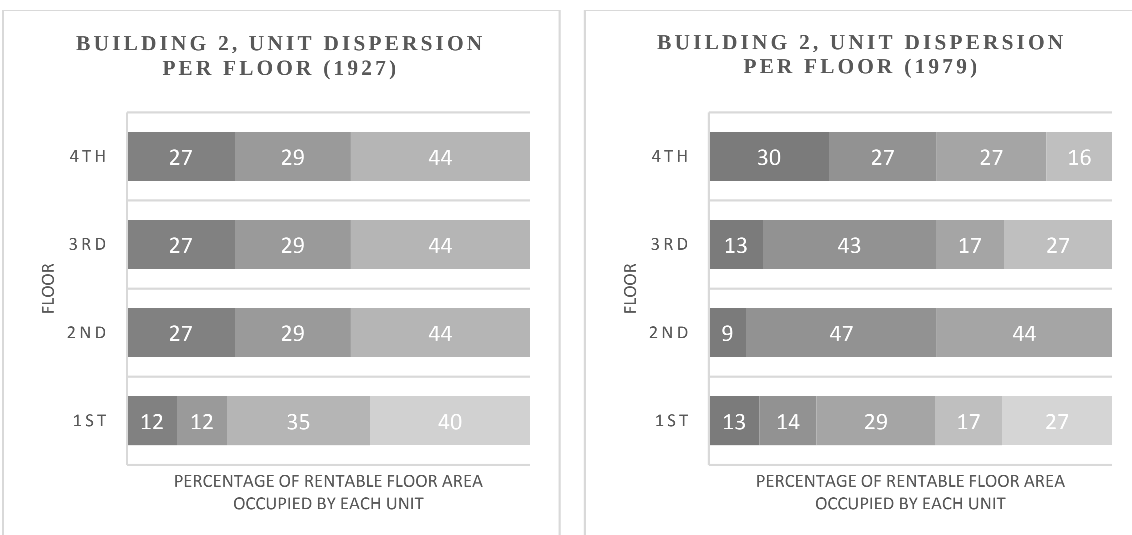


Figure 91, 92: Building 2, unit dispersion per floor, 1927 and 1979.

3.2.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 2 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Cigars	Employ. Agency (1)	Buttons	Buttons (1)	Buttons (2)
Employ. Agency	Pleating (1)	Buttons	Buttons (1)	Buttons (2)
Flowers	Pleating (1)	Buttons	Luncheonette (1)	Notions (1)
Jewelry	Tea Room (1)	Luncheonette	Misc. Business (1)	Buttons & Buckles
Luncheonette	Ribbons	Misc. Business	Silks (1)	Textiles
Notions	Embroidery	Misc. Business	Social Club (1)	Silks
Pleating	Embroidery	Silks	Buttons	Pleating
Pleating	Luncheonette	Social Club	Notions	
Rhinestones		Textiles	Woolens	
Tea Room				

Figure 93: Changing socioeconomic composition of Building 2 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 2 supported 10 tenants, with a total of 9 micro-specializations. In 1942, the total occupancy fell to 8, totaling 6 micro-specializations. In 1958, there was a slight increase to 9 tenants, but with micro-specializations remaining steady at 6. In 1963, total occupancy remained at 9 tenants, but with a rise to 7 micro-specializations. And in 1973, a dip down to 7 tenants, totaling 6 micro-specializations, was observed.

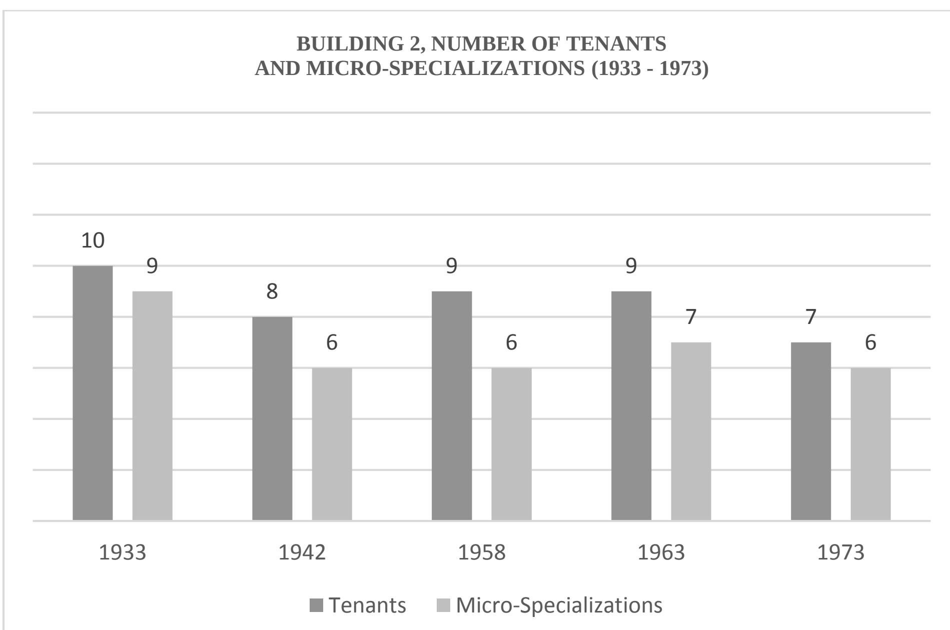


Figure 94: Building 2, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 2, as listed in detail in the first table shown in the page prior, is presented below. In 1942, there are 4 first-time repeat tenants listed. In 1958, among the 9 occupants, none are repeat tenancies from the previous year set. In 1963, a sudden rise to 6 first-time repeat tenants is documented. And in 1973, 3 repeat tenancies are listed, 2 of which have renewed tenancy for a second-consecutive year set, both of which are firms specialized in buttons.

It is important to note also that Building 2 is the only building of the fifteen studied in this section to have a completely new tenant pool (seen in 1958) after a year set with repeat tenants (seen in 1942). Although Building 13 has some semblance of this occurrence observed in 1963, there was still 1 repeat tenant observed for that building in that year.

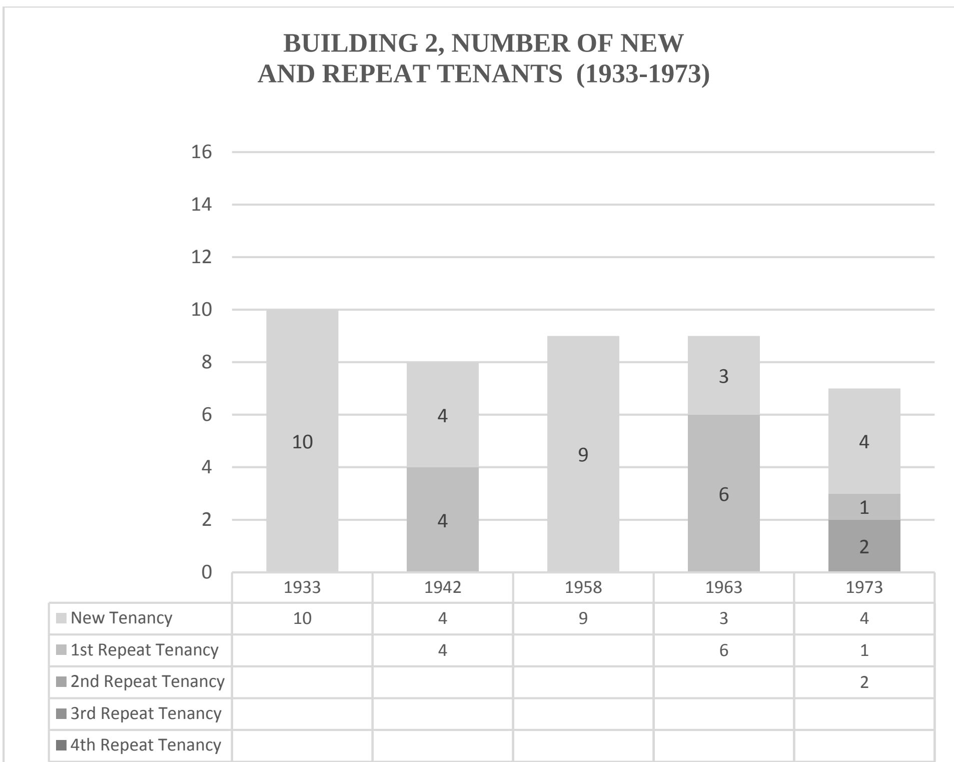


Figure 95: Building 2, number of new and repeat tenants from 1933–1973

Some narratives to note, in looking at the figure relating to socioeconomic composition, below:

- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 2 in 1933 and 1972, one finds that only 2 macro-categories are shared by the year sets (*Decorative & Notions* and *Adjustment)*. *Decorative & Notions* appears in all year sets for Building 2, represented by 3–4 tenants on each occasion. This category consistently retains the higher number of businesses for Building 2, although it is briefly rivaled in 1933 by *Food.*

- *Food* is present in the first four year sets for this building, but is absent entirely in 1973, which seems to be foretold by the number of businesses in this category diminishing from 3 in 1933, to 2 in 1943, and then falling to 1 for 1958 and 1963. *Adjustment* also appears strong in the first two year sets, represented by 2 pleating businesses for the years 1933 and 1942, but vanishes in 1958 and 1963, only to reappear with another pleating business in 1973.
- The amount of diversity at the macro-category scale is noteworthy for Building 2, in that 4–6 macro-categories are consistently represented in the observed year sets, until 1973 when this number falls to 3. Even in 1973 however, there are still 6 micro-specializations being supported by the building.

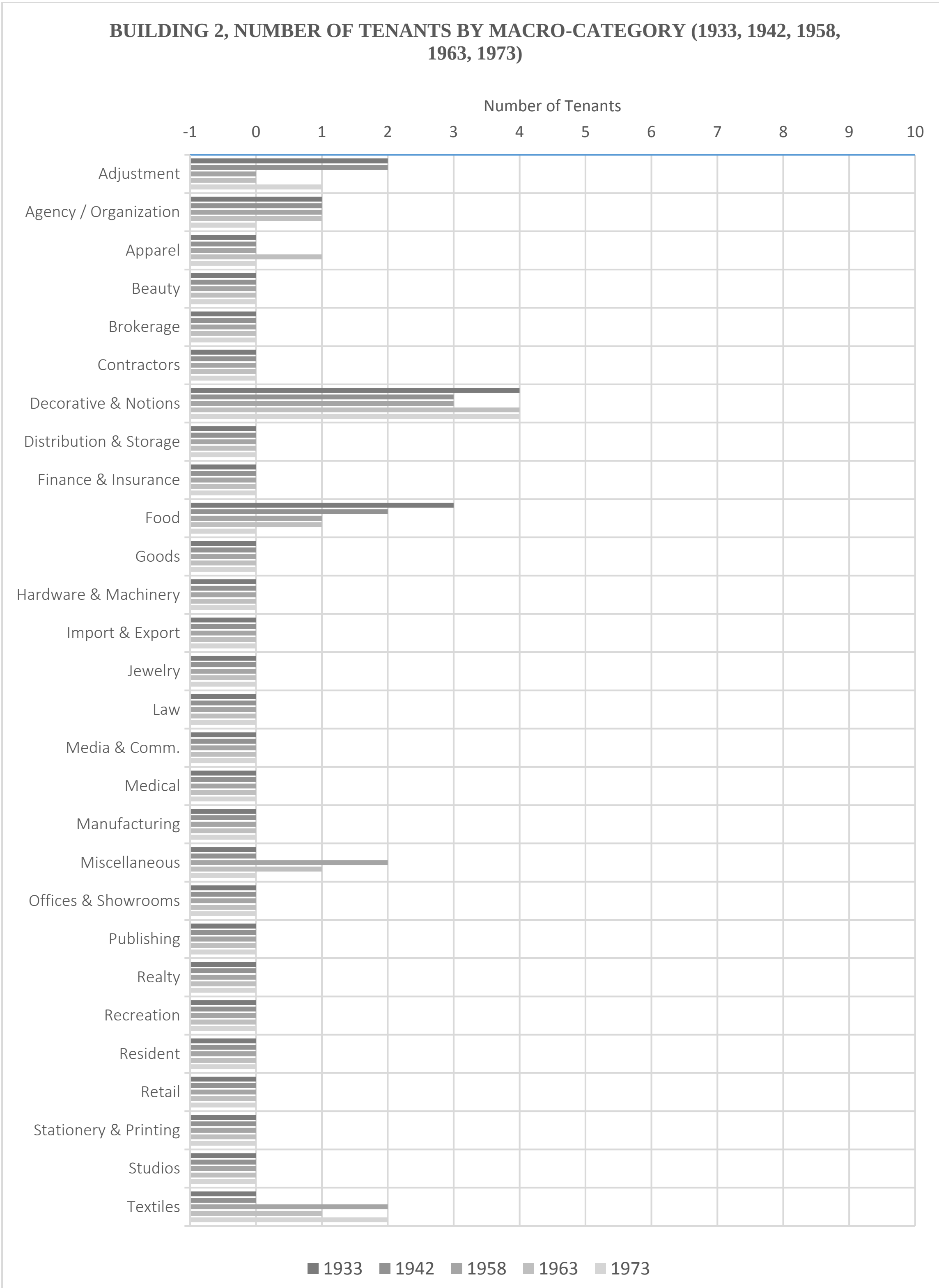


Figure 96: Building 2, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.3. BUILDING 3

3.3.1. ARCHITECTURE AND URBAN CONTEXT

Building 3 is a six-story structure built in 1922. It is 21’-0” wide and 60’-0” deep from the third floor up, 89’-0” deep on the second floor, and 98’-9” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape on the rear façade.

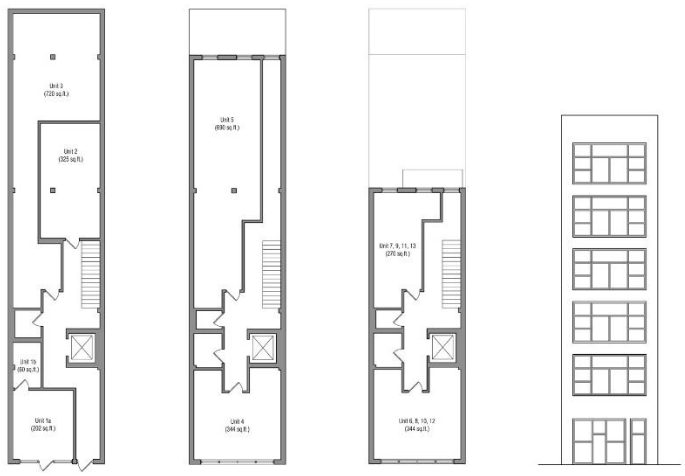


Figure 97, 98, 99, 100 (left to right): Building 3, first (ground) floor (1925); second floor (1925); floors 3–6 (1925); street-front elevation (1980). 1” = 32’. For plans, north is down.

The street-front façade of Building 3 faces north. In the rear (southern) portion of the site, Building 3 also has more access to air and southern light than what would have been provided if only the minimum rear setbacks required by code had been achieved. This degree of openness found in the rear of Building 3, is documented in the rightmost graphic below.

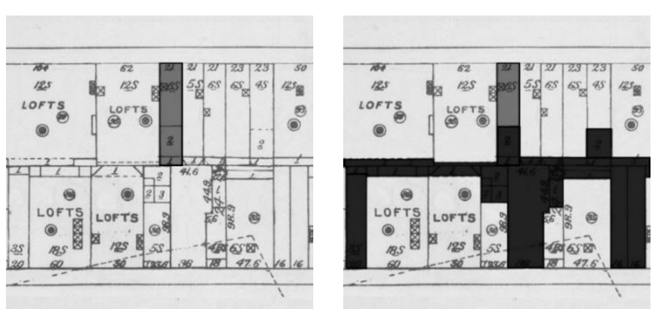


Figure 101, 102: Excerpt from Sanborn Map from 1976, with Building 3 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 3 highlighted in further darker tone. No set scale. North is up.

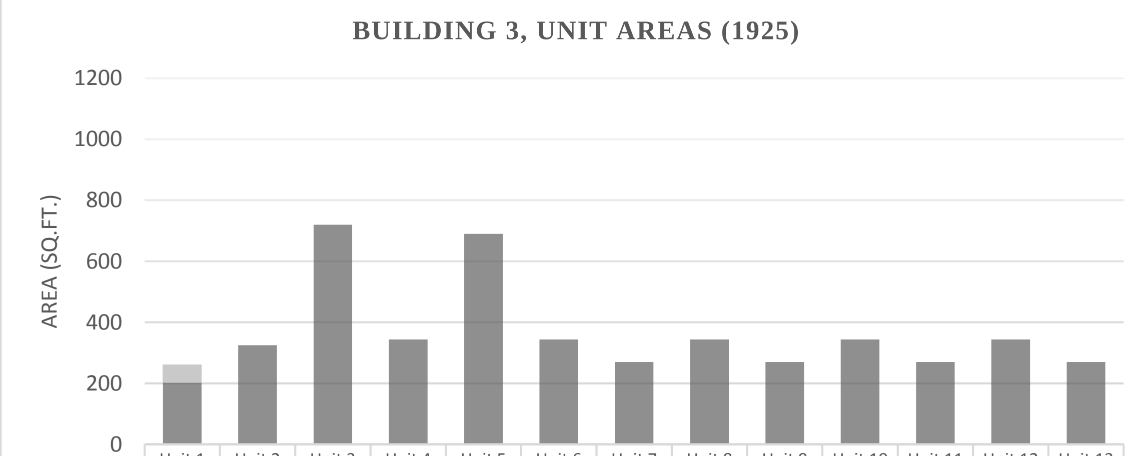
3.3.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 3 obtained for 1925 and 1980, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

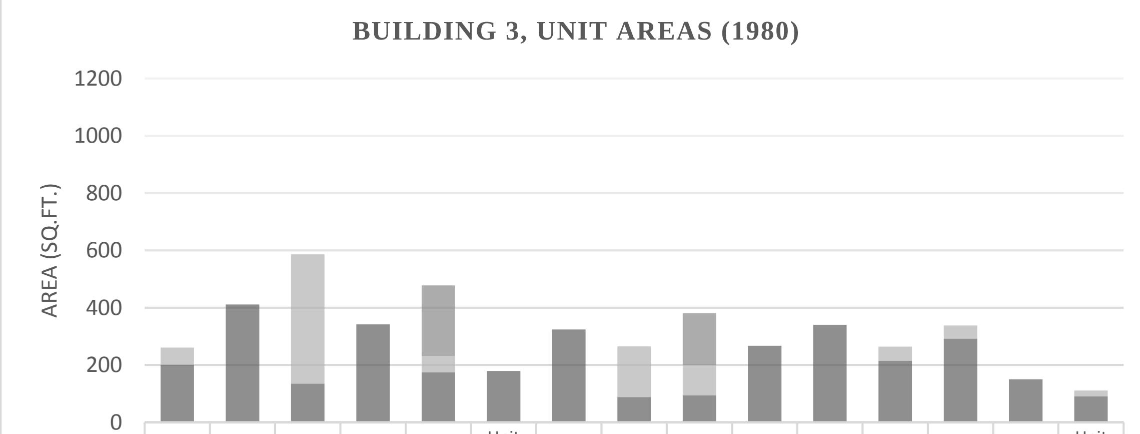
Figure 103, 104, 105, 106, 107, 108 (left to right): Building 3, first floor (1925); same floor (1980); second floor (1925); same floor (1980); third floor (1925); same floor (1980). 1" = 32'. North is down.

Figure 109, 110, 111, 112, 113, 114 (left to right): Building 3, fourth floor (1925); same floor (1980); fifth floor (1925); same floor (1980); sixth floor (1925); same floor (1980). 1" = 32'. North is down.

In 1925, Building 3 had 13 units, with 3 units on the first (ground) floor, and 10 units on the five floors above. In 1980 by comparison, Building 3 had 15 units, still with 3 units on the first floor, but with an increase to 12 units on the five floors above. As can be observed in the graphics below, the 1980 state of Building 3 exhibits greater internal spatial diversity than its 1925 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13
Portion e													
Portion d													
Portion c													
Portion b	60												
Portion a	202	325	720	344	690	344	270	344	270	344	270	344	270



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 5.1	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 13.1
Portion e															
Portion d															
Portion c					247				181						
Portion b	60		451		57			177	106			49	46		21
Portion a	201	411	135	342	174	179	324	88	94	267	340	215	292	150	90

Figure 115, 116: Unit areas for Building 3 for 1925 and 1980, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1925, among the 10 units above the first (ground) floor, the average unit size was 349 square feet, with the smallest unit being 270 square feet and the largest being 690 square feet. In 1980 by comparison, among the 12 units above the first floor, the average unit size had shrunk to 287 square feet, with the smallest unit falling to 111 square feet and the largest unit comparably diminishing to 478 square feet.

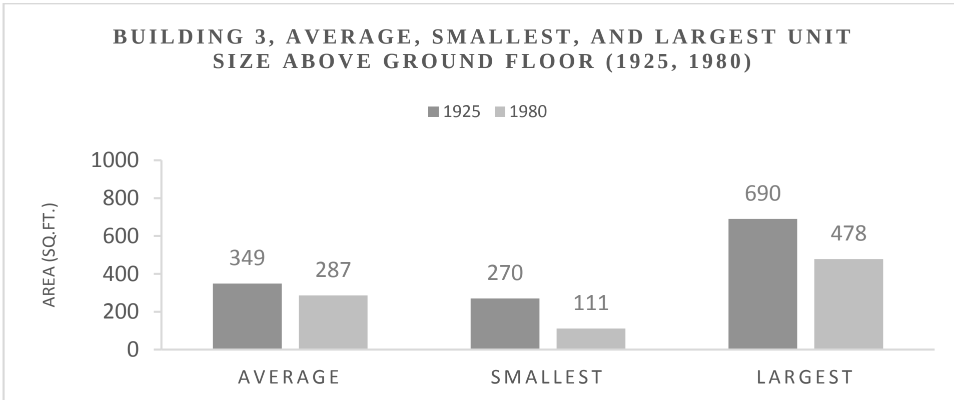
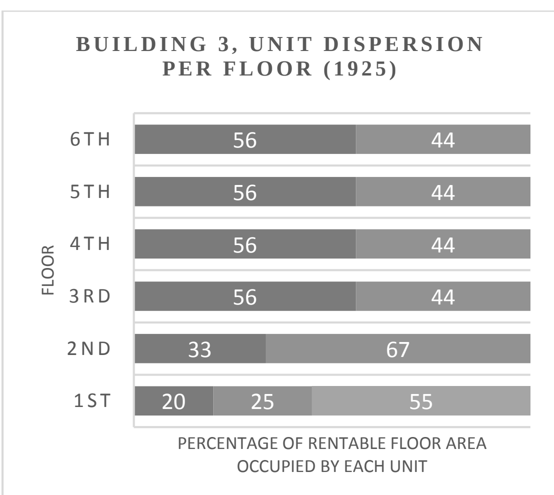


Figure 117: Building 3, average, smallest, and largest unit size above first (ground) floor for 1925 and 1980.

Below is a visualization showing the changes to the internal arrangement of Building 3, floor by floor. One observes that the new units documented in the 1980 plans are located only in the sixth floor and the second floor of the structure, with the other floors remaining the same in terms of unit count. As seen in the floorplans listed two pages prior however, the first, third, fourth, and fifth floor do witness noteworthy internal changes not captured by changes to unit counts.



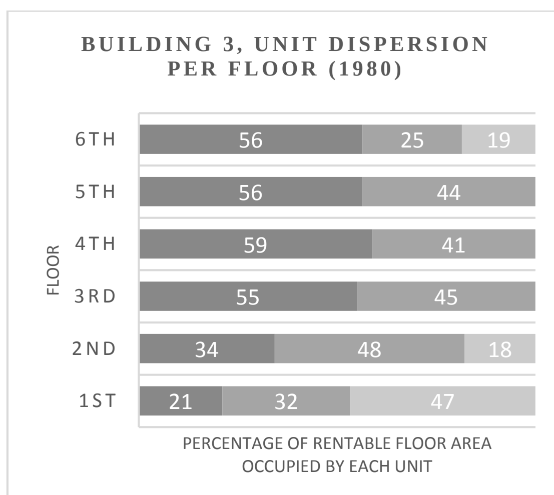


Figure 118, 119: Building 3, unit dispersion per floor, 1925 and 1980.[26]

[26] On the fourth floor, one observes a unit occupying 56% of the rentable floor area in 1930 increase to 59% occupation in 1980. This may seem to be a discrepancy with the largest unit size shrinking from 690 square feet to 478 square feet between these year sets.

3.3.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 3 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933
Dyes
Flowers
Flowers
Manufacturing
Messenger Svce.
Millinery
Millinery
Millinery Supp.
Millinery Supp.
Misc. Business
Textiles

1942
Millinery (1)
Fur
Importing
Notions
Resident
Textiles
Trimmings

1958
Millinery (2)
Flowers
Fur
Handblocking
Handblocking
Millinery
Millinery Supp.
Millinery Supp.
Misc. Business
Misc. Business

1963
Fur (1)
Handblocking (1)
Handblocking (1)
Millinery (1)
Millinery Supp. (1)
Misc. Business (1)
Lace
Notions

1973
Lace (1)
Notions (1)
Electrician
Machines
Partitions
Resident
Textiles
Textiles

Figure 120: Changing socioeconomic composition of Building 3 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 3 had 11 tenants, totaling 8 micro-specializations. In 1942, the total occupancy fell to 7 tenants and 7 micro-specializations. In 1958, there was a rebound back to 10 tenants, but a further slight dip to 6 micro-specializations. In 1963, total occupancy fell to 8 tenants, and yet with a slight rise to 7 micro-specializations. And in 1973, tenants and micro-specializations remained stable at 8 and 7, respectively.

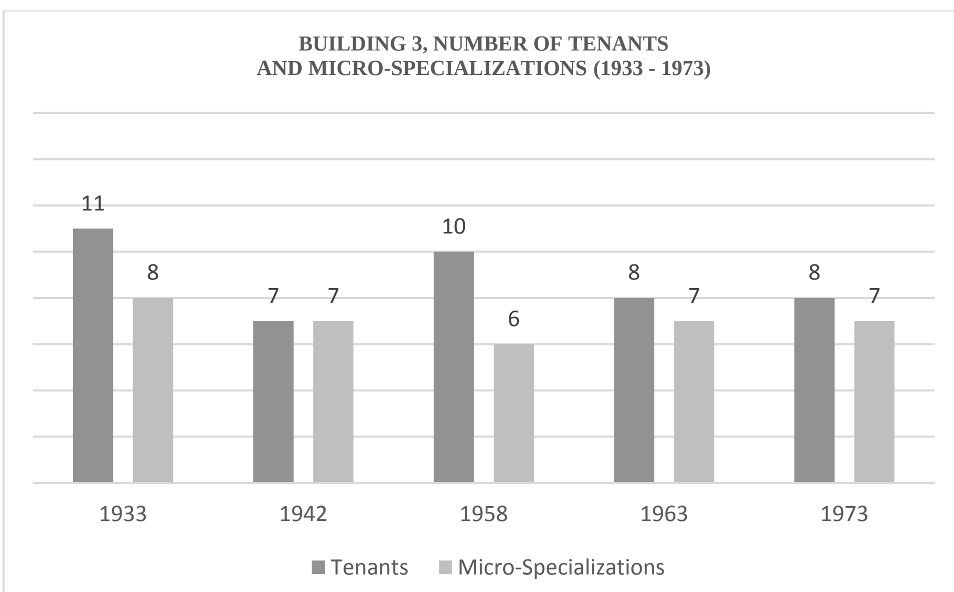


Figure 121: Building 3, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

However, this percentage shift is impacted by changes in the communal vestibules and corridors, which in turn affects total rentable floor area, as seen in the plans (two pages prior).

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 3, as listed in detail in the first table shown in this section, is presented below. As can be observed, in 1942 the structure had 1 repeat tenant. In 1958, the same occupant, a millinery firm, is documented having renewed tenancy for a second consecutive year set. In 1963, the millinery firm is no longer present, but now 6 first-time repeat tenants are observed. In 1973, the count falls to 2 repeat occupants, all of which appear as repeat tenants for the first time.

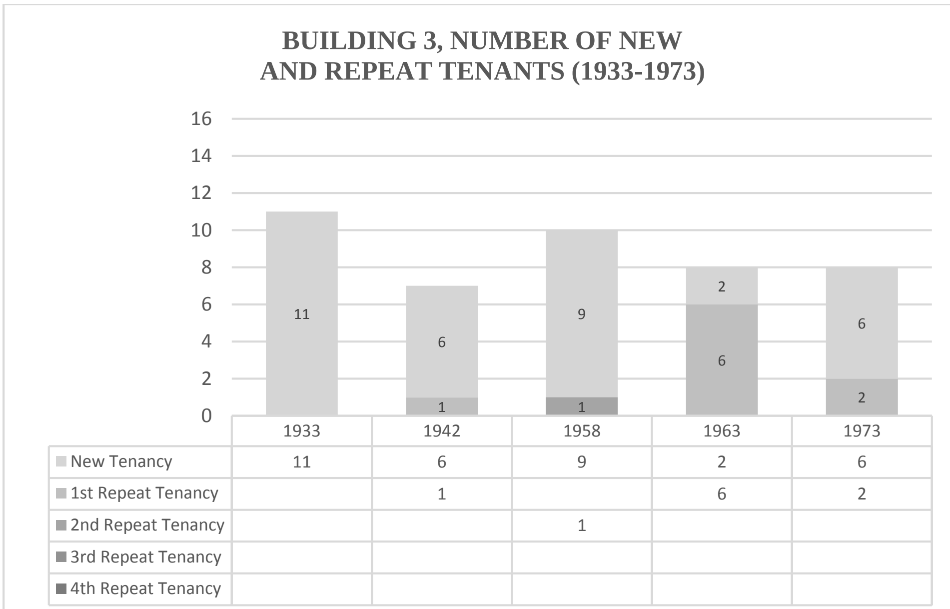


Figure 122: Building 3, number of new and repeat tenants from 1933–1973

Some narratives to note, in looking at the figure relating to socioeconomic composition, below:

- *Apparel* is a dominant category in the first four year sets, but is completely absent in 1973.
- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 3 in 1933 and 1972, one finds that only 2 macro-categories are shared by the year sets (*Decorative & Notions* and *Textiles)*, although 1933 and 1973 both supported 5 macro-categories each. *Decorative & Notions* is present in all year sets, consistently represented by 2 tenants except in 1958, when this number diminishes to 1. *Textiles* however does not share the same consistency, in that is visible in 1933 and 1942, disappears in 1958 and 1963, and reappears in 1973 (represented by 1–2 tenants in all year sets it is observed).
- The amount of diversity at the macro-category scale is noteworthy for Building 3, with 4–6 macro-categories being consistently represented in all the observed year sets, matched in turn by 6–8 micro-specializations also being supported by the structure during the same time period.

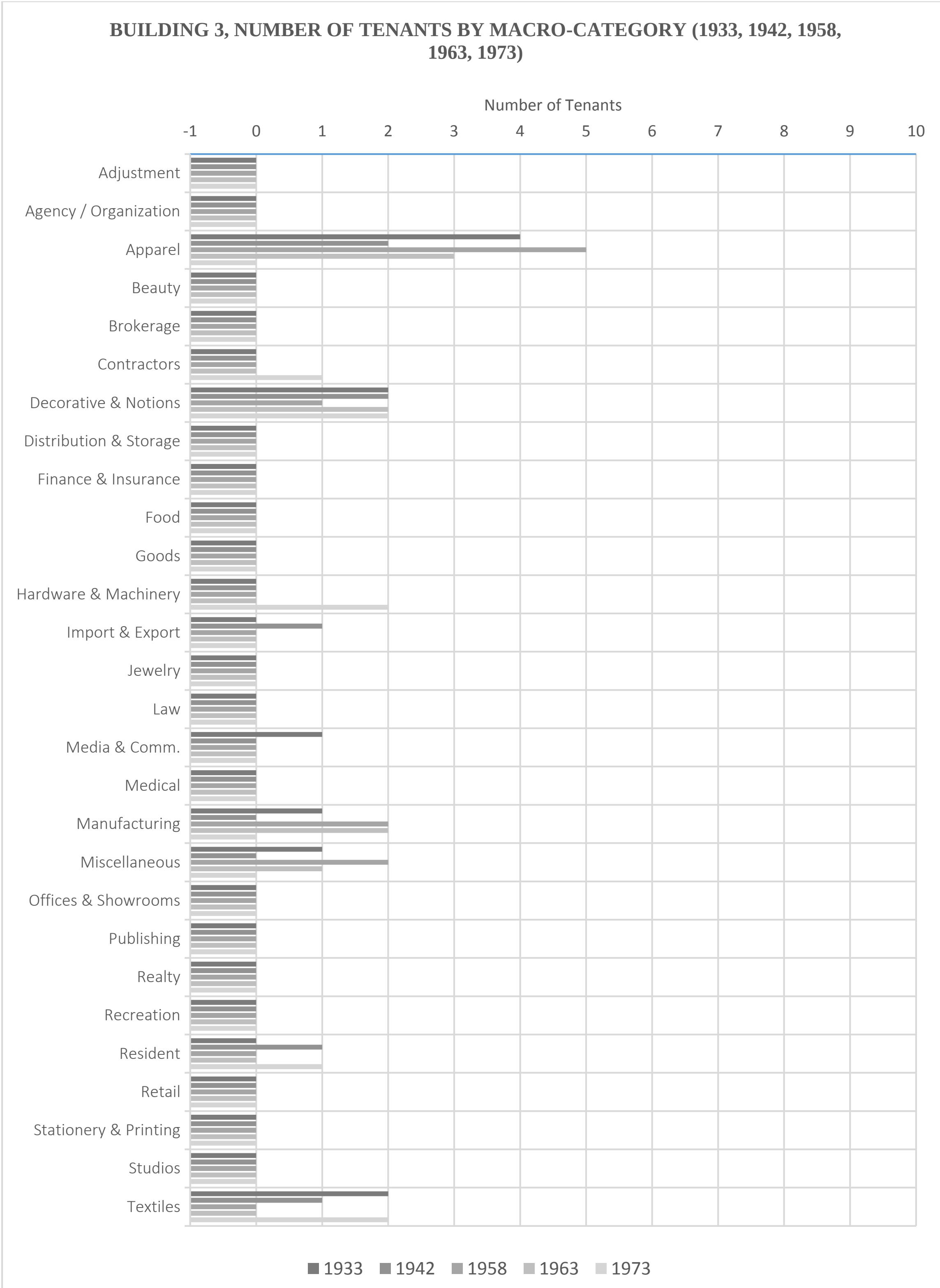


Figure 123: Building 3, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.4. BUILDING 4

3.4.1. ARCHITECTURE AND URBAN CONTEXT

Building 4 is a four-story structure built in 1927. It is 40’-0” wide and 40’-0” deep from the second floor up, and 49’-6” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has no elevators, one set of stairs, and one fire escape located on the rear façade.

Figure 124, 125, 126 (left to right): Building 4, first (ground) floor (1928); floors 2–4 (1928); street-front elevation (1977). 1” = 32’. For plans, north is up.

The street-front façade of Building 4 faces south. In the rear (northern) portion of the site, Building 4 receives roughly the bare minimum of access to air and northern light as achieved by minimum code standards. There is though, a gap of approximately 15’ to the northeast that provides the building with a bit more openness in terms of light and air, as documented in the rightmost graphic below.

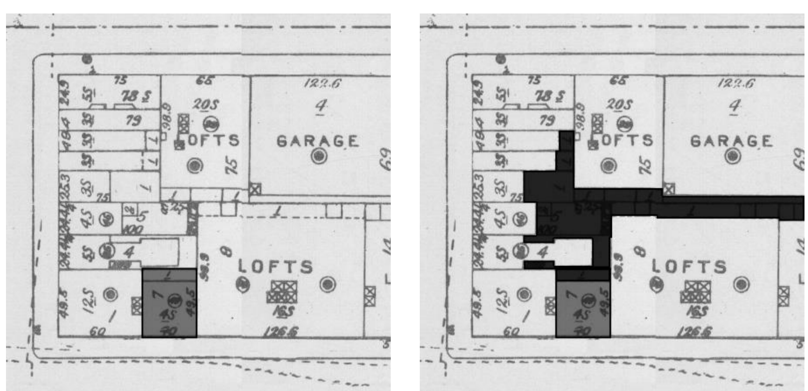


Figure 127, 128: Excerpt from Sanborn Map from 1976, with Building 4 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 4 highlighted in further darker tone. No set scale. North is up.

3.4.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 4 obtained for 1928 and 1977, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

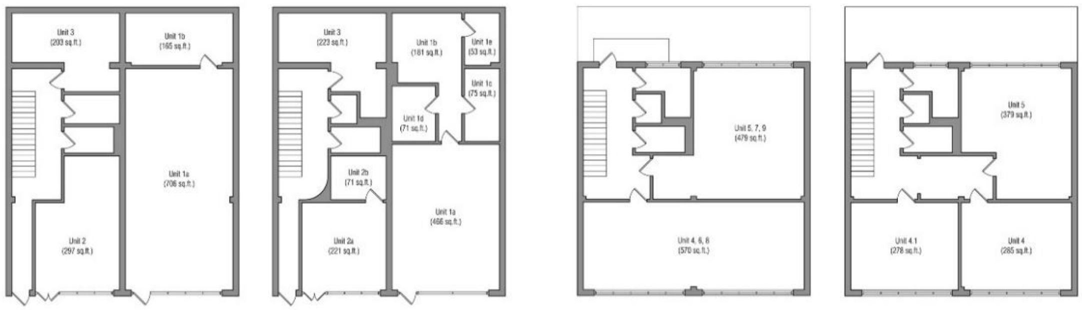


Figure 129, 130, 131, 132 (left to right): Building 4, first floor (1928); same floor (1977); second floor (1928); same floor (1977). 1" = 32'. North is up.

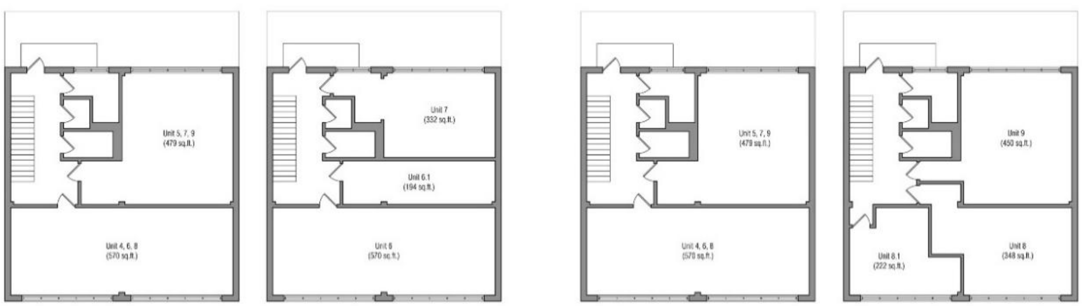
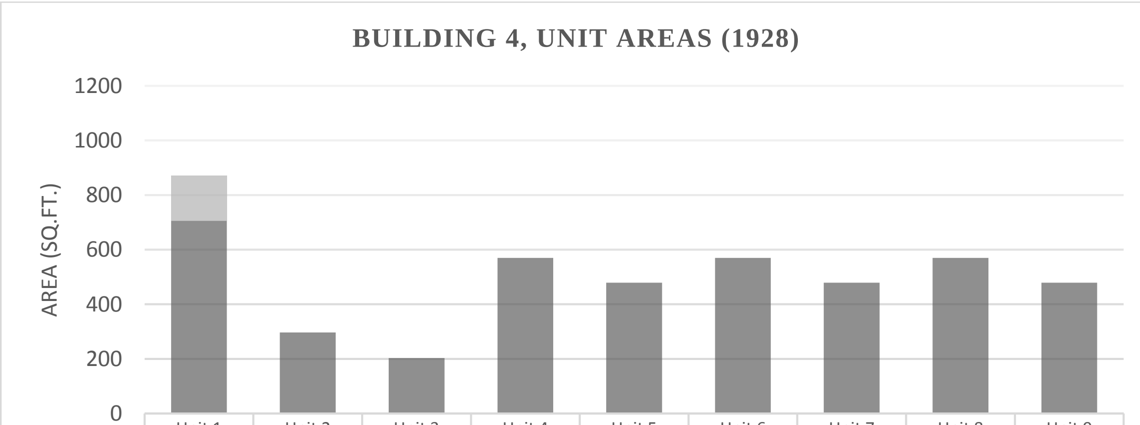
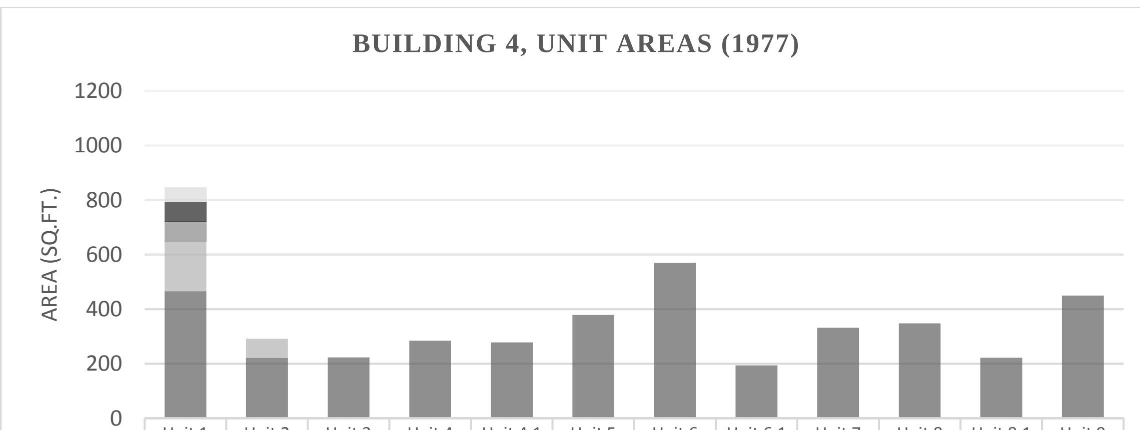


Figure 133, 134, 135, 136 (left to right): Building 4, third floor (1928); same floor (1977); fourth floor (1928); same floor (1977). 1" = 32'. North is up.

In 1928, Building 4 had 9 units, with 3 units on the first (ground) floor, and 6 units on the three floors above. In 1977 by comparison, the total unit count of Building 4 had increased to 12, still with 3 units on the first floor, but with an increase to 9 units on the three floors above (3 more than in 1928). As can be observed in the graphics below, the 1977 state of Building 4 exhibits greater internal spatial diversity than its 1928 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
Portion e									
Portion d									
Portion c									
Portion b	165								
Portion a	706	297	203	570	479	570	479	570	479



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 4.1	Unit 5	Unit 6	Unit 6.1	Unit 7	Unit 8	Unit 8.1	Unit 9
Portion e	53											
Portion d	71											
Portion c	75											
Portion b	181	71										
Portion a	466	221	223	285	278	379	570	194	332	348	222	450

Figure 137, 138: Unit areas for Building 4 for 1928 and 1977, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1928, among the 6 units above the first (ground) floor, the average unit size was 525 square feet, with the smallest unit being 479 square feet and the largest being 570 square feet. In 1977 by comparison, among the 9 units above the first floor, the average unit size had shrunk to 340 square feet, with the smallest unit size falling substantially to 194 square feet and the largest unit remaining at 570 square feet.

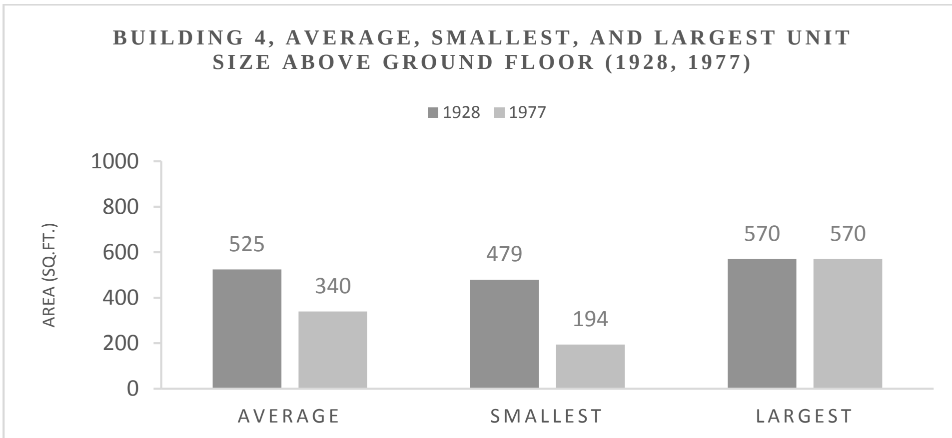
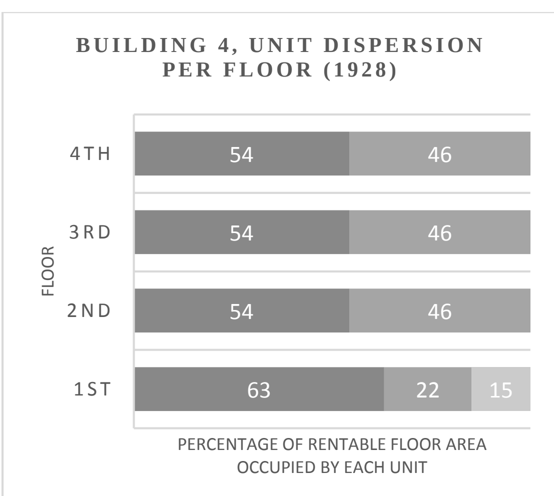


Figure 139: Building 4, average, smallest, and largest unit size above first (ground) floor for 1928 and 1977.

Below is a visualization showing the changes to the internal arrangement of Building 4, floor by floor. One point worth noting is that in the 1977 state, a new unit has been added to each floor above the ground floor. This would seem to give the impression that the ground floor has remained unchanged through the years, but if one looks at the plans for the first floor (two pages prior) and the changes observed internally in Units 1, 2, and 3 located on that floor, it is clear that there are significant refinements occurring internally in the units in question.



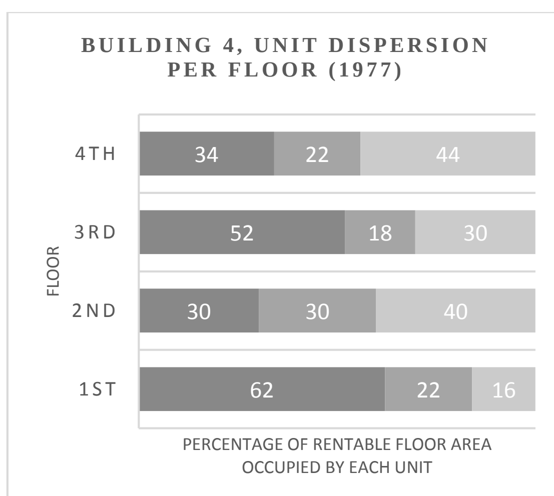


Figure 140, 141: Building 4, unit dispersion per floor, 1928 and 1977.

3.4.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 4 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Buttonholes	Buttons (1)	Buttons (2)	Buttonholes (2)	Shoulder Pads (3)
Buttons	Adjustment	Buttonholes (1)	Shoulder Pads (2)	Notions (1)
Buttons & Notions	Buttonholes	Buttons (1)	Soldering (2)	Buttons
Misc. Business	Buttons	Notions (1)	Buttons (1)	Buttons
Misc. Business	Notions	Soldering (1)	Buttons (1)	Coffee House
Notions	Notions	Buttons	Buttons (1)	Notions
Silks	Notions	Buttons	Electrical Equip. (1)	Pleating
Silks	Shoulder Pads	Buttons	Luncheonette (1)	Resident
Stitching	Soldering	Buttons	Buttons	Textiles
		Electrical Equip.	Jewelry	
		Luncheonette	Misc. Business	
		Shoulder Pads	Notions	
			Textiles	

Figure 142: Changing socioeconomic composition of Building 4 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 and 1942, Building 4 supported 9 tenants, totaling 7 micro-specializations. In 1958, the number of tenants increased to 12, while the micro-specialization count continued to remain stable at 7. In 1963, total occupancy increased to a high of 13 tenants, with micro-specializations also peaking at a count of 10. And in 1973, tenants and micro-specializations reverted back to their 1933 and 1942 count, with 9 tenants and 7 micro-specializations.

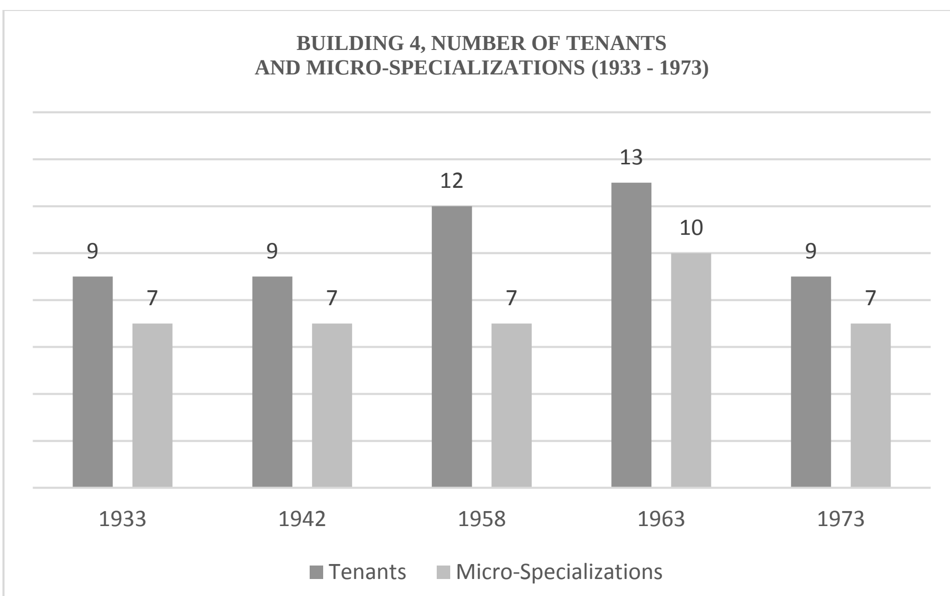


Figure 143: Building 4, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 4, as listed in detail in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 1 repeat tenant. In 1958, there was a growth to 5 repeat tenancies, 1 of which was a tenant renewing for the second consecutive year set. In 1963, again an increase was observed, to a high of 8 repeat tenants, 3 of which were tenants renewing for a second consecutive year set. In 1973, there is a fall to 2 repeat tenants, 1 of which though, a firm specialized in shoulder pads, is a tenant renewing for the third consecutive year set.

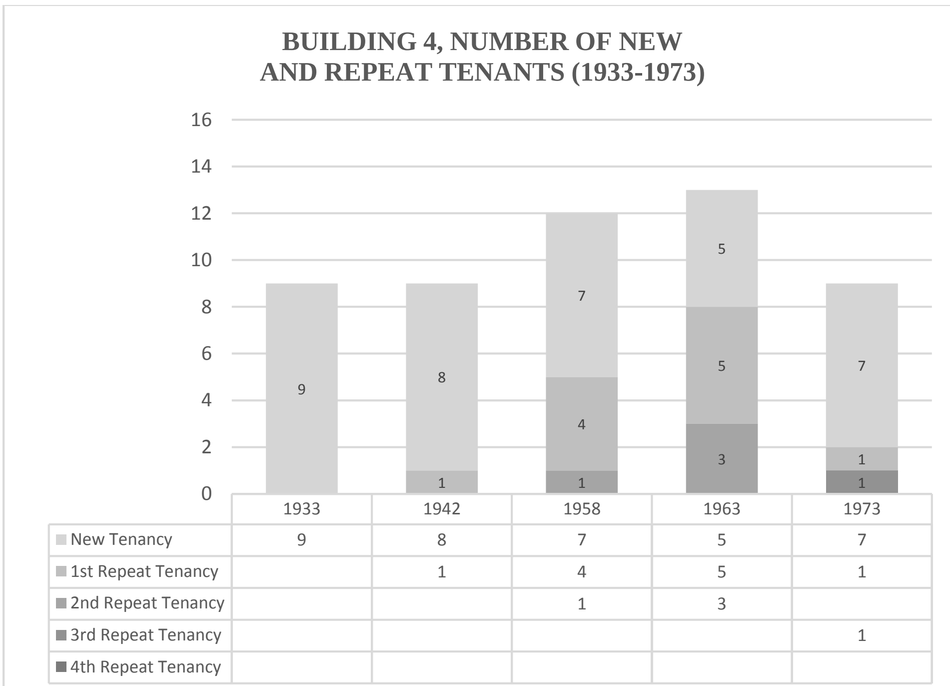


Figure 144: Building 4, number of new and repeat tenants from 1933–1973

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- Throughout all the year sets, *Decorative & Notions* and *Adjustment* are consistently present in Building 4. *Decorative & Notions* however is clearly the more dominant macro-category of the two, in that it is represented by 5–8 tenants throughout four of the five year sets, except for in 1933 when 3 such tenants are observed. *Adjustment* on the other hand is represented by 1-2 tenants throughout the five year sets, represented by stitching, buttonhole, and pleating firms.
- Whereas in 1933 a more equally diversified socioeconomic fabric is observed (in terms of macro-categories), with 2–3 tenants being represented in each of the 4 macro-categories present, this changes to a less-equalized composition from 1942 onward, with the total

number of firms engaged in *Decorative & Notions* consistently forming a large share of the overall tenant count. This point however should be contextualized with the fact that Building 4 consistently supported 7 micro-specializations in four out of five year sets observed, with an additional peak of 10 micro-specializations in 1963.

- Building 4 also is seen to have supported a noteworthy degree of macro-categorical diversity over the years, peaking at 8 in 1963, 5 in 1958 and 1973, 4 in 1933, and 3 in 1942. The slump in the latter year, again, needs to be contextualized within the socioeconomic impact of World War II.
- There are no apparel-specific firms observed in Building 4 during the five documented year sets.

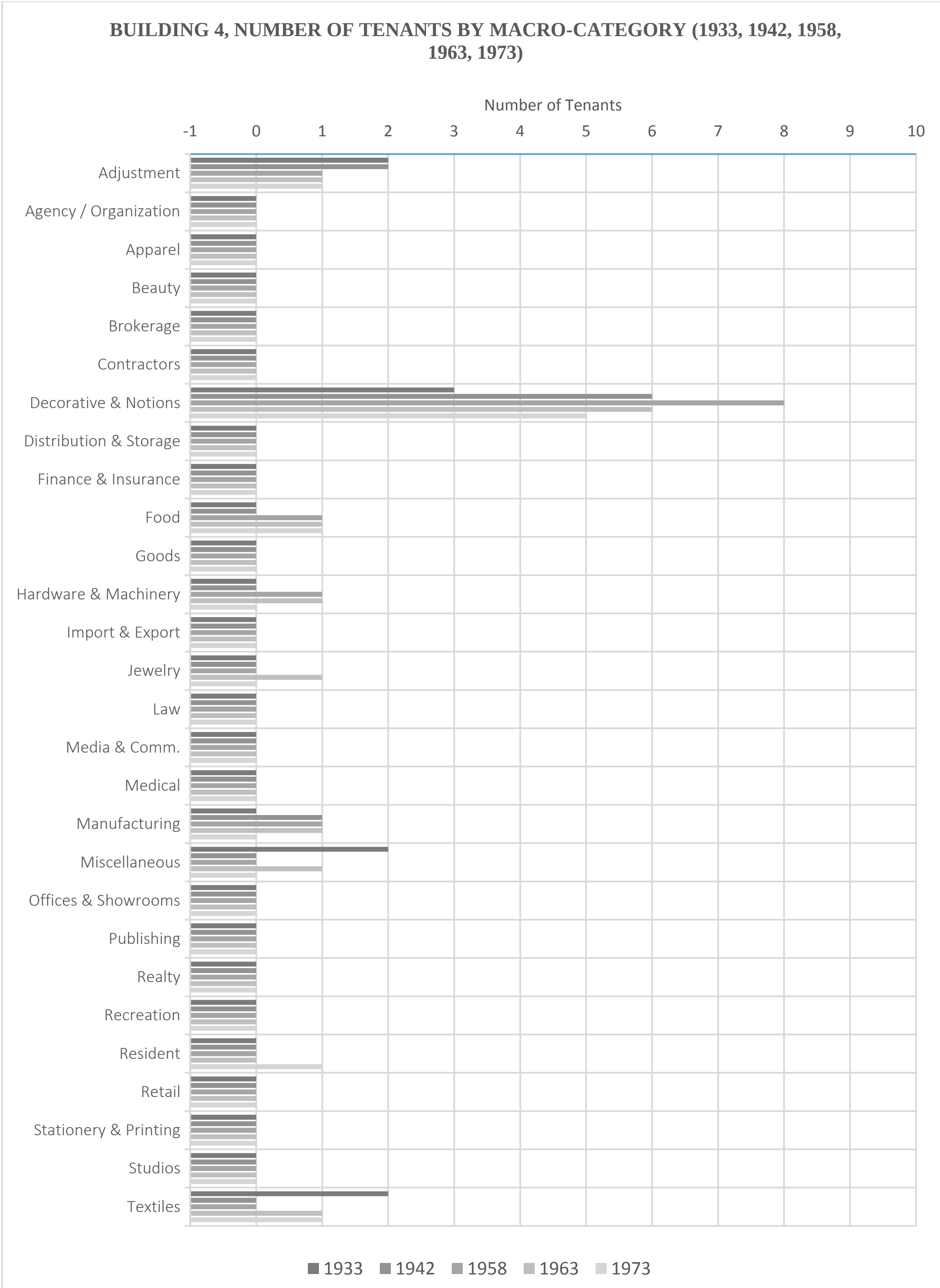


Figure 145: Building 4, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.5. BUILDING 5

3.5.1. ARCHITECTURE AND URBAN CONTEXT

Building 5 is a five-story structure built in 1930. It is 21’-0” wide and 85’-0” deep from the third floor up, and 98’-9” deep on the first (ground) and second floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape located on the rear façade.

Figure 146, 147, 148, 149 (left to right): Building 5, first (ground) floor (1930); second floor (1930); floors 3–5 (1930); street-front elevation (1974). For plans, north is down.

The street-front façade of Building 5 faces north. In the rear (southern) portion of the site, Building 5 receives the bare minimum of access to air and south light as achieved by minimum code standards, as documented in the rightmost graphic below.

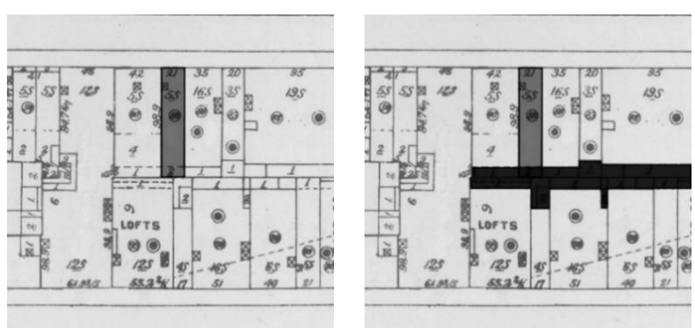


Figure 150, 151: Excerpt from Sanborn Map from 1976, with Building 5 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 5 highlighted in further darker tone. No set scale. North is up.

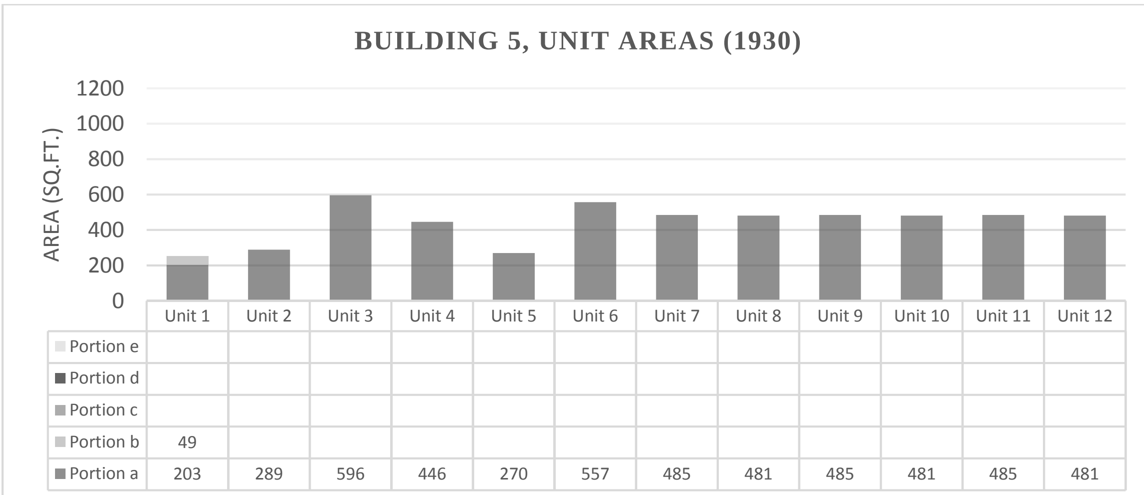
3.5.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 5 obtained for 1930 and 1974, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 152, 153, 154, 155, 156, 157 (left to right): Building 5, first floor (1930); same floor (1974); second floor (1930); same floor (1974); third floor (1930); same floor (1974). 1" = 32'. North is down.

Figure 158, 159, 160, 161 (left to right): Building 5, fourth floor (1930); same floor (1974); fifth floor (1930); same floor (1974). 1" = 32'. North is down.

In 1930, Building 5 had 12 units, with 3 units on the first (ground) floor, and 9 units on the four floors above. In 1974 by comparison, the total unit count of Building 5 had increased to 14, still with 3 units on the first floor, but with an increase to 11 units on the four floors above (2 more than in 1930). As can be observed in the graphics below, the 1974 state of Building 5 exhibits greater internal spatial diversity than its 1930 state.



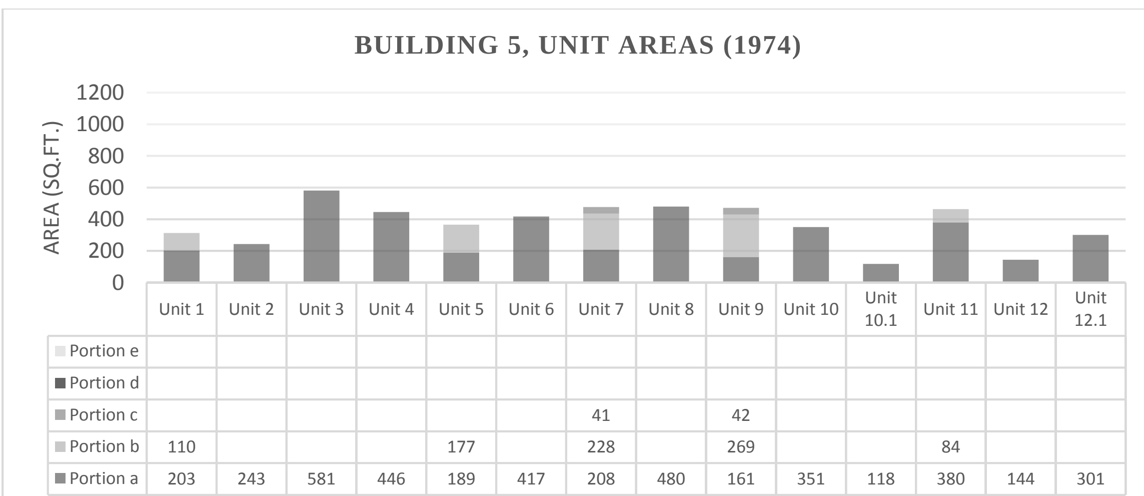


Figure 162, 163: Unit areas for Building 5 for 1930 and 1974, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1928, among the 6 units above the first (ground) floor, the average unit size was 525 square feet, with the smallest unit being 479 square feet and the largest being 570 square feet. In 1977 by comparison, among the 9 units above the first floor, the average unit size had shrunk to 340 square feet, with the smallest unit size falling substantially to 194 square feet and the largest unit remaining at 570 square feet.

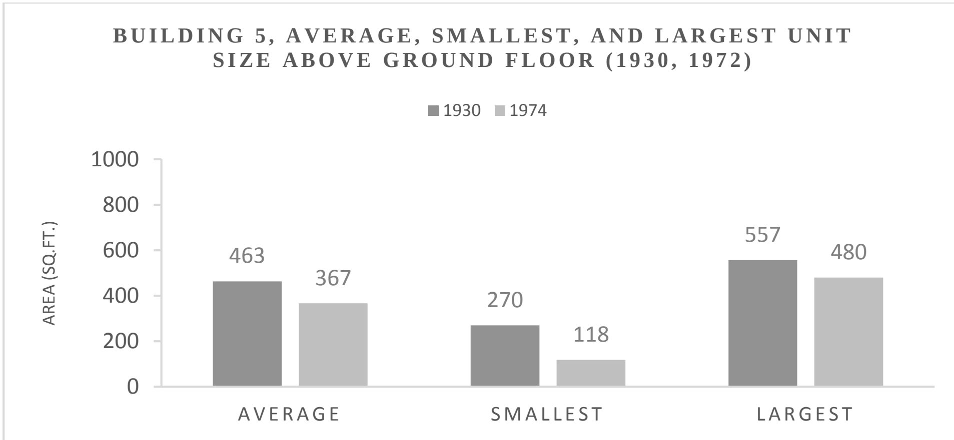
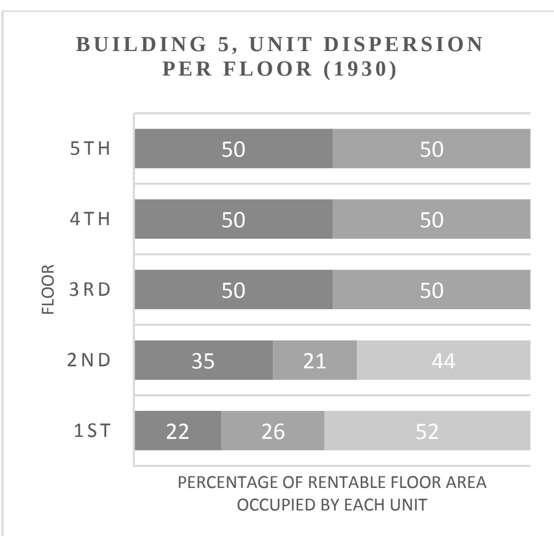


Figure 164: Building 5, average, smallest, and largest unit size above first (ground) floor for 1930 and 1974.

Below is a visualization showing the changes to the internal arrangement of Building 5, floor by floor. One observes that the 2 new units documented in the 1974 state occurs at the topmost two floors of Building 5. This would seem to give the impression that the bottommost three floors of the building remain relatively unchanged throughout the years. While this is roughly true for the first (ground) floor, the second and third floors exhibit significant internal changes within the units. This can be observed in the floorplans for these levels (two pages prior) and in the Unit Areas charts for Building 5's 1930 and 1974 state (one page prior), specifically in looking at changes to Unit 5 and Unit 7.



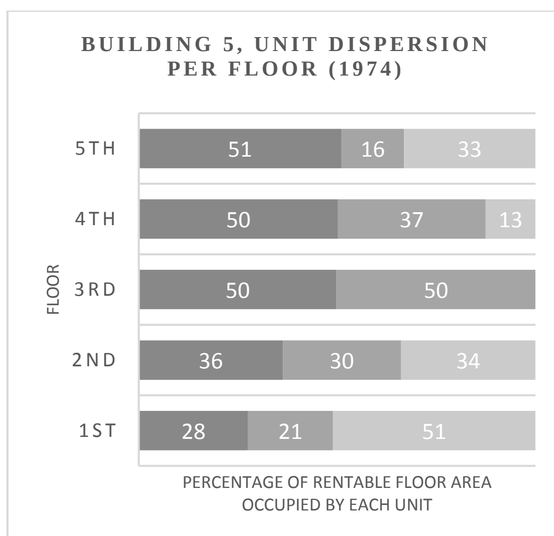


Figure 165, 166: Building 5, unit dispersion per floor, 1930 and 1974.

3.5.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 5 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Brokerage	Knitwear (1)	Millinery Rsrch. (1)	Millinery Rsrch (2)	Misc. Business (1)
Dresses & Suits	Millinery (1)	Misc. Business (1)	Misc. Business (2)	Ribbons (1)
Embroidery	Braids	Publication (1)	Publication (2)	Ribbons (1)
Flowers & Feathers	Millinery	Feathers	Ribbons (1)	Textiles (1)
Knitwear	Millinery	Import / Export	Textiles (1)	Jewelry
Millinery	Millinery	Importing	Misc. Business	Millinery
Millinery	Millinery Research	Millinery	Ribbons	Negliges
Misc. Business	Misc. Business	Millinery	Ribbons	Silks
Restaurant	Misc. Business	Millinery	Textiles	Silks & Velvets
Restaurant	Misc. Business	Notions	Textiles	Woolens
	Restaurant	Notions		
	Showroom	Ribbons & Velvets		
		Textiles		

Figure 167: Changing socioeconomic composition of Building 5 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 5 supported 10 tenants, totaling 8 micro-specializations. In 1942, the number of tenants increased to 12, while the micro-specialization count dropped slightly to 7. In 1958, total occupancy increased to a high of 13 tenants, with micro-specializations also peaking at a count of 10. In 1963, both tenants and micro-specializations dropped, to a count of 10 and 6, respectively. And in 1973, while the total tenant count remained stable at 10, micro-specializations increased to 9.

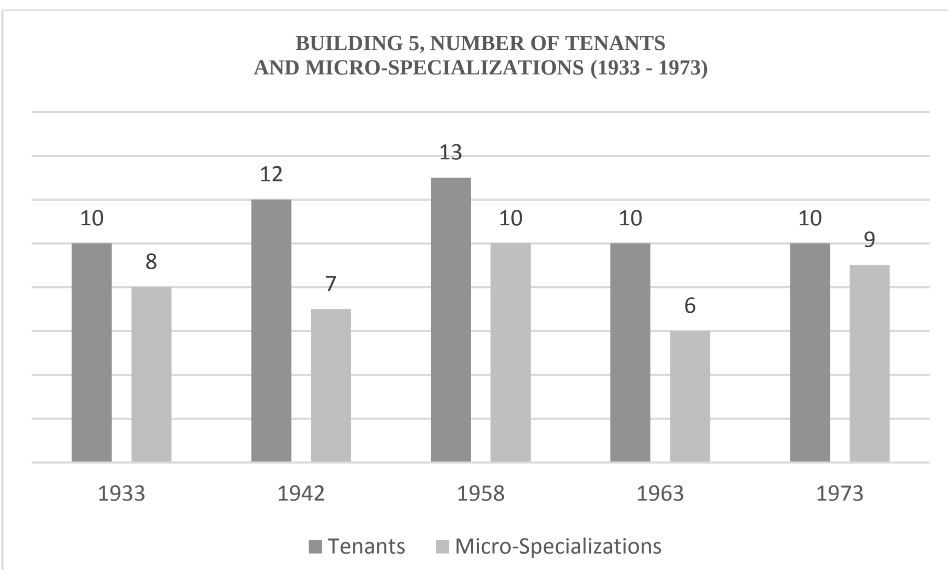
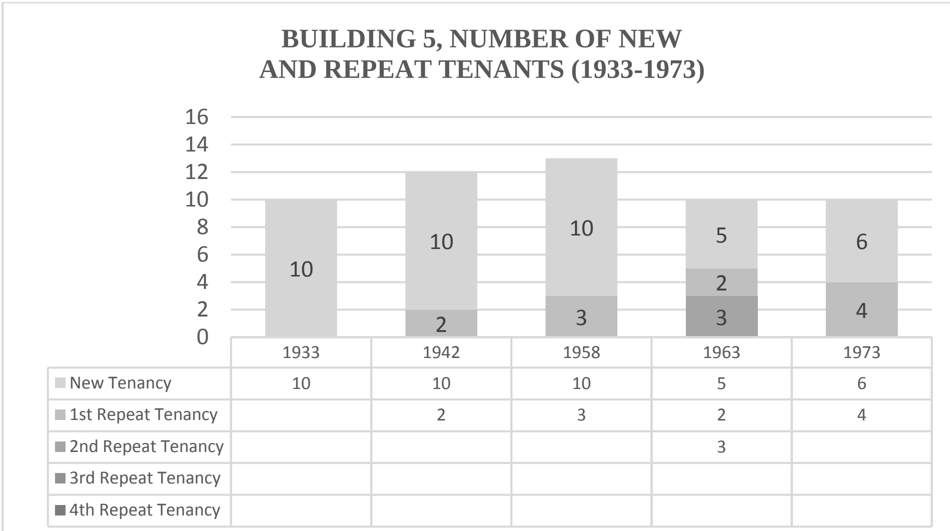


Figure 168: Building 5, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 5, as listed in detail in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 2 repeat tenants. In 1958, this rose to 3 repeat tenants. In 1963, 5 repeat tenants were observed, with 3 being second-time repeat tenancies. In 1973, there is a fall to 4 repeat tenants documented.



	1933	1942	1958	1963	1973
New Tenancy	10	10	10	5	6
1st Repeat Tenancy		2	3	2	4
2nd Repeat Tenancy				3	
3rd Repeat Tenancy					
4th Repeat Tenancy					

Figure 169: Building 5, number of new and repeat tenants from 1933–1973

A few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- Throughout all five year sets, *Apparel*, *Decorative & Notions*, and *Miscellaneous* are consistently observed. *Apparel* is represented by its highest numbers (4–6 tenants) in the first three year sets, before falling to 1 tenant in 1963 and rising briefly to 3 in 1973. *Decorative & Notions* makes its strongest showing in 1958 and 1963, with 4 and 3 tenants, respectively. In the other year sets, it is represented by 1–2 tenants. *Miscellaneous* is consistently represented by 1–2 tenants in four out of five year sets, reaching a peak of 3 tenants in 1942.
- *Textiles* are observed in the last three year sets, represented by 3 tenants in 1963 and 1973, and 1 in 1958. *Food* also makes a quick appearance in the first two year sets, represented by 2, then 1 tenant.
- The macro-categorical diversity supported by Building 5 is noteworthy, with 5 macro-categories consistently supported in four out of five year sets, and reaching a peak of 6 in 1958. In this latter year, *Decorative & Notions* and *Apparel* are the dominant categories, represented by 4 tenants each. The micro-specialization diversity supported by Building 5 is also comparable, with a count of 6–10 being observed in the five year sets.

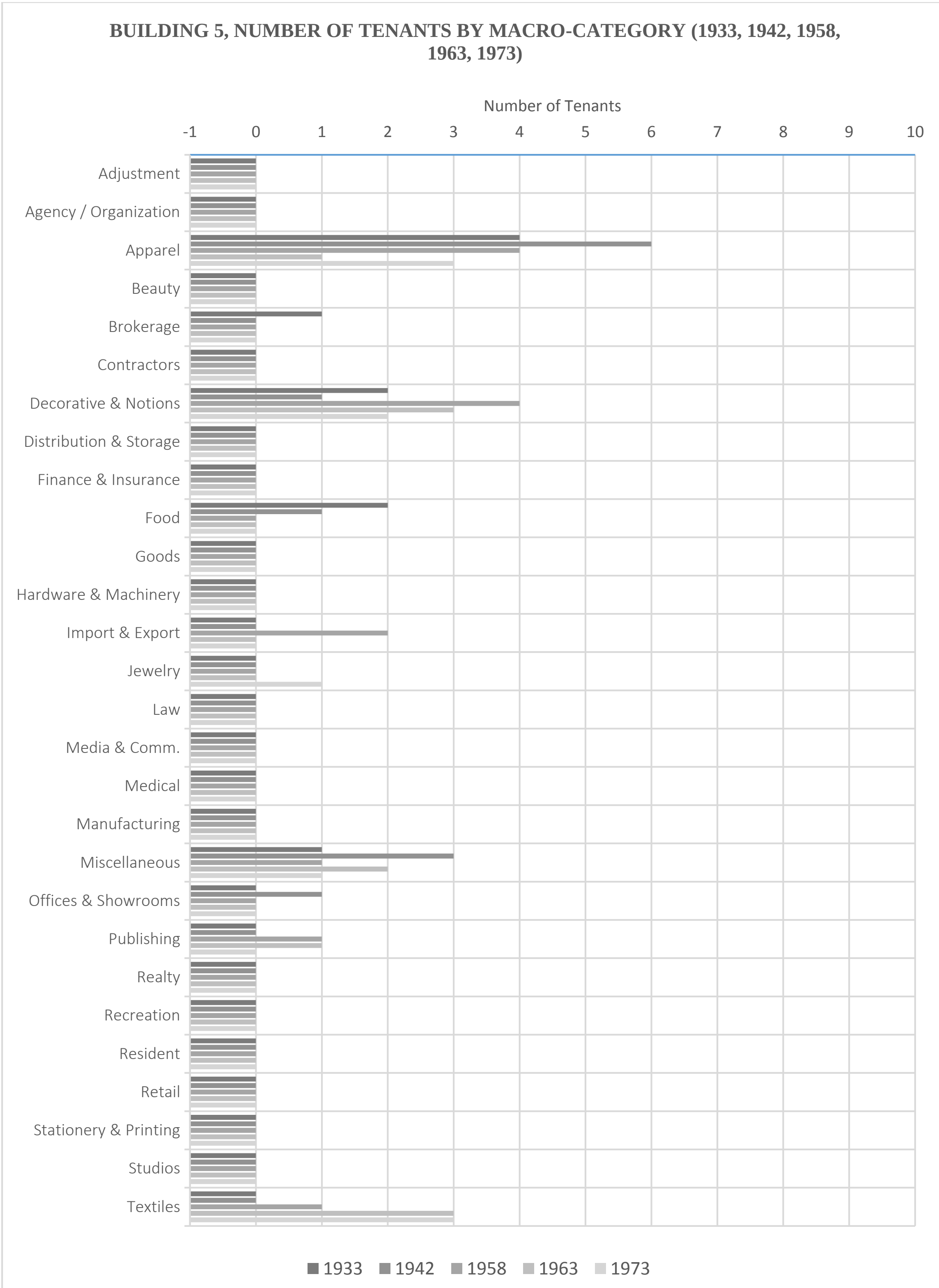


Figure 170: Building 5, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.6. BUILDING 6

3.6.1. ARCHITECTURE AND URBAN CONTEXT

Building 6 is a six-story structure built in 1920. It is 49’-4” wide and 90’-0” deep from the second floor up, and 100’-0” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has two elevators, one set of stairs, and one fire escape located on the rear façade.

Figure 171, 172, 173 (left to right): Building 6, first (ground) floor (1921); floors 4–6 (1921); street-front elevation (1982). For plans, north is to the right.

The street-front façade of Building 6 faces east. In the rear (western) portion of the site, Building 6 receives the bare minimum of access to air and western light as achieved by minimum code standards. Due to the surrounding urban context, however, floors 4–6 also enjoy some additional light and air via windows opening up to the north, looking over the shorter neighboring buildings, as shown in the rightmost graphic below.

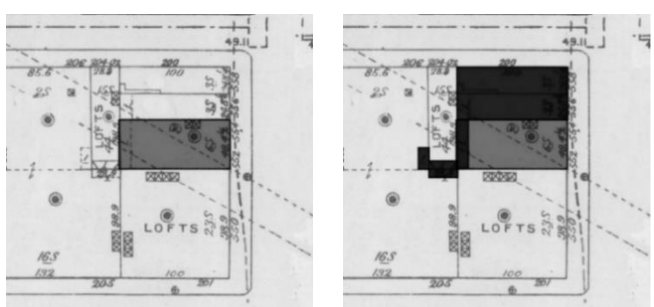


Figure 174, 175: Excerpt from Sanborn Map from 1976, with Building 6 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 6 highlighted in further darker tone. No set scale. North is up.

3.6.2. INTERNAL SPATIAL COMPOSITION

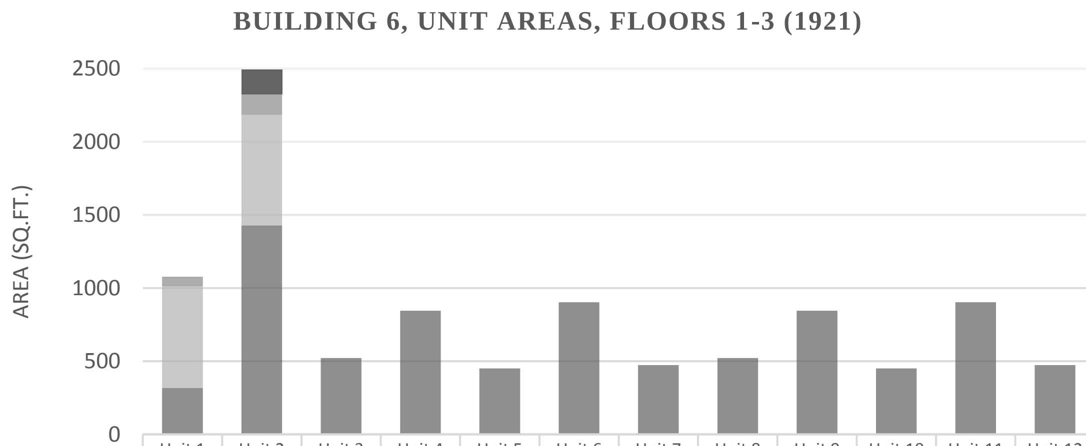
The entire set of plans for Building 6 obtained for 1921 and 1982, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 176, 177, 178, 179 (left to right): Building 6, first floor (1921); same floor (1982); second floor (1921); same floor (1982). 1" = 32'. North is to the right.

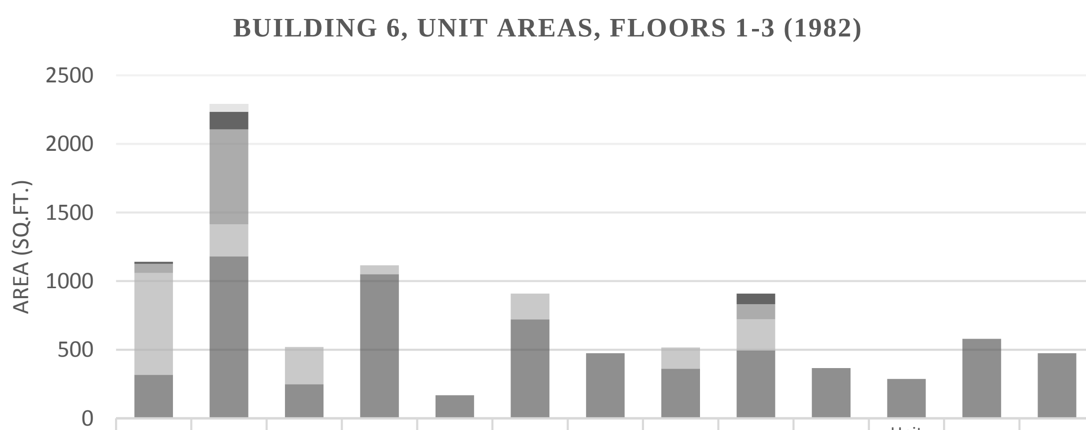
Figure 180, 181, 182, 183 (left to right): Building 6, third floor (1921); same floor (1982); fourth floor (1921); same floor (1982). 1" = 32'. North is to the right.

Figure 184, 185, 186, 187 (left to right): Building 6, fifth floor (1921); same floor (1982); sixth floor (1921); same floor (1982). 1" = 32'. North is to the right.

In 1921 and in 1982, Building 6 had 27 units, with 2 units on the first (ground) floor, and 25 units on the five floors above. Even though the unit count remains consistent from year set to year set however, the 1982 state of Building 6, as can be observed in the graphics below, exhibits greater internal spatial diversity when compared to its 1921 state.

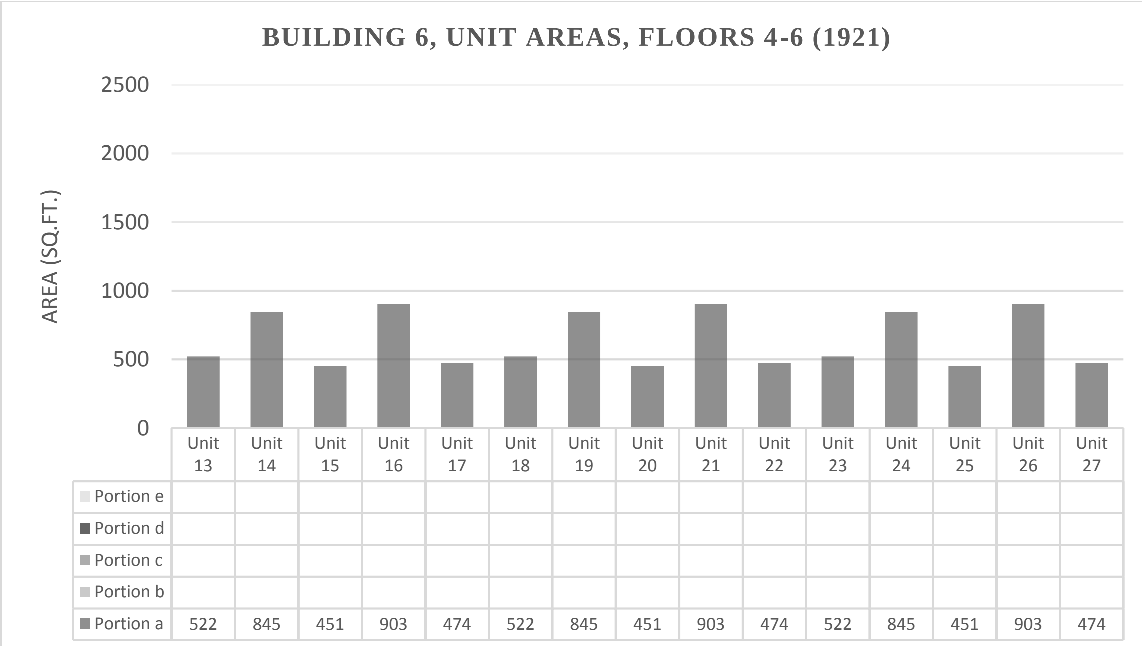


	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12
Portion e												
Portion d		171										
Portion c	67	140										
Portion b	694	757										
Portion a	317	1428	522	845	451	903	474	522	845	451	903	474

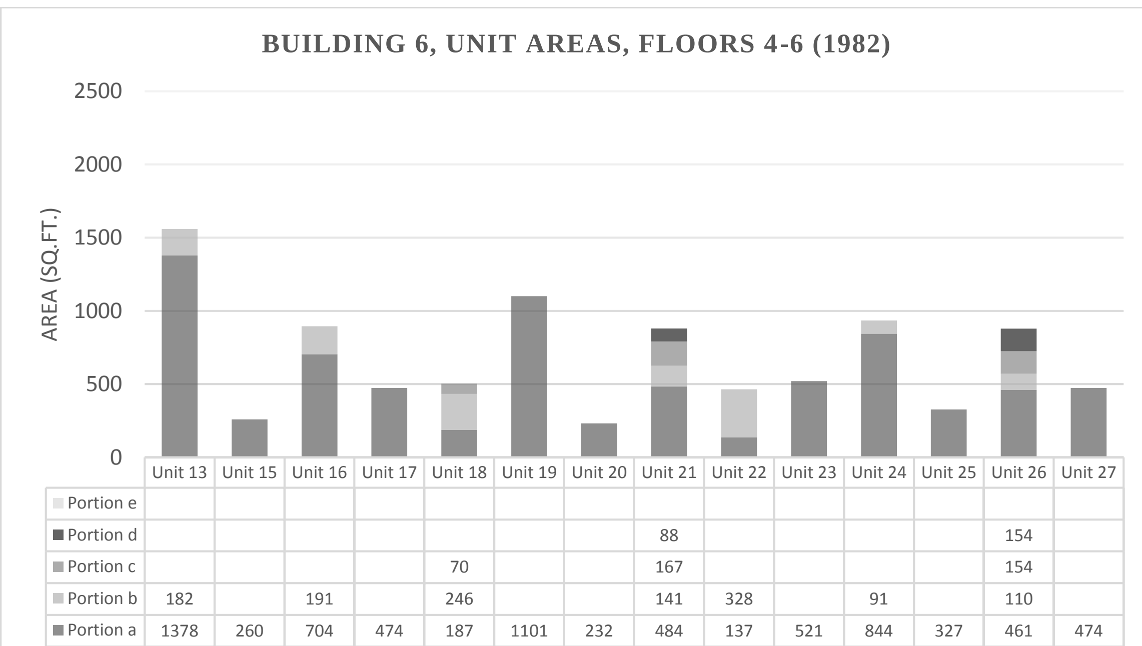


	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 10.1	Unit 11	Unit 12
Portion e		57											
Portion d	15	127							77				
Portion c	67	692							111				
Portion b	742	234	272	65		187		155	227				
Portion a	317	1181	248	1050	168	722	474	362	494	366	287	579	474

Figure 188, 189: Unit areas for Building 6, floors 1–3 for 1921 and 1982, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



	Unit 13	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27
Portion e															
Portion d															
Portion c															
Portion b															
Portion a	522	845	451	903	474	522	845	451	903	474	522	845	451	903	474



	Unit 13	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27
Portion e														
Portion d								88					154	
Portion c					70			167					154	
Portion b	182		191		246			141	328		91		110	
Portion a	1378	260	704	474	187	1101	232	484	137	521	844	327	461	474

Figure 190, 191: Unit areas for Building 6, floors 4–6 for 1921 and 1982, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1921, among the 25 units above the first (ground) floor in Building 6, the average unit size was 639 square feet, with the smallest unit being 451 square feet and the largest being 903 square feet. In 1982 by comparison, among the 25 units above the first floor, the average unit size for Building 6 had remained roughly the same at 633 square feet. This consistency however occurred in a rather unique way when compared to the changes in these statistics observed in the smaller buildings studied in this section, in that the smallest unit size fell to 168 square feet and the largest unit size expanded to 1560 square feet. This is a different occurrence, in that the largest unit size actually increases in this instance, rather than remaining stable (or decreasing) as observed in the smaller scale buildings studied in this section.

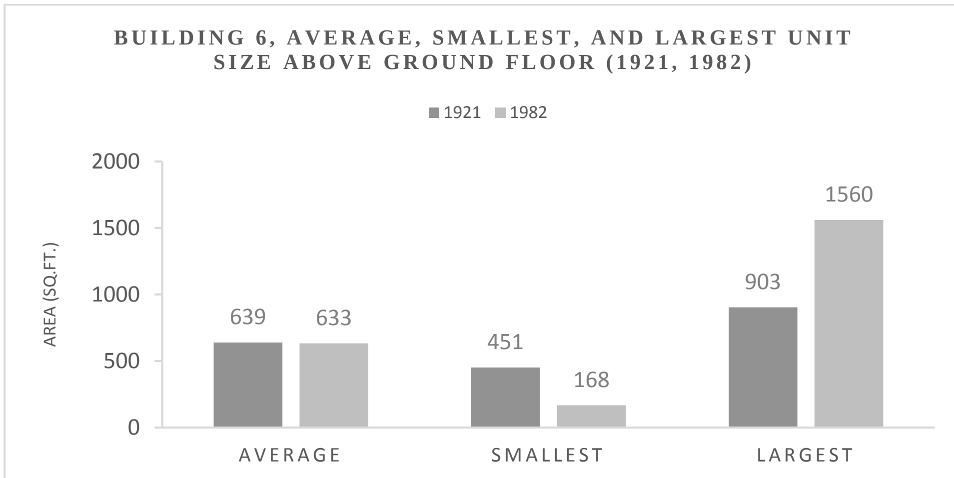


Figure 192: Building 6, average, smallest, and largest unit size above first (ground) floor for 1921 and 1982.

Below is a visualization showing the changes to the internal arrangement of Building 6, floor by floor. One observes that the fourth floor has 4 units in 1982 (compared to 5 in 1921), due to the emergence of the 1560 square foot unit (larger than the 903 square foot unit which was the largest unit in 1921). The third floor, in turn has gained a unit, which accounts for the stable unit count between the two year sets observed.

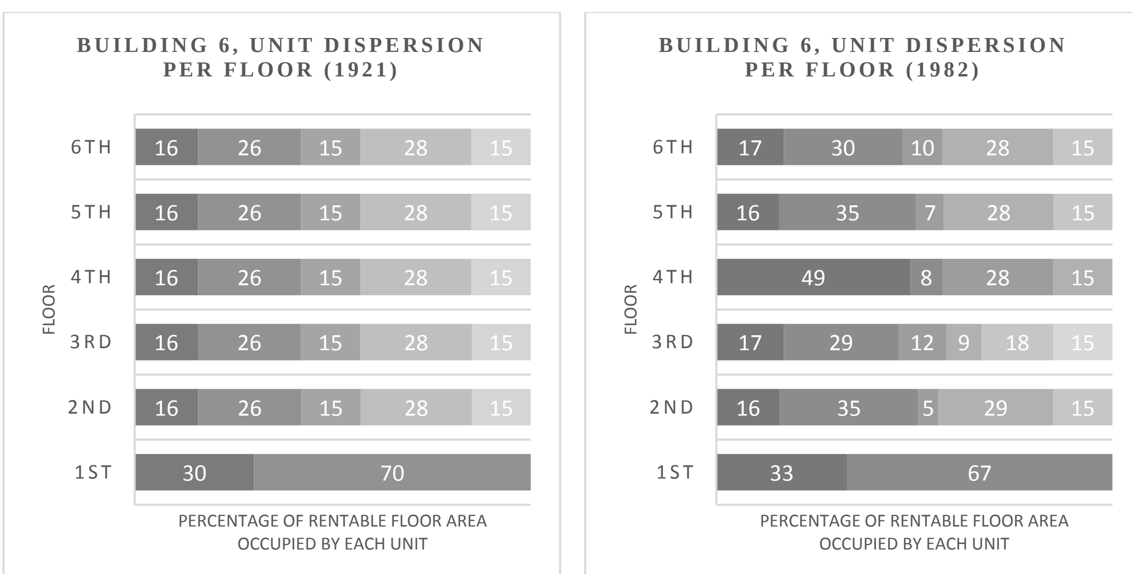


Figure 193, 194: Building 6, unit dispersion per floor, 1921 and 1982.

3.6.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 6 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Accounting	Accounting (1)	Accounting (2)	Buttons (3)	Apparel (3)
Apparel	Buttons (1)	Buttons (2)	Dresses (3)	Textiles (3)
Buttons	Dresses (1)	Dresses (2)	Apparel (2)	Coffee House (2)
Candy	Electrician (1)	Apparel (1)	Coats (2)	Food (2)
Carpenter	Luncheonette (1)	Coats (1)	Dresses (2)	Maintenance (1)
Construction	Silks (1)	Dresses (1)	Textiles (2)	Optometrist (1)
Contractor / Jobber	Apparel	Textiles (1)	Textiles (2)	Textiles (1)
Dresses	Apparel	Textiles (1)	Buttons (1)	Buttons
Dresses	Apparel	Apparel	Buttons (1)	Buttons & Buckles
Dresses & Coats	Apparel	Buttons	Buttons (1)	Cigars
Electrician	Apparel	Buttons	Buttons (1)	Coats & Suits
Embroidery	Barber Shop	Buttons	Cigars (1)	Designer
Embroidery	Brokerage	Buttons	Coffee House (1)	Designer
Importing	Cigars	Buttons	Dresses (1)	Knitwear
Linings	Coats	Cashmere	Food (1)	Manufacturing
Luncheonette	Coats	Cigars	Textiles (1)	Misc. Business
Misc. Business	Coats	Coats & Suits	Textiles (1)	Misc. Business
Misc. Business	Coats & Suits	Coffee House	Textiles (1)	Misc. Business
Negliges	Dresses	Converting	Textiles (1)	Misc. Business
Notions	Dresses	Designer	Coats & Suits	Misc. Business
Notions	Dresses	Designer	Designer	Misc. Business
Publishing	Dresses	Dresses	Jewelry	Misc. Business
Silks	Dresses	Food	Junior Apparel	Notions
Silks	Dresses	Manufacturing	Knitwear	Notions
Silks	Dresses	Maternity Apparel	Maintenance	Zippers
Trimmings	Dresses	Maternity Apparel	Optometrist	
Velvets	Dresses	Maternity Apparel	Textiles	
Window Cleaning	Electrician	Misc. Business	Textiles	
Window Cleaning	Misc. Business	Textiles	Textiles	
	Misc. Business	Textiles		
	Notions	Textiles		
	Painters	Textiles		
	Publishing	Textiles		
	Sports Apparel	Textiles		
	Textiles	Textiles		
	Textiles	Textiles		
	Textiles	Textiles		
	Textiles	Textiles		
	Textiles	Textiles		
	Trimmings	Textiles		
	Trimmings	Textiles		
		Trimmings		

Figure 195: Changing socioeconomic composition of Building 6 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 6 supported 29 tenants, totaling 22 micro-specializations. In 1942 the total tenant count had increased to 41, but surprisingly micro-specializations had decreased down to a count of 20. In 1958, again a similar pattern was witnessed, with a slight increase of total tenants to 42, and a decrease of micro-specializations down to 17. In 1963, a dip in both variables was witnessed, with total tenancy dropping to 29, and micro-specializations dipping to 15. And in 1973, tenants continued their drop, down to a count of 25, while micro-specializations increased by 1, to end at a count of 16. This inverse relationship between total tenancy and micro-specializations, observed clearly in the first three year sets, is noteworthy. A similar such pattern is also observed in Building 8, another larger-scale building, but seems to be absent from the smaller-scale buildings studied in this phase of the research.

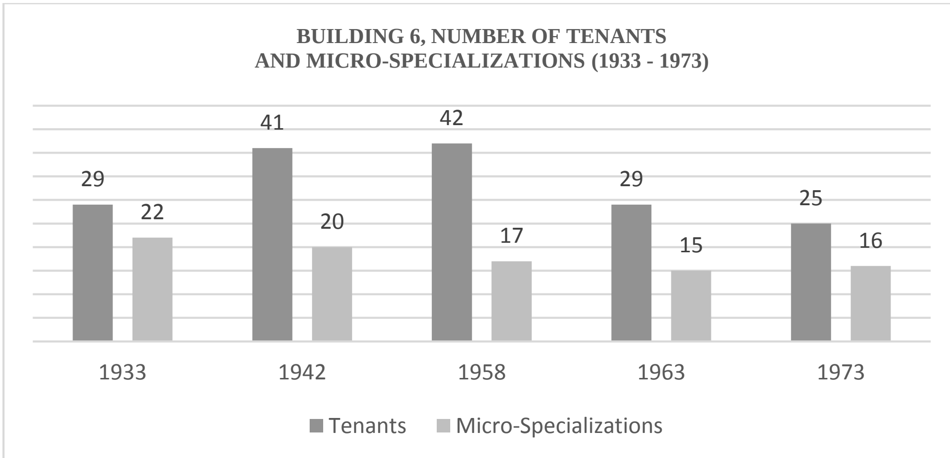
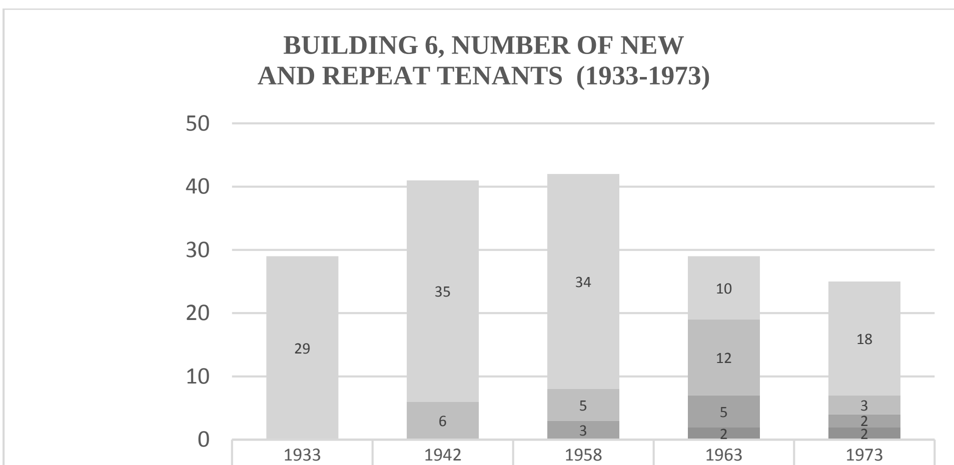


Figure 196: Building 6, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973.



	1933	1942	1958	1963	1973
New Tenancy	29	35	34	10	18
1st Repeat Tenancy		6	5	12	3
2nd Repeat Tenancy			3	5	2
3rd Repeat Tenancy				2	2
4th Repeat Tenancy					

Figure 197: Building 6, number of new and repeat tenants from 1933–1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 6, as listed in detail in the first table shown in this section, is presented above. As can be observed, in 1942 the building supported 6 repeat tenants. In 1958, there was a growth to 8 repeat tenancies, 3 of which were tenants renewing for the second consecutive year set. In 1963, a substantial increase was observed, to a high of 19 repeat tenants, 5 of which were tenants renewing for a second consecutive year set, and 2 renewing for a third consecutive year set. In 1973, an opposite movement is observed, with a substantial fall to 7 repeat tenants, 2 of which are occupants repeating tenancy for a second time, and 2 of which are repeating tenancy for a third time.

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, on the following page:

- There are four macro-categories that are consistently observed throughout all five year sets. These are *Apparel, Decorative & Notions, Food,* and *Textiles. Apparel* and *Textiles* exhibit more of a fluctuating nature, with *Apparel* representing 3 tenants at its low in 1973 and 20 tenants at its peak in 1942, and *Textiles* similarly representing 2 tenants at its low in 1973, and 15 tenants at its peak in 1958. *Decorative & Notions* and *Food,* by comparison appear to be more stable macro-categories, consistently representing 4–8 tenants and 2–3 tenants, respectively, throughout the five year sets observed.
- Unexpectedly, while 1942 is the most lopsided year set in terms of socioeconomic composition (with *Apparel* being the singularly dominant macro-category with 20 tenants), it was during this year also that the highest number of macro-categories was observed, with a count of 10. The other four year sets had a macro-category count of 8–9, and a less-lopsided spread in terms of tenant count among the macro-categories represented.
- 1933, which appears to be the most-evenly spread year in terms of tenant count, is also the year set during which micro-specializations for Building 6 were at their highest, with a count of 22, as observed in the Number of Tenants and Micro-Specializations chart (three pages prior).

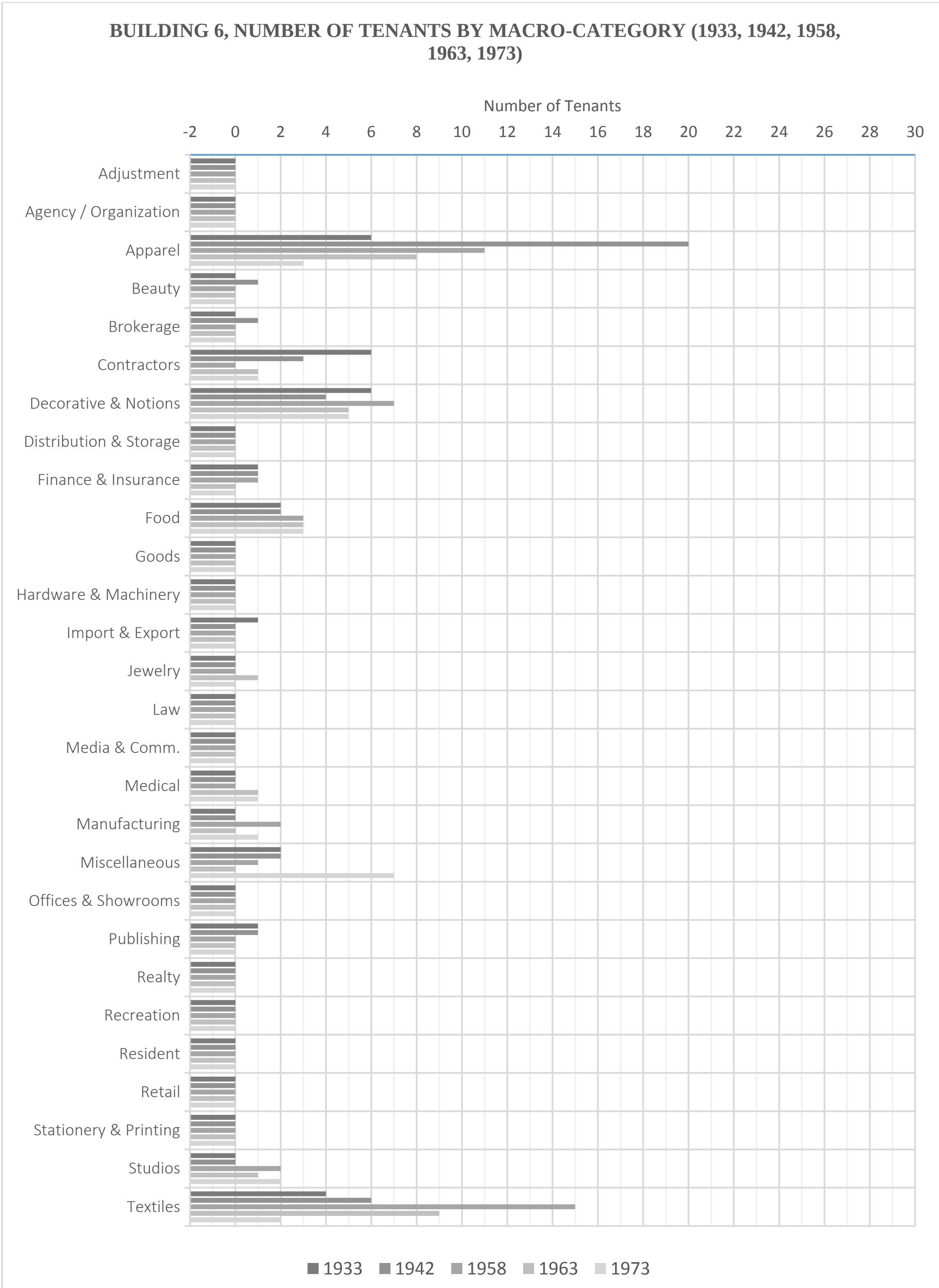


Figure 198: Building 6, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.7. BUILDING 7

3.7.1. ARCHITECTURE AND URBAN CONTEXT

Building 7 is a five-story structure built in 1910. It is 22’-0” wide and 60’-0” deep from the third floor up, and 90’-0” deep on the first (ground) and second floor. The street-front façade steps back 5’-0” starting on the third floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has no elevators, one set of stairs, and one fire escape located on the rear façade.

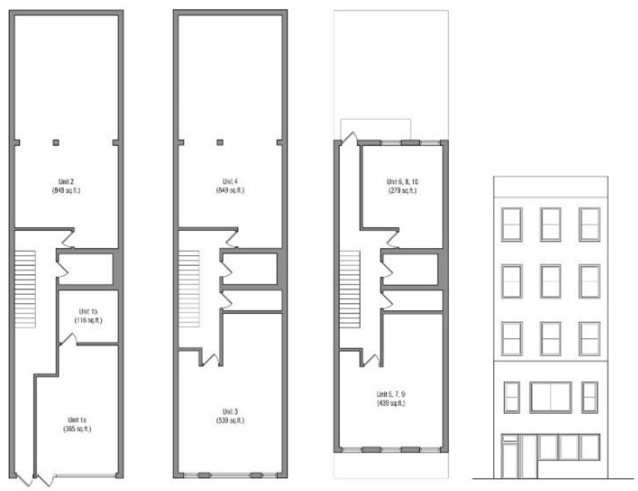


Figure 199, 200, 201 (left to right): Building 7, first (ground) floor (1925); second floor (1925); floors 3–5 (1925); street-front elevation (1979). For plans, north is up.

The street-front façade of Building 7 faces south. In the rear (northern) portion of the site, Building 7 receives more than the minimum access to air and northern light as would be achieved by minimum code standards.

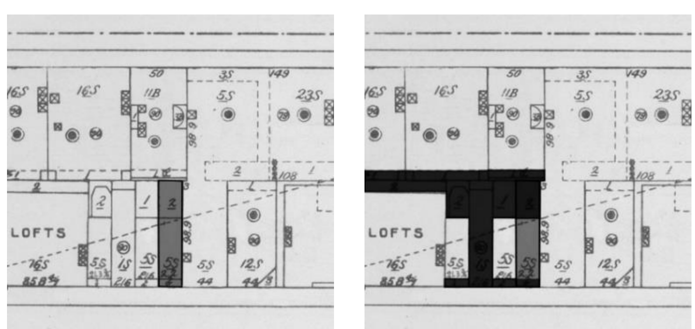


Figure 202, 203: Excerpt from Sanborn Map from 1976, with Building 7 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 7 highlighted in further darker tone. No set scale. North is up.

3.7.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 4 obtained for 1925 and 1979, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 204, 205, 206, 207, 208, 209 (left to right): Building 7, first floor (1925); same floor (1979); second floor (1925); same floor (1979); third floor (1925); same floor (1979). 1" = 32'. North is up.

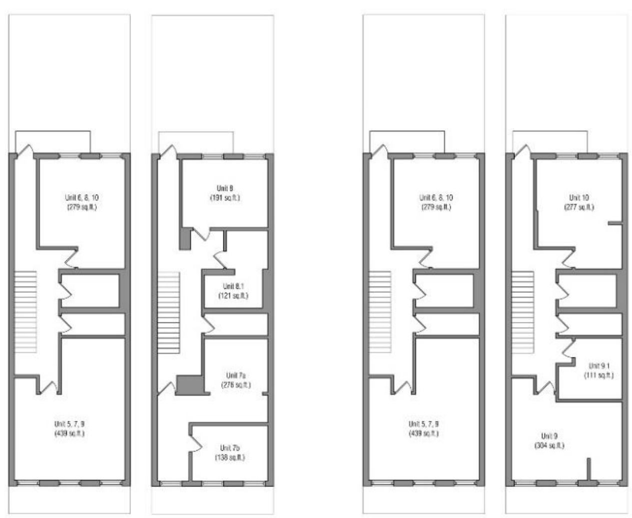
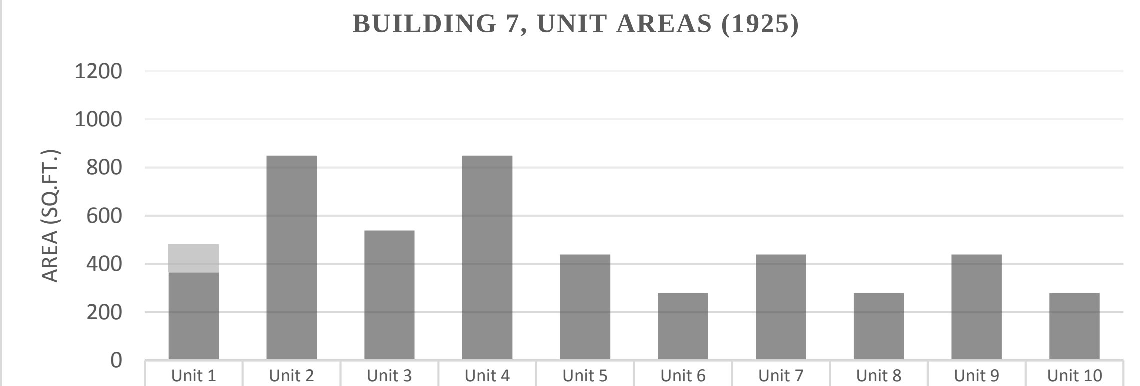
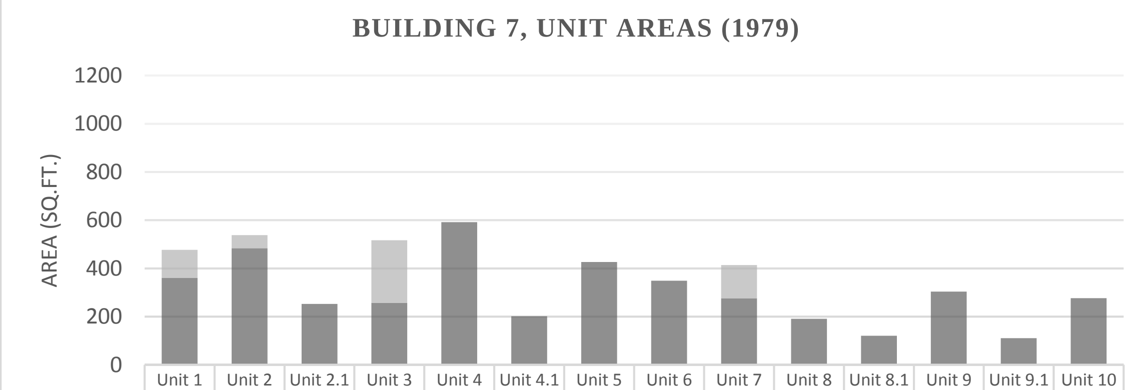


Figure 210, 211, 212, 213 (left to right): Building 7, fourth floor (1925); same floor (1979); fifth floor (1925); same floor (1970). 1" = 32'. North is up.

In 1925, Building 7 had 10 units, with 2 units on the first (ground) floor, and 8 units on the four floors above. In 1979 by comparison, the total unit count of Building 7 had increased to 14 (4 more than in 1925), with 3 units on the first floor (1 more than in 1925), and 11 units on the four floors above (3 more than in 1925). As can be observed in the graphics below, the 1979 state of Building 7 exhibits greater internal spatial diversity than its 1925 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
Portion e										
Portion d										
Portion c										
Portion b	116									
Portion a	365	849	539	849	439	279	439	279	439	279



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 4	Unit 4.1	Unit 5	Unit 6	Unit 7	Unit 8	Unit 8.1	Unit 9	Unit 9.1	Unit 10
Portion e														
Portion d														
Portion c														
Portion b	116	54		260					138					
Portion a	361	484	253	257	592	202	427	349	276	191	121	304	111	277

Figure 214, 215: Unit areas for Building 7 for 1925 and 1979, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1925, among the 8 units above the first (ground) floor, the average unit size was 443 square feet, with the smallest unit being 279 square feet and the largest being 849 square feet. In 1977 by comparison, among the 11 units above the first floor, the average unit size had shrunk to 319 square feet, with the smallest unit size falling to 111 square feet and the largest unit also shrinking to 592 square feet.

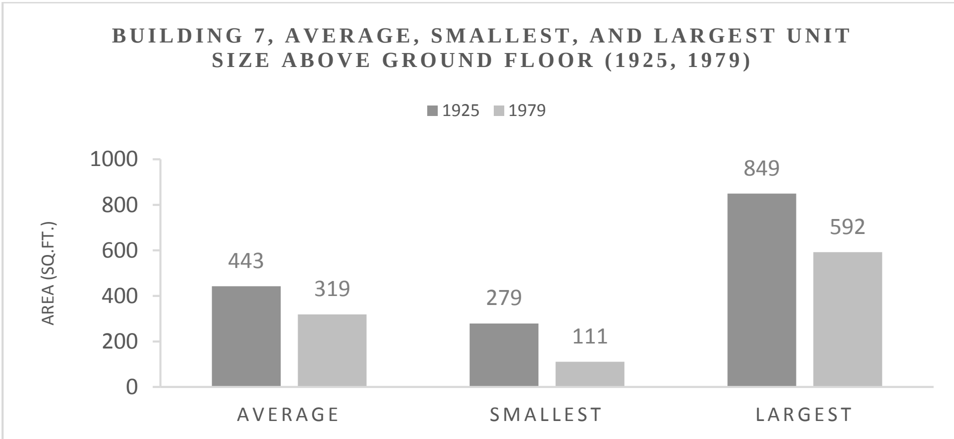
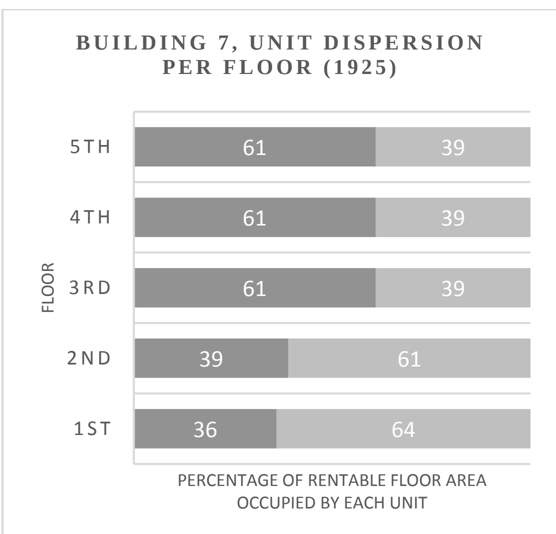


Figure 216: Building 7, average, smallest, and largest unit size above first (ground) floor for 1925 and 1979.

Below is a visualization showing the changes to the internal arrangement of Building 7, floor by floor. One observes that the 4 new units observed in Building 7 in 1979 are distributed equally throughout four of the building's five floors, occupying the first, second, fourth, and fifth floors. The third floor, aside from a small expansion in Unit 6 (in the rear of the floor plan), remains largely unchanged from 1925 to 1979, as can be seen in the plans listed two pages prior.



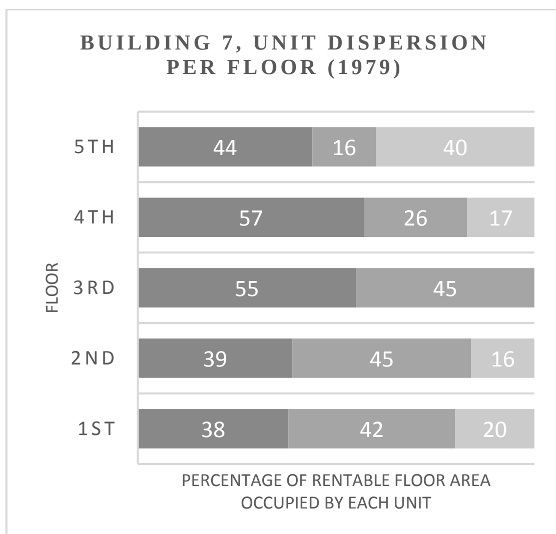


Figure 217, 218: Building 7, unit dispersion per floor, 1925 and 1979.

3.7.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 7 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Architect	Luncheonette	Coffee House	Coffee House (1)	Resident (2)
Construction	Millinery	Dentist	Resident (1)	Dentist (1)
Electrolysis	Millinery	Resident	Dentist	Resident (1)
Resident	Resident	Resident	Photography	Embroidery
Resident	Resident	Resident	Photography	Luncheonette
Tea Room	Textiles	Resident	Resident	Pressing Machines
Textiles		Ribbons	Resident	Resident
		Silks	Resident	Resident
		Silks & Velvets	Resident	Resident
			Resident	Sewing
			Stitching	Textiles

Figure 219: Changing socioeconomic composition of Building 7 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 7 supported 7 tenants, totaling 6 micro-specializations. In 1942, total tenancy had dropped slightly to 6, and micro-specializations to 4. In 1958, a reversal was observed, with the total occupant count rising to 9, and micro-specialization count to 6. In 1963, while the total number of tenants increased to a high of 11, but micro-specializations fell by 1, to a count of 5. In 1973 in turn while the total tenant count remained stable at 11, micro-specializations increased to a peak count of 7.

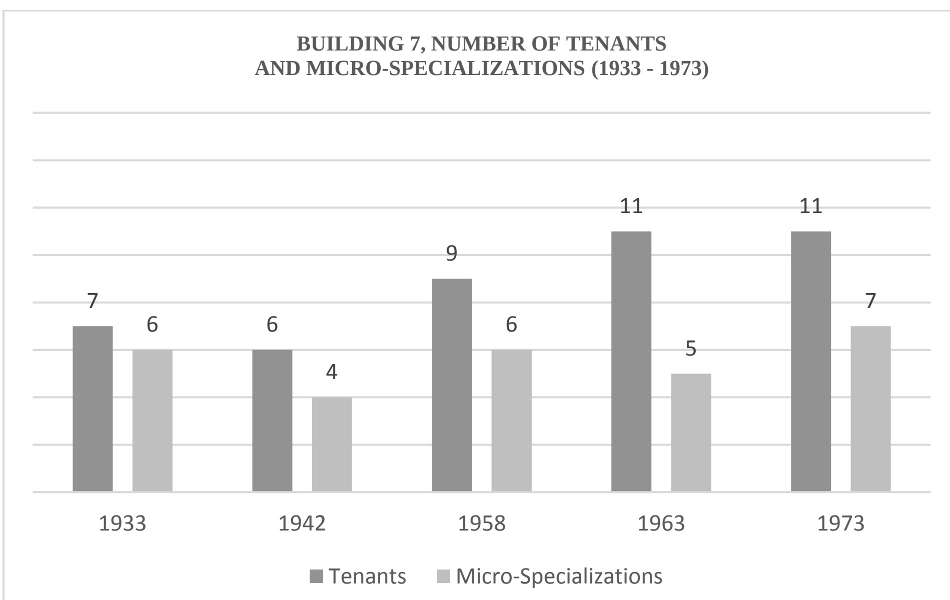
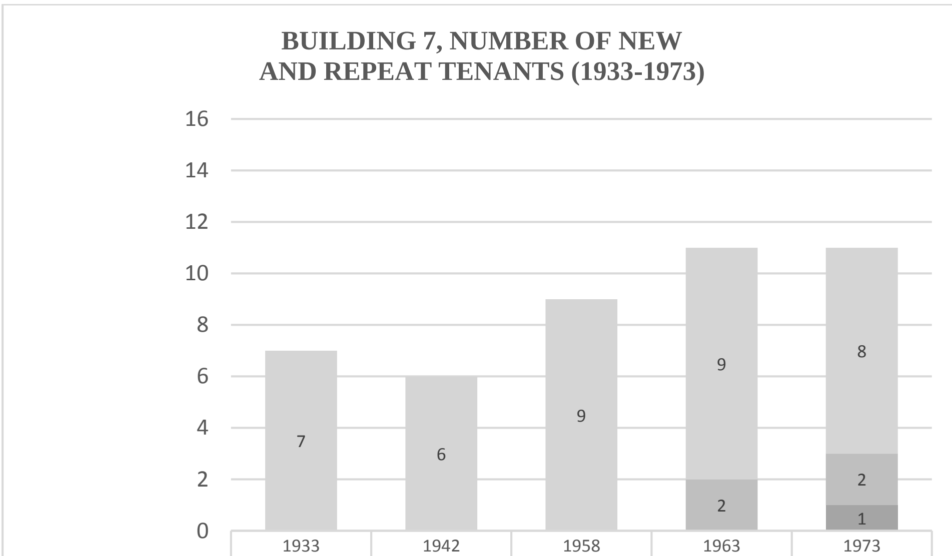


Figure 220: Building 7, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 7, as listed in detail in the first table shown in this section, is presented below. As can be observed, 1963 is the first year set during which repeat tenants are observed, with a count of 2. In 1973, 3 repeat tenants are listed, with 1 being an occupant renewing tenancy for the second consecutive year set. It is worth noting that Building 7 is the only building among the fifteen being studied in this research phase, to have such a late occurrence of repeat tenants. .



	1933	1942	1958	1963	1973
New Tenancy	7	6	9	9	8
1st Repeat Tenancy				2	2
2nd Repeat Tenancy					1
3rd Repeat Tenancy					
4th Repeat Tenancy					

Figure 221: Building 7, number of new and repeat tenants from 1933–1973

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- There are two macro-categories that consistently appear in all of the observed year sets. These include *Resident* and *Food.* The number of residents in Building 7 peaks in 1963, with a count of 6, followed closely by 1973 and 1942, with a count of 5 and 4, respectively. In the first two year sets, in turn, the resident count remains stable at 2. *Food*, on the other hand, is consistently represented by 1 tenant throughout all five year sets, with the 1958 and 1963 *Food* listing being the same coffee house.
- The macro-categorical diversity supported by Building 7 is also worth noting, with 5 macro-categories being represented in 1933, dipping slightly to 4 in 1942, only to rise to 5 again in 1958 and 1963, and peaking in 1973 with a count of 6.

- This macro-categorical pattern is somewhat mimicked by the micro-specialization count over the years for Building 7, with 6, 4, 6, 5, and 7 micro-specializations being listed for 1933, 1942, 1958, 1963, and 1973 respectively (largely mirroring the 5, 4, 5, 5, and 6 rhythm of the macro-category count).
- Apparel-specific firms appear only once in the five year sets observed, namely in 1942 with 2 millinery firms being listed.

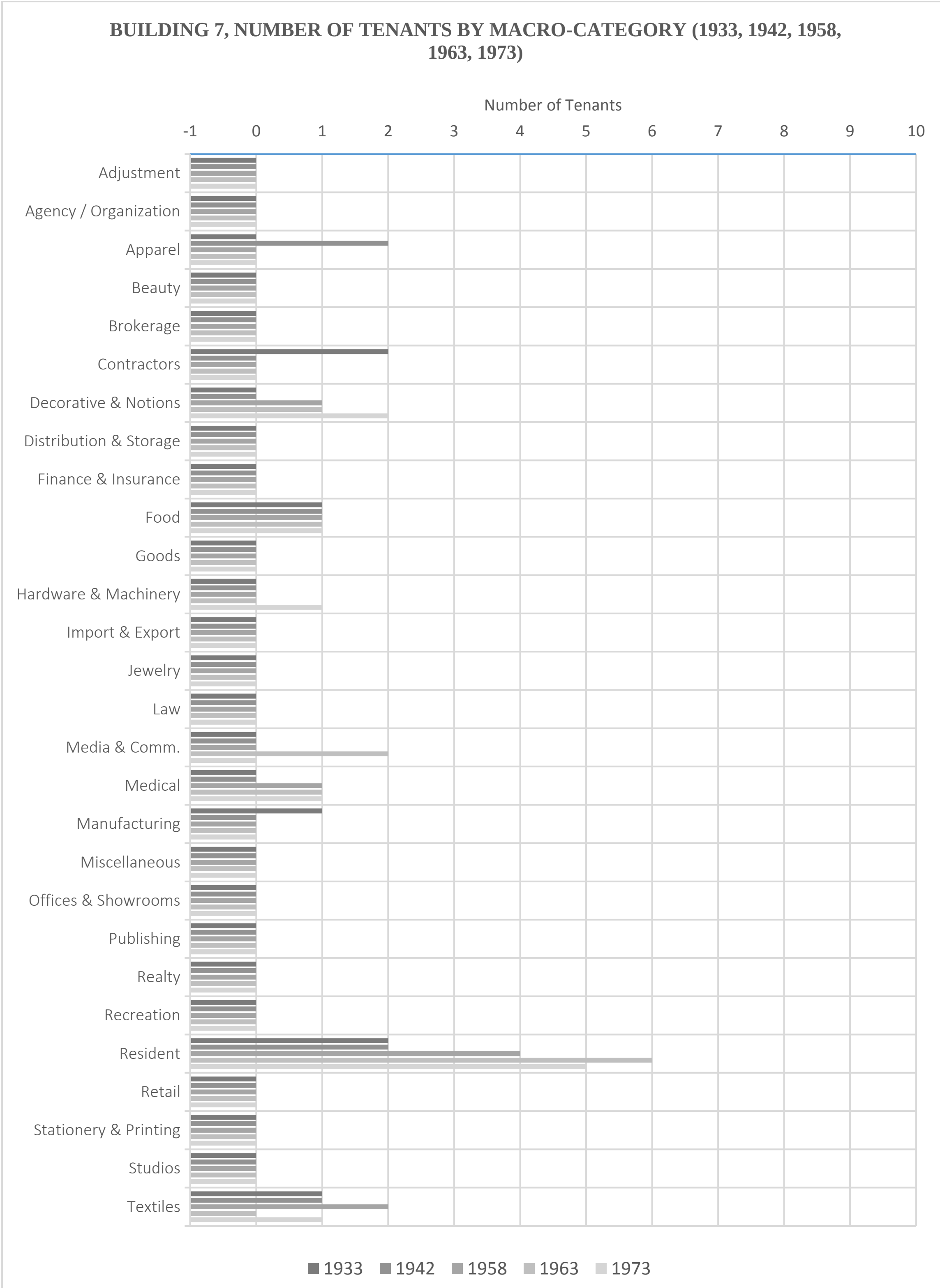


Figure 222: Building 7, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.8. BUILDING 8

3.8.1. ARCHITECTURE AND URBAN CONTEXT

Building 8 is a twelve-story structure built in 1928. It is 53’-0” wide and 64’-0” deep from the second floor up, and 74’-0” deep on the first (ground) floor. It is classified as a Fireproof Structure—one of two among the fifteen building being studied in this research phase (the other being Building 10). Its outer envelope is brick, while its primary structure is composed of steel with robust concrete reinforcement. It has two elevators, and two set of stairs.

Figure 223, 224, 225 (left to right): Building 8, first (ground) floor (1926); floors 4–12 (1926); street-front elevation (1981). 1” = 32’. For plans, north is to the left.

The street-front façade of Building 8 faces west. In the rear (eastern) portion of the site, Building 8 receives roughly the bare minimum of access to air and eastern light as achieved by minimum code standards. There is though, an area of lower density in the urban fabric in the rear of site (to the southeast) that provides the building with a bit more openness in terms of light and air, as documented in the rightmost graphic below.

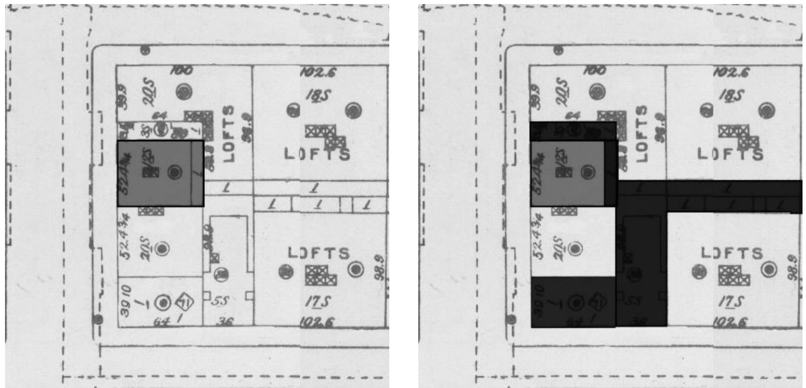


Figure 226, 227: Excerpt from Sanborn Map from 1976, with Building 8 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 8 highlighted in further darker tone. No set scale. North is up.

3.8.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 8 obtained for 1926 and 1981, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 228, 229 (left to right, top down): Building 8, first floor (1926); same floor (1981). 1'' = 32'. North is to the left.

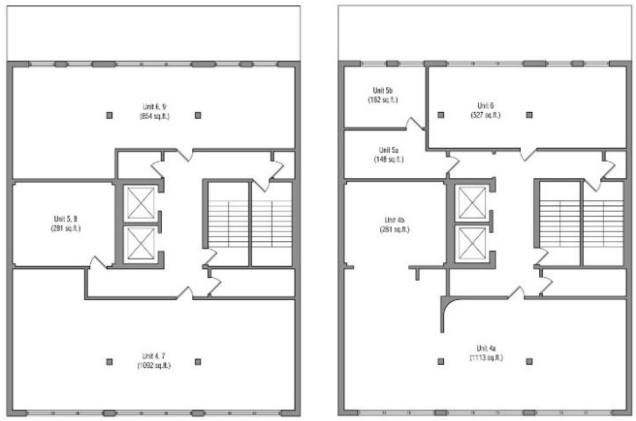


Figure 230, 231 (left to right, top down): Building 8, second floor (1926); same floor (1981). 1" = 32'. North is to the left.

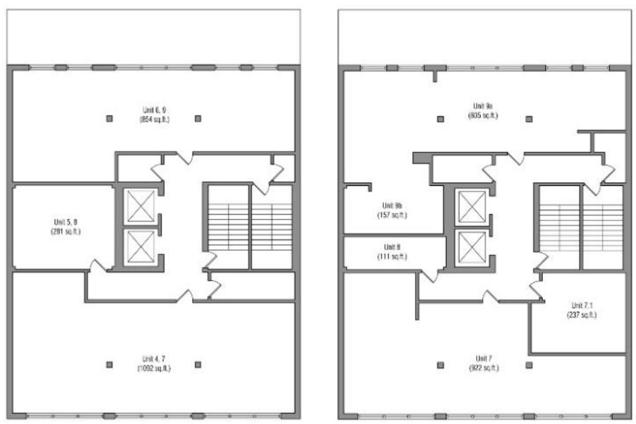


Figure 232, 233 (left to right, top down): Building 8, third floor (1926); same floor (1981). 1" = 32'. North is to the left.

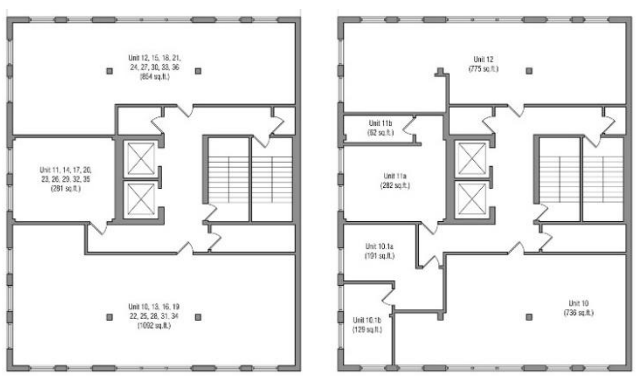


Figure 234, 235 (left to right, top down): Building 8, fourth floor (1926); same floor (1981). 1" = 32'. North is to the left.

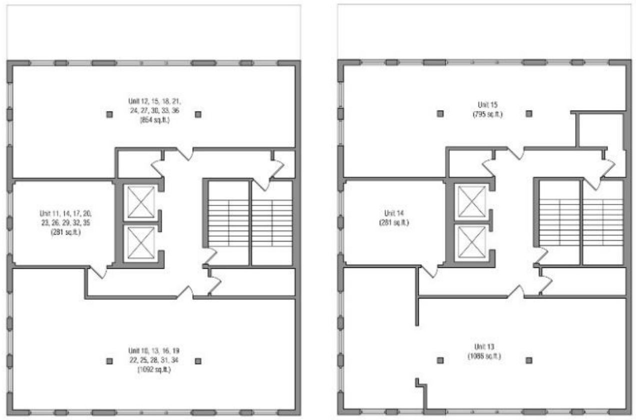


Figure 236, 237 (left to right, top down): Building 8, fifth floor (1926); same floor (1981). 1" = 32'. North is to the left.

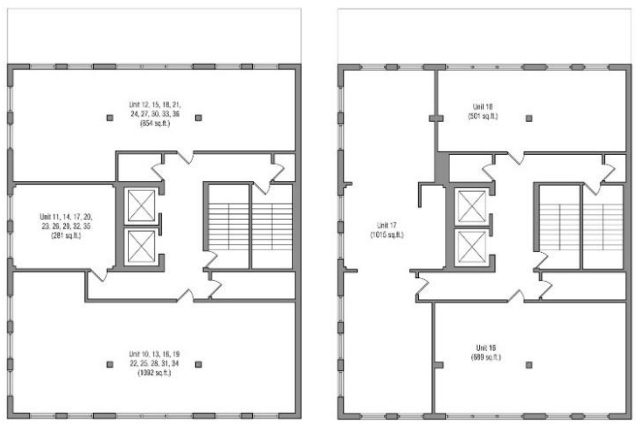


Figure 238, 239 (left to right, top down): Building 8, sixth floor (1926); same floor (1981). 1" = 32'. North is to the left.

Figure 240, 241 (left to right, top down): Building 8, seventh floor (1926); same floor (1981). 1" = 32'. North is to the left.

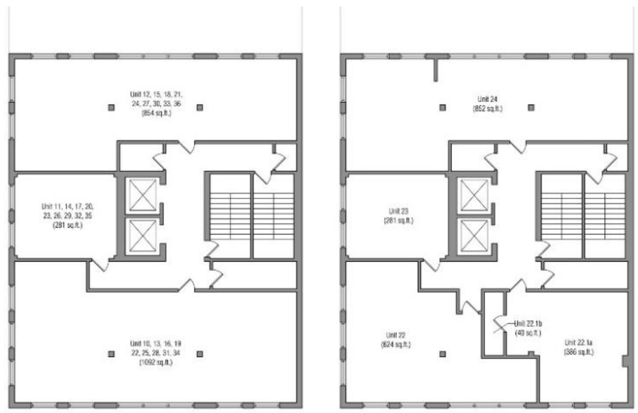


Figure 242, 243 (left to right, top down): Building 8, eighth floor (1926); same floor (1981). 1" = 32'. North is to the left.

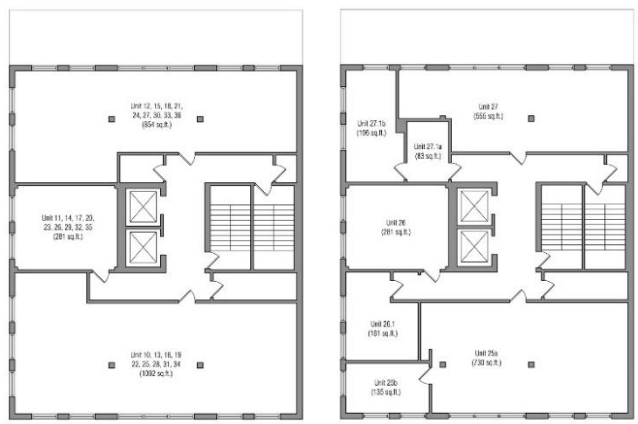
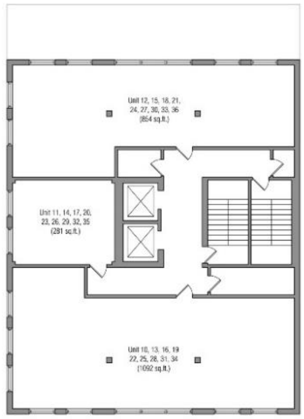


Figure 244, 245 (left to right, top down): Building 8, ninth floor (1926); same floor (1981). 1" = 32'. North is to the left.

Figure 246, 247 (left to right, top down): Building 8, tenth floor (1926); same floor (1981). 1" = 32'. North is to the left.



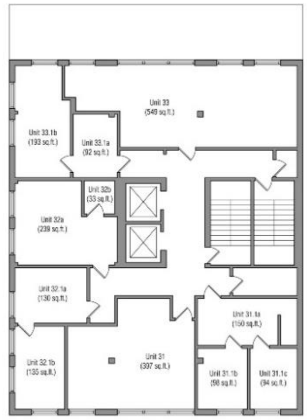
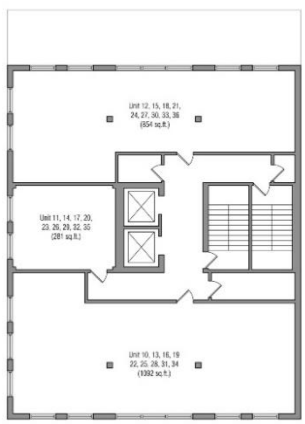


Figure 248, 249 (left to right, top down): Building 8, eleventh floor (1926); same floor (1981). 1" = 32'. North is to the left.



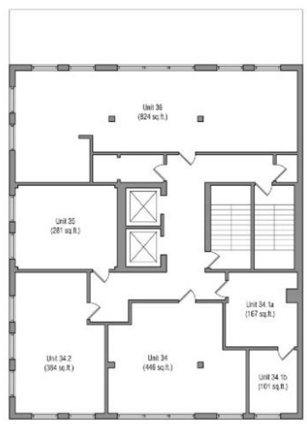
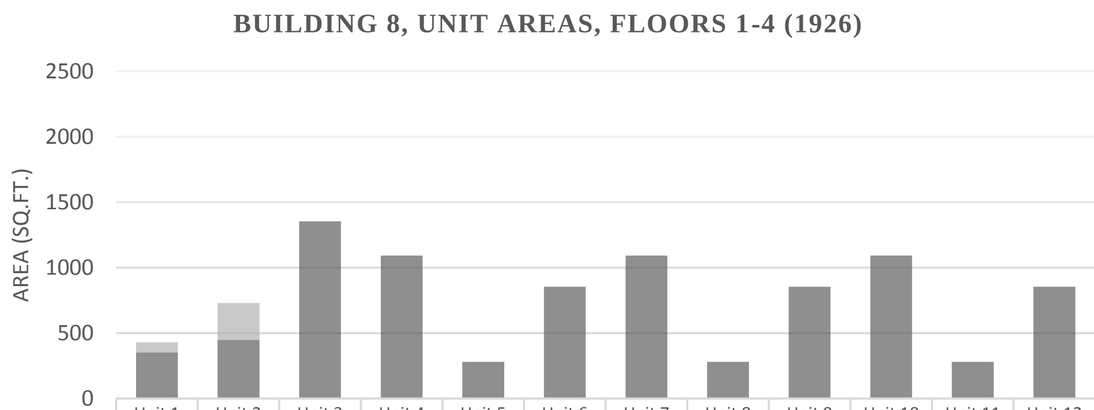
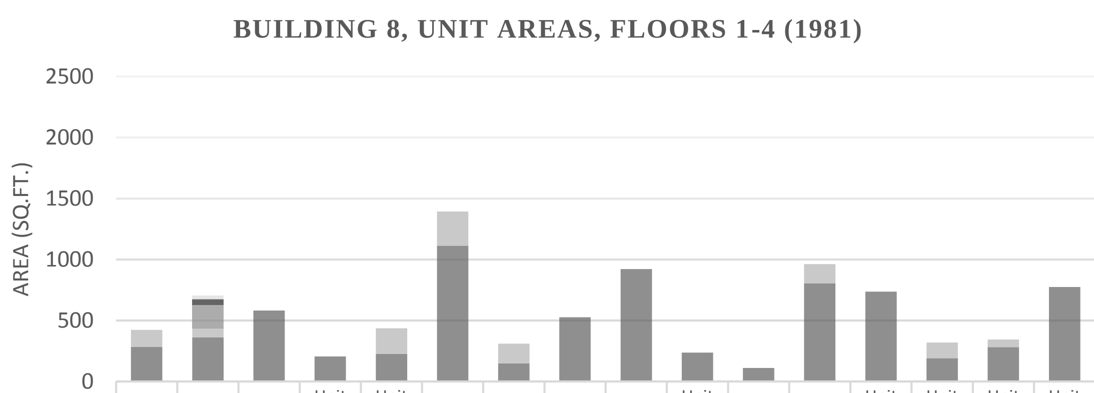


Figure 250, 251 (left to right, top down): Building 8, twelfth floor (1926); same floor (1981). 1" = 32'. North is to the left.

In 1926, Building 8 had 36 units, with 3 units on the first (ground) floor, and 33 units on the eleven floors above. In 1981 by comparison, the total unit count of Building 8 had increased to 50, with 5 units on the first floor (2 units more than in 1926), and 45 units on the eleven floors above (12 units more than in 1926). As can be observed in the graphics below, the 1981 state of Building 8 exhibits greater internal spatial diversity than its 1926 state.

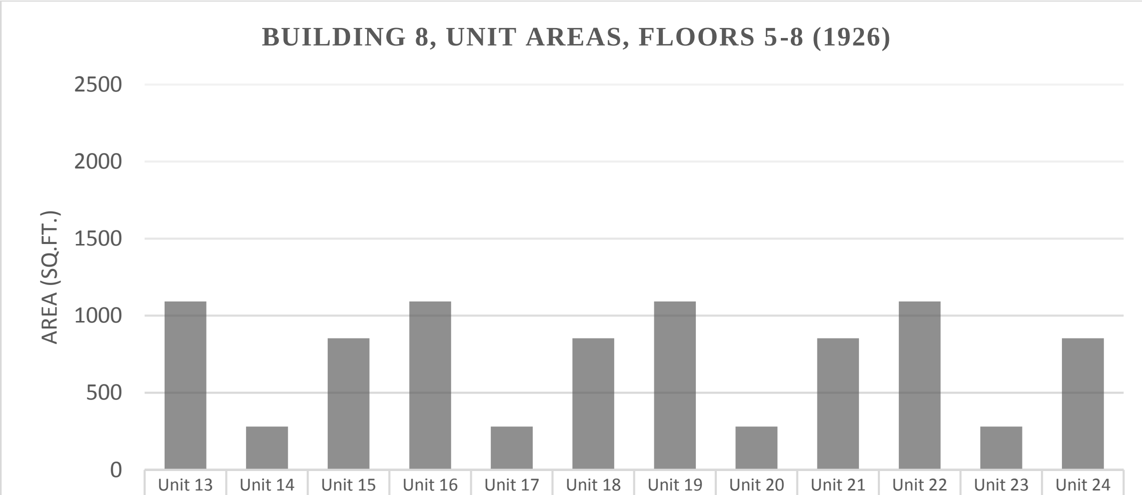


	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12
Portion e												
Portion d												
Portion c												
Portion b	76	281										
Portion a	353	449	1353	1092	281	854	1092	281	854	1092	281	854

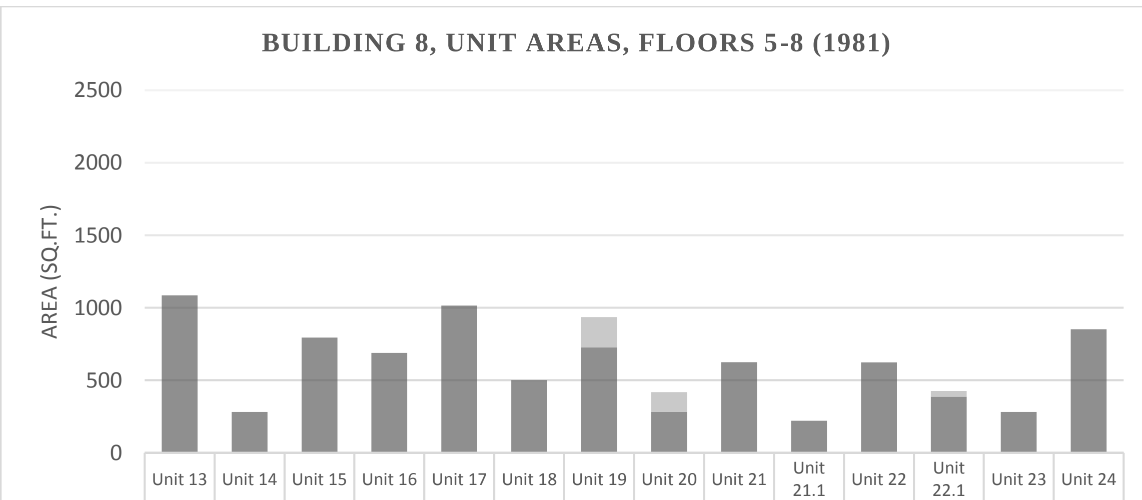


	Unit 1	Unit 2	Unit 3	Unit 3.1	Unit 3.2	Unit 4	Unit 5	Unit 6	Unit 7	Unit 7.1	Unit 8	Unit 9	Unit 10	Unit 10.1	Unit 11	Unit 12
Portion e		33														
Portion d		48														
Portion c		190														
Portion b	140	75			209	281	162					157		129	62	
Portion a	283	361	582	205	227	1113	148	527	922	237	111	805	736	191	282	775

Figure 252, 253: Unit areas for Building 8, floors 1–4 for 1926 and 1981, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

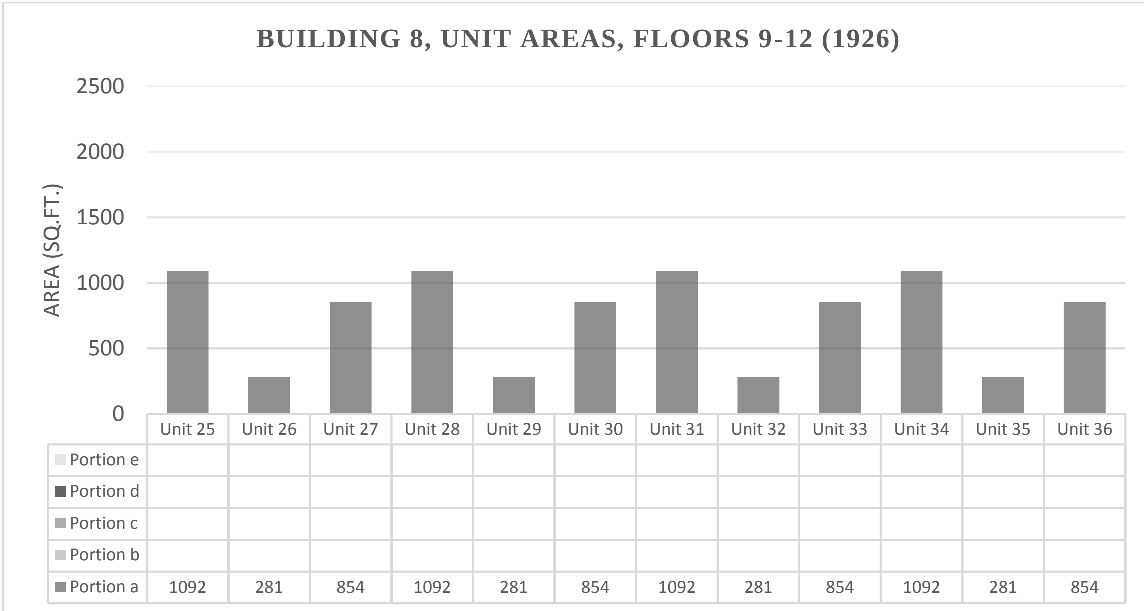


	Unit 13	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24
Portion e												
Portion d												
Portion c												
Portion b												
Portion a	1092	281	854	1092	281	854	1092	281	854	1092	281	854



	Unit 13	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 21.1	Unit 22	Unit 22.1	Unit 23	Unit 24
Portion e														
Portion d														
Portion c														
Portion b							210	137				40		
Portion a	1086	281	795	689	1015	501	726	281	625	221	624	386	281	852

Figure 254, 255: Unit areas for Building 8, floors 5–8 for 1926 and 1981, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



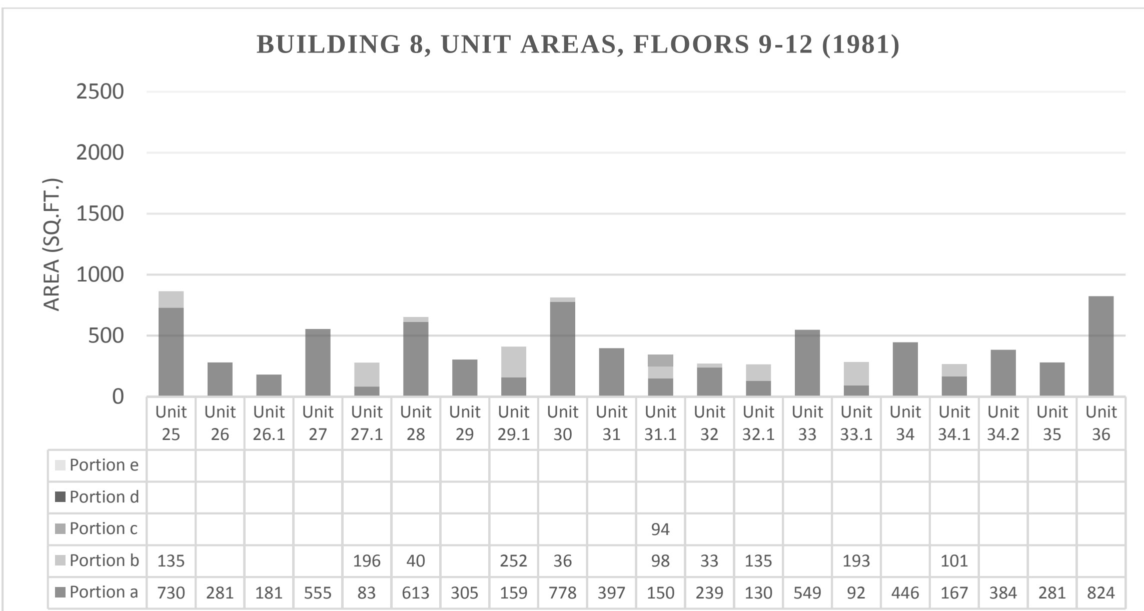


Figure 256, 257: Unit areas for Building 8, floors 9–12 for 1926 and 1981, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1926, among the 33 units above the first (ground) floor, the average unit size was 742 square feet, with the smallest unit being 281 square feet and the largest being 1092 square feet. In 1981 by comparison, among the 45 units above the first floor, the average unit size had shrunk to 534 square feet. This decrease in average unit size however occurred in a rather intriguing manner (similar to that seen in Building 6), in that 1981 witnessed the largest unit size actually increasing in size, to 1394 square feet, and the smallest unit size inversely falling to 111 square feet.

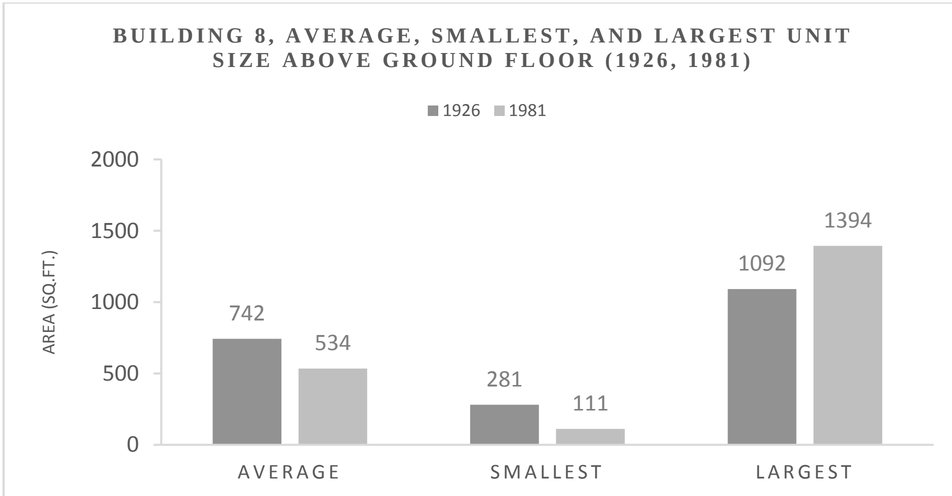
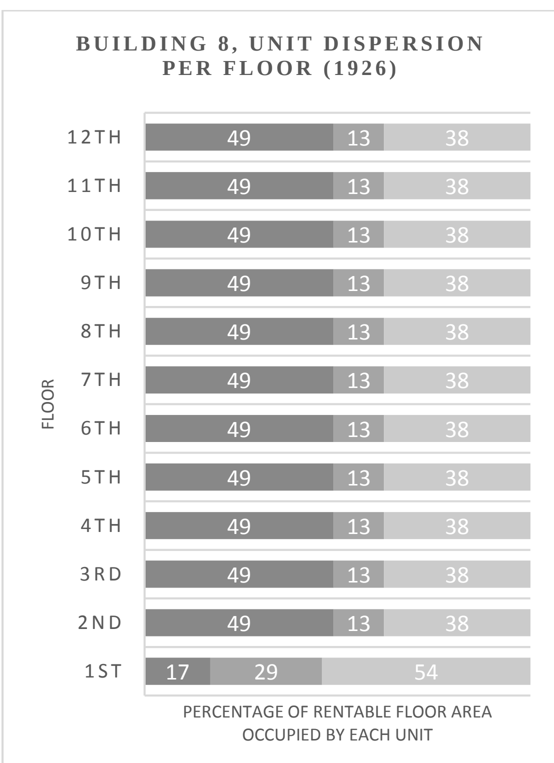


Figure 258: Building 8, average, smallest, and largest unit size above first (ground) floor for 1926 and 1981.

Below is a visualization showing the changes to the internal arrangement of Building 8, floor by floor. One observes that in the 1981 state of Building 8, floors 7–12 had 4–6 units per floor, whereas floors 2–6 had 3–4 units per floor. This seems to indicate that on average, the socioeconomic fabric at some point supported in the lower half of the building (above the ground floor) required larger square footages for their functions, while the upper half required the inverse.



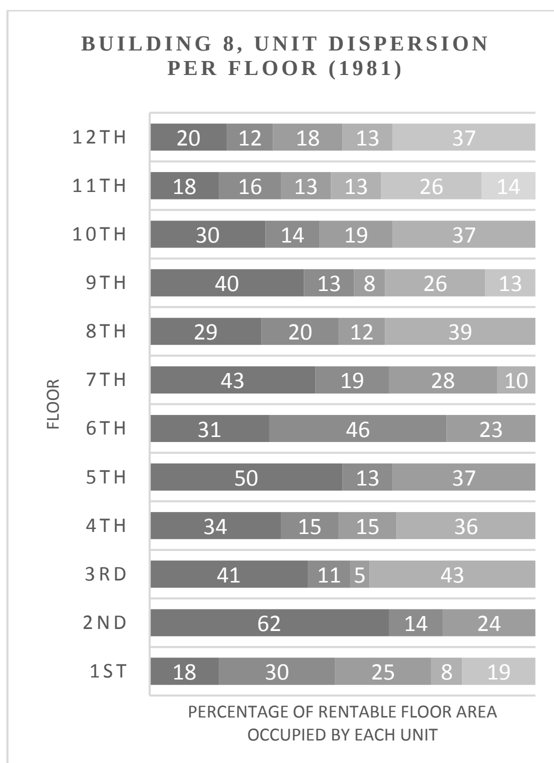


Figure 259, 260: Building 8, unit dispersion per floor, 1926 and 1981.

3.8.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 8 for 1933, 1942, 1958, and 1973, coded from reverse business directories obtained at the New York Public Library. Data from 1963 is missing, due to the copies found at the archives relating to that year being too corrupted to retrieve and code accurately.

1933	1942	1958		1973
Buttonholes	Buttons (1)	Dentist (2)	Textiles	Trimmings (3)
Buttons	Buttons (1)	Silks & Rayons (2)	Textiles	Notions (2)
Buttons	Dentist (1)	Trimmings (2)	Textiles	Brokerage (1)
Buttons	Fur (1)	Woolens (2)	Textiles	Check Cashing (1)
Buttons	Misc. Business (1)	Notions (1)	Textiles	Luncheonette (1)
Buttons	Paper & Twine (1)	Silks & Rayons (1)	Textiles	Misc. Business (1)
Buttons	Paper & Twine (1)	Trimmings (1)	Textiles	Misc. Business (1)
Buttons (Covered)	Printing & Stat. (1)	Woolens (1)	Textiles	Misc. Business (1)
Cloaks	Silks (1)	Woolens (1)	Textiles & Linings	Silks & Rayons (1)
Cloaks & Suits	Silks (1)	Brokerage, Selling	Textiles & Linings	Textiles (1)
Coats	Trimmings (1)	Check Cashing	Textiles & Linings	Textiles (1)
Coats	Woolens (1)	Contractor / Jobb.	Trimmings	Textiles (1)
Cotton Goods	Accessories	Freight	Trimmings	Textiles (1)
Dentist	Apparel	Jewelry	Trucking	Textiles (1)
Dress Supplies	Belts	Jewelry	Woolens	Textiles (1)
Dress Supplies	Buttons	Linens & Rayons	Woolens	Textiles (1)
Dresses	Buttons	Luncheonette	Woolens	Textiles (1)
Electrical Equipment	Cloaks	Misc. Business	Woolens & Velvets	Textiles (1)
Electrician	Coats & Suits	Misc. Business		Trimmings (1)
Embroidery	Coats & Suits	Misc. Business		Trimmings (1)
Embroidery	Contractor / Jobb.	Misc. Business		Woolens (1)
Embroidery	Fur	Misc. Business		Woolens (1)
Embroidery	Hosiery	Misc. Business		Agency
Embroidery	Jewelry	Misc. Business		Apparel
Embroidery	Millinery	Misc. Business		Jewelry
Fur	Misc. Business	Misc. Business		Maternity Apparel
Luncheonette	Misc. Business	Notions		Misc. Business
Misc. Business	Misc. Business	Pressing Machines		Misc. Business
Misc. Business	Notions	Rayons		Misc. Business
Misc. Business	Pleating & Stitching	Resident		Misc. Business
Notions	Rayons	Silks & Rayons		Retail
Notions	Realty	Silks & Rayons		Sewing
Notions	Silks	Silks & Rayons		Sewing Mach.
Paper & Twine	Silks	Textiles		Silks
Paper & Twine	Textiles	Textiles		Silks & Velvets
Paper & Twine	Textiles	Textiles		Textiles
Pleating	Textiles	Textiles		Textiles
Pleating & Stitching	Trimmings	Textiles		Textiles
Printing & Station.	Woolens	Textiles		Textiles
Realty	Woolens	Textiles		Textiles
Rhinestones	Woolens	Textiles		Textiles
Ribbons	Woolens	Textiles		Textiles
Silks	Woolens	Textiles		Textiles
Silks	Woolens	Textiles		Textiles
Silks & Woolens	Woolens	Textiles		Textiles
Trimmings	Woolens	Textiles		Textiles
Trimmings	Woolens	Textiles		Textiles & Linings
Woolens	Woolens	Textiles		Textiles & Linings
	Woolens	Textiles		Trucking
	Woolens	Textiles		Trucking & Stor.
	Woolens	Textiles		Trucking & Stor.
	Woolens	Textiles		
	Woolens	Textiles		

Figure 261: Changing socioeconomic composition of Building 8 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 8 supported 48 tenants, with a total of 28 micro-specializations. In 1942, the number of tenants increased to 53, but inversely the micro-specialization count dropped to 23. In 1958, a similar pattern was observed with tenants rising to 71, but micro-specializations dropping further to 20. And in 1973, tenants dropped to a count of 51, yet micro-specializations increased slightly to a count of 21.

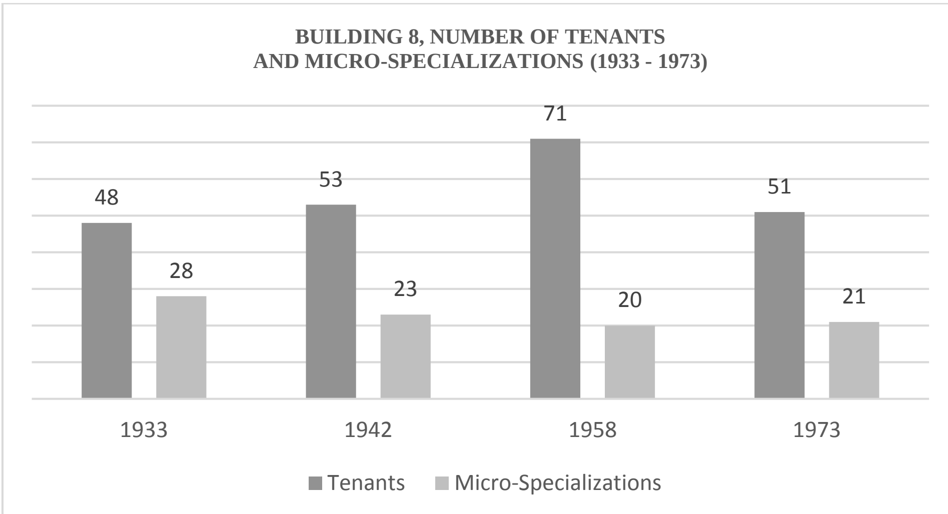
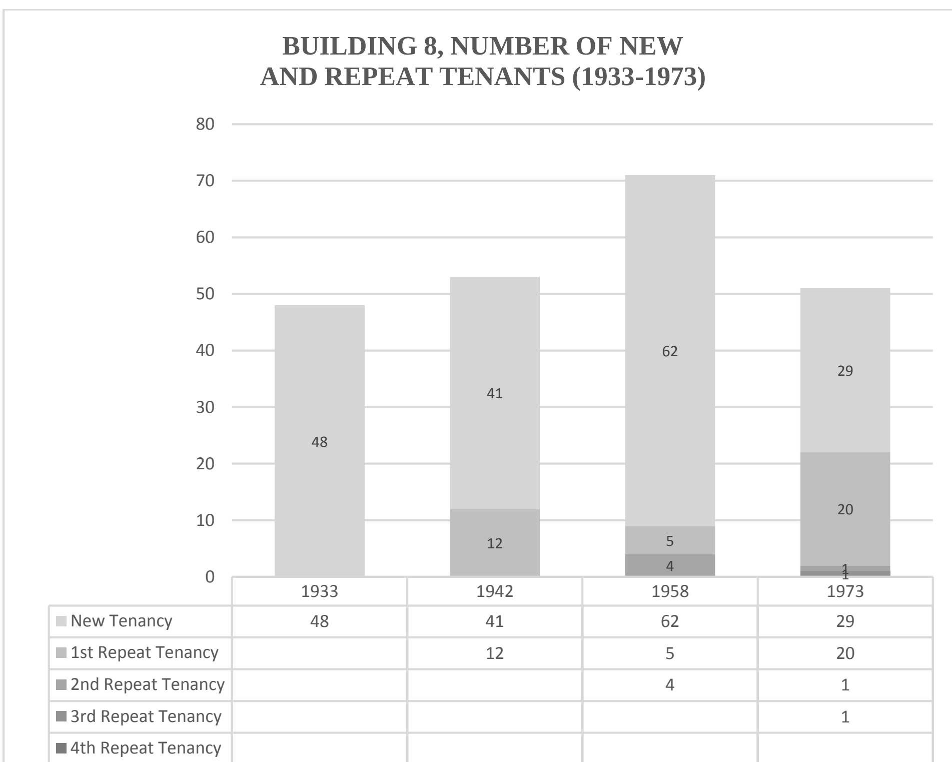


Figure 262: Building 8, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973



	1933	1942	1958	1973
New Tenancy	48	41	62	29
1st Repeat Tenancy		12	5	20
2nd Repeat Tenancy			4	1
3rd Repeat Tenancy				1
4th Repeat Tenancy				

Figure 263: Building 8, number of new and repeat tenants from 1933–1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 8, as listed in detail in the first table shown in this section, is presented above. As can be observed, in 1942 the building supported 12 repeat tenants. In 1958, there were 9 repeat tenants (a decrease of 3), with 4 being occupants renewing for the second consecutive year set. In 1973, a peak of 22 repeat tenants was observed, with 1 being a second-time repeat tenant (a notions business), and the other being a third-time repeat tenant (a trimmings firm).

This inverse relationship between total tenancy and micro-specializations (with the latter declining as the former is rising), observed clearly in the first three year sets, is noteworthy. A similar such pattern is also observed in Building 6, another larger-scale building, but seems to be absent from the smaller-scale buildings studied in this phase of the research.

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, in the page that follows.

- There are 4 macro-categories that are present in all four year sets documented. These include *Apparel, Decorative & Notions, Miscellaneous,* and *Textiles. Apparel* is represented by 4–9 tenants for 1933, 1958 and 1973, peaking at 26 tenants in 1942. *Decorative & Notion* similarly, peaks at 20 tenants in 1933, and then diminishes to a consistent 5–7 tenants in the last three year sets. *Miscellaneous* on the other hand never peaks as sharply as the prior two macro-categories, with 3–9 firms observed throughout the documented year sets. *Textiles* in turn, peaks in 1958 but is also quite strong in 1973, with 38 and 25 tenants respectively, compared to the 3–8 tenants it was represented by in the first two years.
- In all the year sets observed, there is one dominant macro-category that emerges per year set. For 1933, this is *Decorative & Notions,* with 20 tenants. For 1942, it is *Apparel,* with 26 tenants. For 1958 and 1973, it is *Textiles,* with 38 and 25 tenants, respectively.
- The macro-categorical diversity in the building is noteworthy, with the count at 12–13 macro-categories being observed in three out of four year sets, with the exception being 1942 with 10 macro-categories.

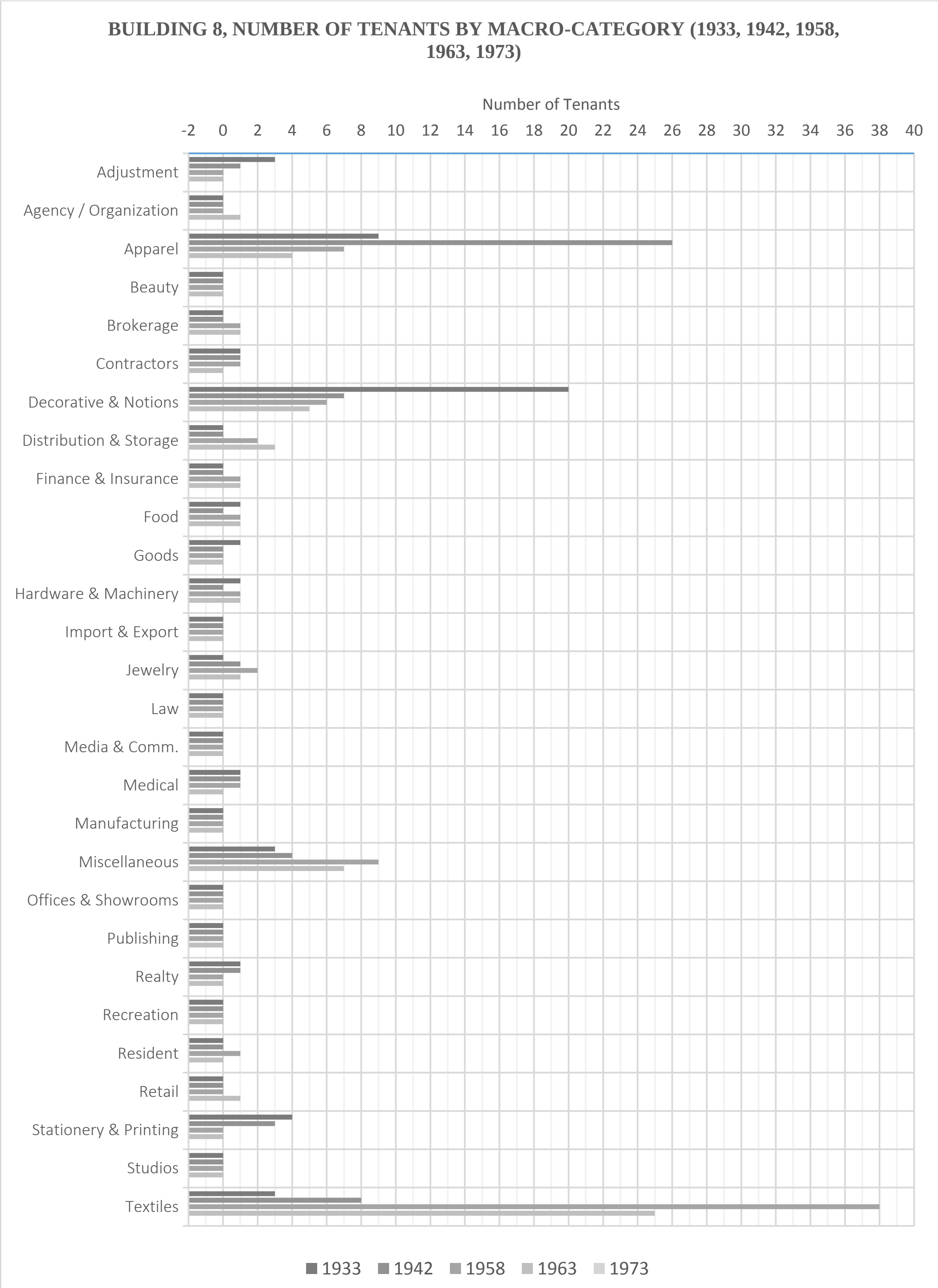


Figure 264: Building 8, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.9. BUILDING 9

3.9.1. ARCHITECTURE AND URBAN CONTEXT

Building 9 is a five-story structure built in 1927. It is 25’-0” wide and 85’-0” deep from the second floor up, and 98’-9” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has no elevators, one set of stairs, and one fire escape located on the rear façade.

Figure 265, 266, 267 (left to right): Building 9, first (ground) floor (1930); floors 2–5 (1930); street-front elevation (1974). For plans, north is up.

The street-front façade of Building 9 faces south. In the rear (northern) portion of the site, Building 4 receives roughly the bare minimum of access to air and northern light as achieved by minimum code standards, as documented in the rightmost graphic below.

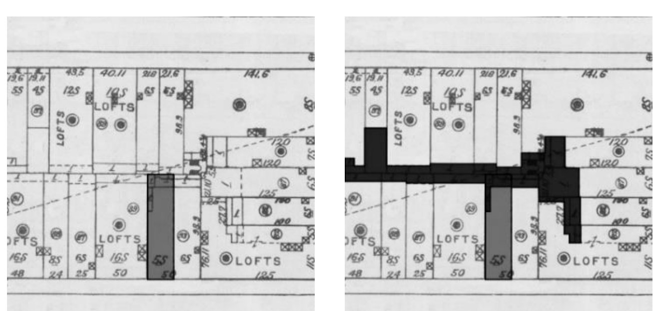


Figure 268, 269: Excerpt from Sanborn Map from 1976, with Building 9 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 9 highlighted in further darker tone. No set scale. North is up.

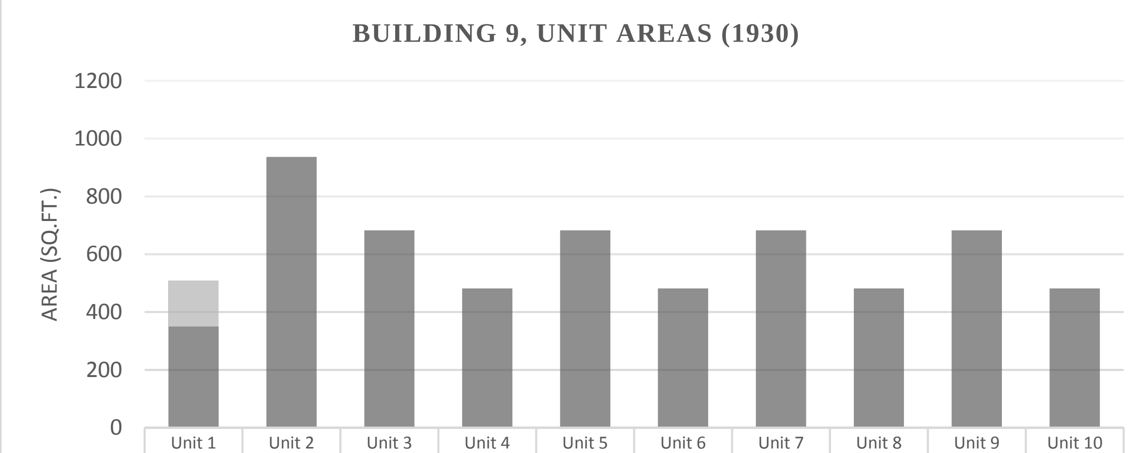
3.9.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 9 obtained for 1930 and 1974, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

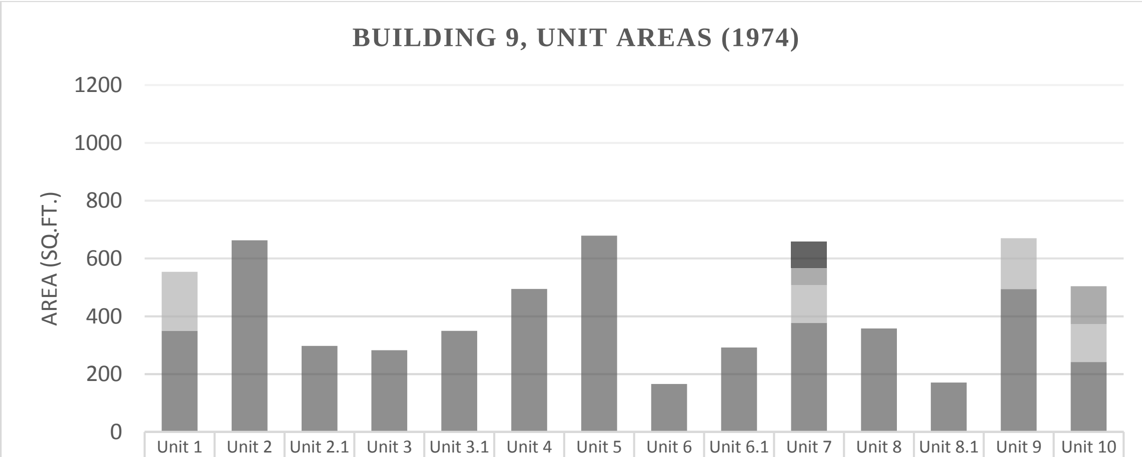
Figure 270, 271, 272, 273 (left to right): Building 9, first floor (1930); same floor (1974); second floor (1930); same floor (1974); third floor (1930); same floor (1974). 1" = 32'. North is up.

Figure 274, 275, 276, 277 (left to right): Building 9, fourth floor (1930); fourth floor (1974); fifth floor (1930); same floor (1974); 1" = 32'. North is up.

In 1930, Building 9 had 10 units, with 2 units on the first (ground) floor, and 8 units on the four floors above. In 1974 by comparison, the total unit count of Building 4 had increased to 14, with 3 units on the first floor (1 more than in 1930), and an increase to 11 units on the four floors above (3 more than in 1930). As can be observed in the graphics below, the 1974 state of Building 9 exhibits greater internal spatial diversity than its 1930 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
Portion e										
Portion d										
Portion c										
Portion b	158									
Portion a	350	937	683	482	683	482	683	482	683	482



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 3.1	Unit 4	Unit 5	Unit 6	Unit 6.1	Unit 7	Unit 8	Unit 8.1	Unit 9	Unit 10
Portion e														
Portion d										91				
Portion c										60				131
Portion b	204									131			176	131
Portion a	350	663	298	283	350	495	679	166	292	377	358	171	494	242

Figure 278, 279: Unit areas for Building 9 for 1930 and 1974, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1930, among the 8 units above the first (ground) floor, the average unit size was 585 square feet, with the smallest unit being 482 square feet and the largest being 683 square feet. In 1974 by comparison, among the 11 units above the first floor, the average unit size had decreased to 421 square feet, with the smallest unit size falling substantially to 166 square feet and the largest unit remaining roughly the same, at 679 square feet.

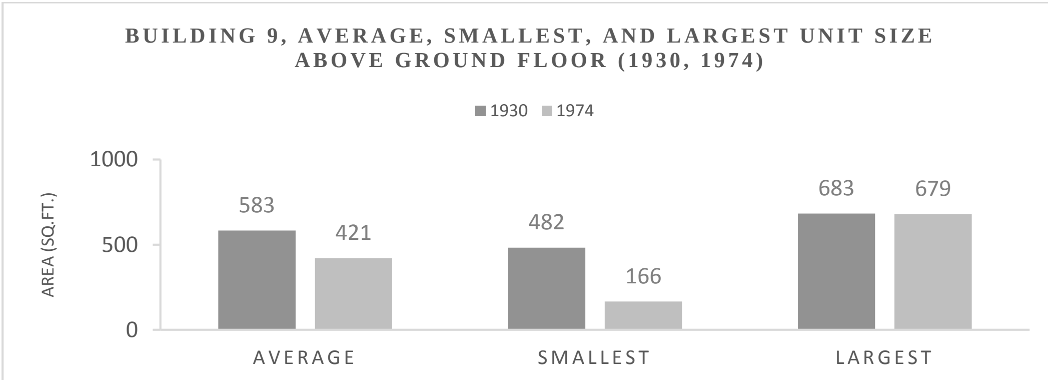
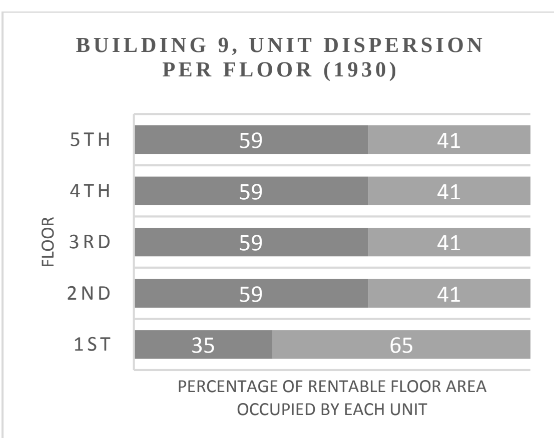


Figure 280: Building 9, average, smallest, and largest unit size above first (ground) floor for 1930 and 1974.

Below is a visualization showing the changes to the internal arrangement of Building 9, floor by floor. As observed below, floors 1–4 have new units added to their floorplans. In the first and second floor, the larger units occupying 65% and 59% (respectively) of the rentable floor area in 1930 have been subdivided by 1974. In floors 3–4 on the other hand, it is the smaller unit occupying 41% of the rentable floor area in 1930 that has been subdivided. By 1974, there are also significant internal changes to units on the fifth floor, as seen in the plans listed two pages prior. Noteworthy is the change to the northern unit, which has transformed a single large space into a waiting room and two office arrangement. These changes simply do not affect the overall unit count for that floor, as observed below.



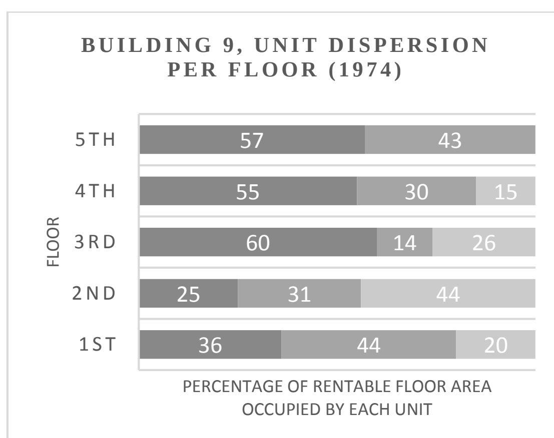


Figure 281, 282: Building 9, unit dispersion per floor, 1930 and 1974.

3.9.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 9 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Accounting	Dyeing (1)	Dyeing (2)	Dyeing (3)	Dyeing (4)
Beads	Coats & Suits	Luncheonette (1)	Notions (1)	Coffee House
Beauty Salon	Feathers	Neckwear (1)	Trimmings (1)	Jewelry
Beauty Salon	Feathers	Buckles	Artist	Misc. Business
Consumer Agency	Flowers	Buttons	Buttons	Misc. Business
Dresses	Flowers & Feathers	Jewelry	Exporting	Notions
Dyeing	Flowers & Feathers	Jewelry	Misc. Business	Resident
Millinery	Importing	Notions	Photography	Woolens
Publishing	Importing	Stitching		
Textiles	Luncheonette	Trimmings		
	Misc. Business	Trimmings		
	Neckwear			
	Notions			
	Pillows			
	Resident			
	Stitching			

Figure 283: Changing socioeconomic composition of Building 9 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 9 supported 10 tenants, totaling 9 micro-specializations. In 1942 a rise to a peak of 16 tenants and 13 micro-specializations was observed. In 1958, these numbers sank to 11 tenants and 9 micro-specializations. In 1963, again a slight decrease to 8 tenants and 8 micro-specializations. In 1973, total tenants remained the same, at a count of 8, while micro-specializations decreased to 7.

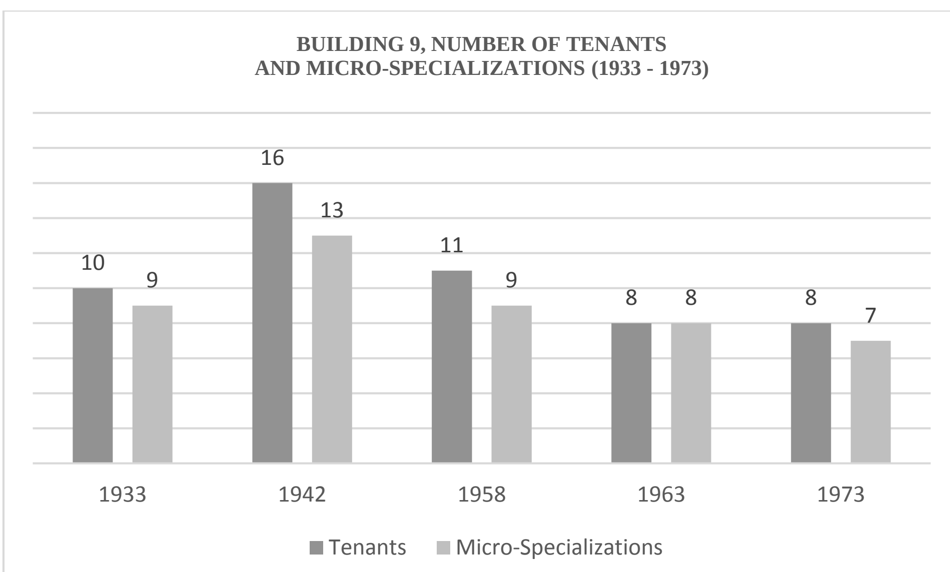


Figure 284: Building 9, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 9, as listed in detail in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 1 repeat tenant. In 1958, there was a growth to 3 repeat tenancies, 1 of which was a tenant renewing for the second consecutive year set. In 1963, again 3 repeat tenancies were observed, 1 of which was the same tenant from prior years (a dyeing company) renewing for a third consecutive year set. In 1973, this same dyeing company is seen as a repeat tenant for a fourth-consecutive year set, and happens to also be the only repeat tenant for that year.

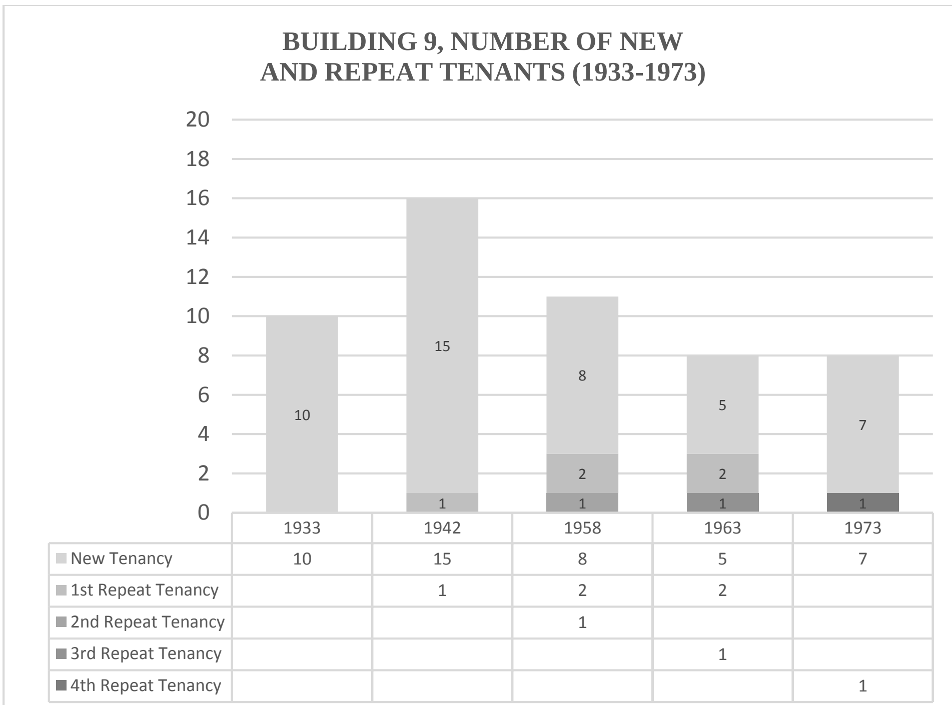


Figure 285: Building 9, number of new and repeat tenants from 1933–1973

The following charts in turn, show the macro-categorical changes, as opposed to the micro-specialization changes discussed above, in the socioeconomic fabric supported by Building 9, from 1933 to 1973.

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- In 1933 and 1973, a more equally distributed tenant count is observed when compared to the middle three year sets. In 1933, 8 macro-categories are present, representing 1–2 tenants each. In 1973 similarly, 7 macro-categories are present, again representing 1–2 tenants each.

- *Decorative & Notions* appears in four out of the five year sets (absent in 1973), peaking at 5–6 tenants in 1942 and 1958, and represented by 1–3 tenants in the other year sets. It is important to note the *Decorative & Notions* is the only macro-category to have 3 or more tenants on any given occasion.
- *Manufacturing* is visible in all five year sets, but it is represented by only 1 tenant on each occasion, due to the long-term tenancy of the aforementioned dyeing company.
- *Apparel* is observed as in four out of five year sets (absent in 1963), represented by 1–2 tenants each year it is present.

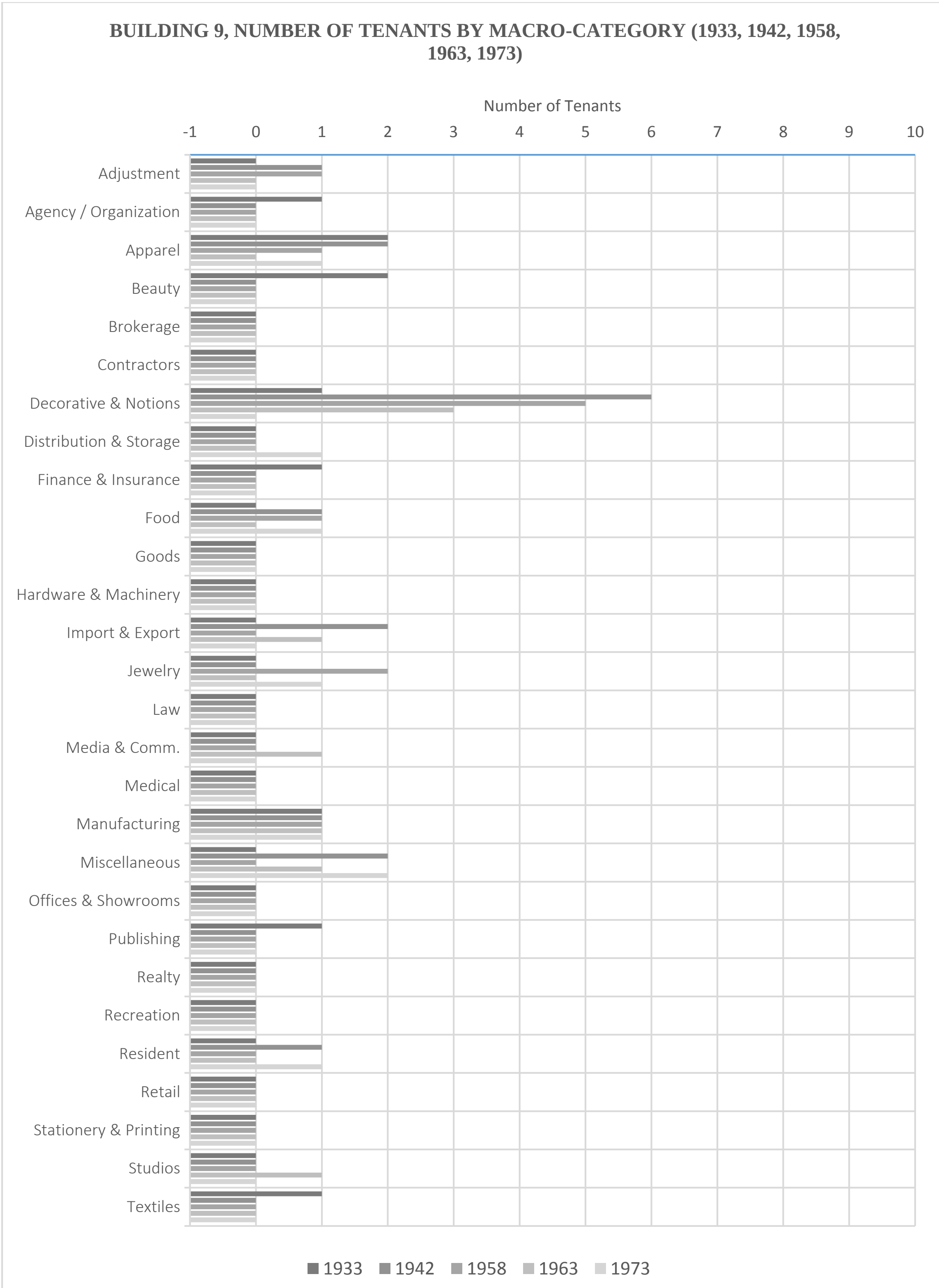


Figure 286: Building 9, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.10. BUILDING 10

3.10.1. ARCHITECTURE AND URBAN CONTEXT

Building 10 is a twelve-story structure built in 1909. It is 56'-0" wide and 89'-0" deep from the second floor up, and 99'-0" deep on the first (ground) floor. It is classified as a Fireproof Structure—one of two being classified as such among the fifteen buildings being studied in this section (the other being Building 8). Its outer envelope is brick, while its primary structure is composed of steel with robust concrete reinforcement. It has three elevators, and two sets of stairs.

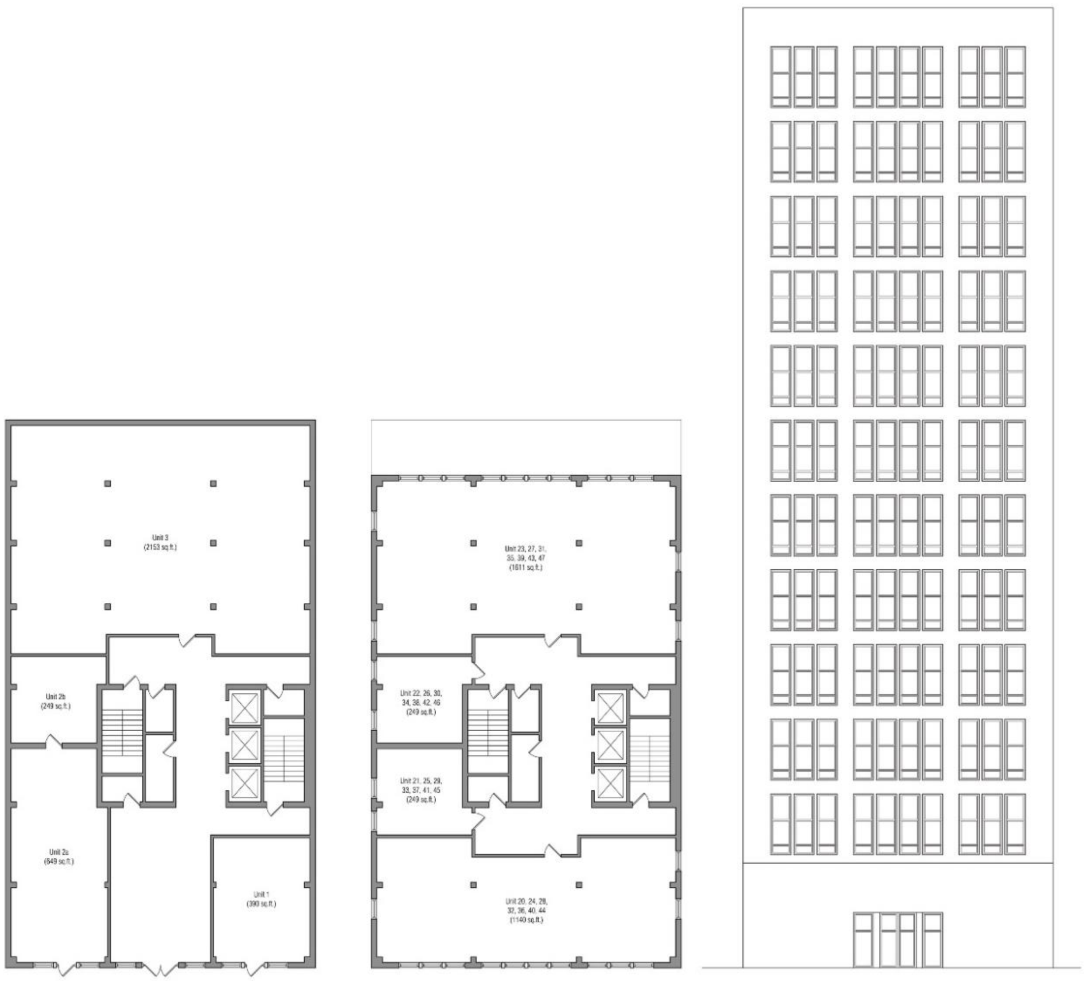


Figure 287, 288, 289 (left to right): Building 10, first (ground) floor (1921); floors 6–12 (1921); street-front elevation (1979). 1" = 32'. For plans, north is up.

The street-front façade of Building 10 faces south. In the rear (northern) portion of the site, Building 10 receives more than the minimum of access to air and northern light than would be achieved by minimum code standards. To the east and west also, Building 10 enjoys additional access to air and light via windows from the sixth floor up, overlooking shorter neighboring buildings, as documented in the rightmost graphic below, as well as the third floorplan placed above.

Figure 290, 291: Excerpt from Sanborn Map from 1976, with Building 10 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 10 highlighted in further darker tone. No set scale. North is up

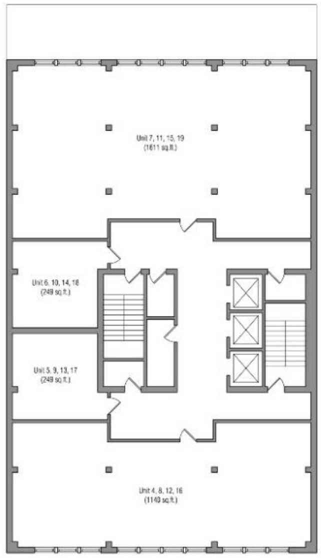
3.10.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 4 obtained for 1921 and 1979, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 292, 293 (left to right): Building 10, first floor (1921); same floor (1979). 1" = 32'. North is up.

Figure 294, 295 (left to right): Building 10, second floor (1921); same floor (1979). 1" = 32'. North is up.

Figure 296, 297 (left to right): Building 10, third floor (1921); same floor (1979). 1" = 32'. North is up.



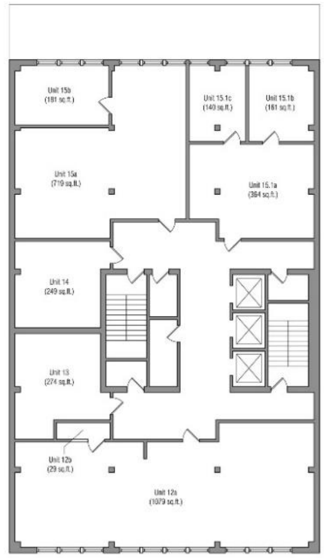
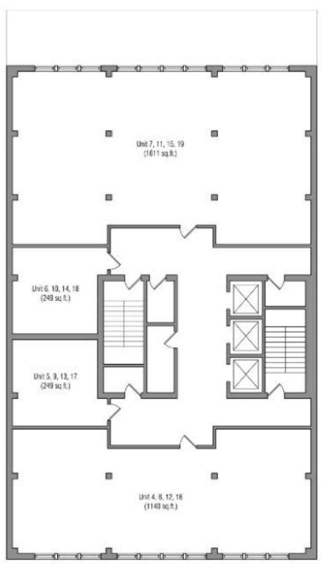


Figure 298, 299 (left to right): Building 10, fourth floor (1921); same floor (1979). 1" = 32'. North is up.



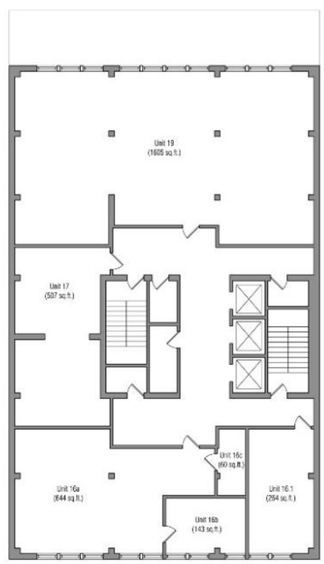
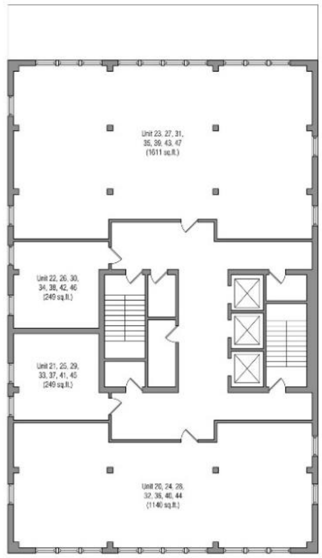


Figure 300, 301 (left to right): Building 10, fifth floor (1921); same floor (1979). 1" = 32'. North is up.

Figure 302, 303 (left to right): Building 10, sixth floor (1921); same floor (1979). 1" = 32'. North is up.

Figure 304, 305 (left to right): Building 10, seventh floor (1921); same floor (1979). 1" = 32'. North is up.



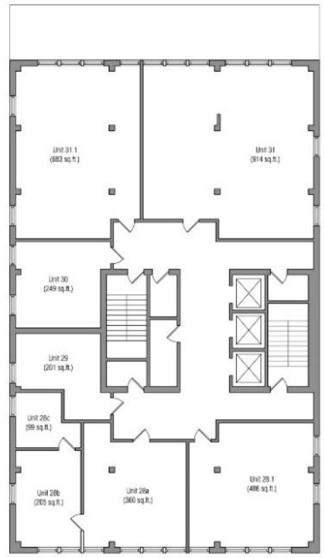
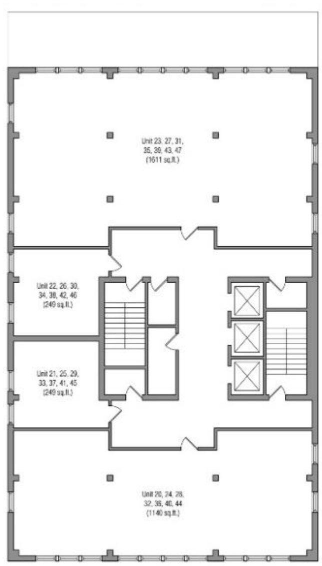


Figure 306, 307 (left to right): Building 10, eighth floor (1921); same floor (1979). 1'' = 32'. North is up.



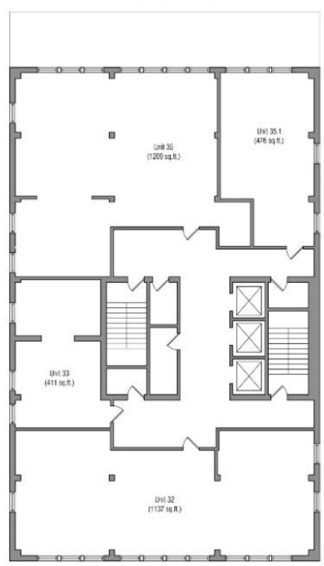


Figure 308, 309 (left to right): Building 10, ninth floor (1921); same floor (1979). 1'' = 32'. North is up.

Figure 310, 311 (left to right): Building 10, tenth floor (1921); same floor (1979). 1" = 32'. North is up.

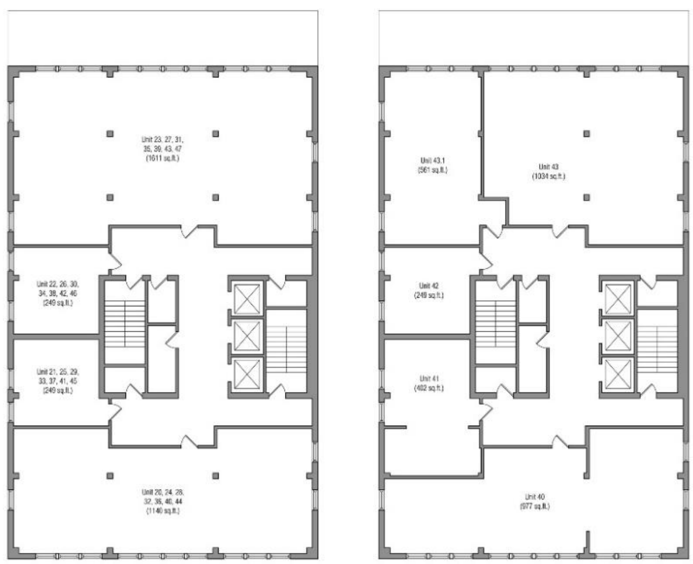


Figure 312, 313 (left to right): Building 10, eleventh floor (1921); same floor (1979). 1" = 32'. North is up.

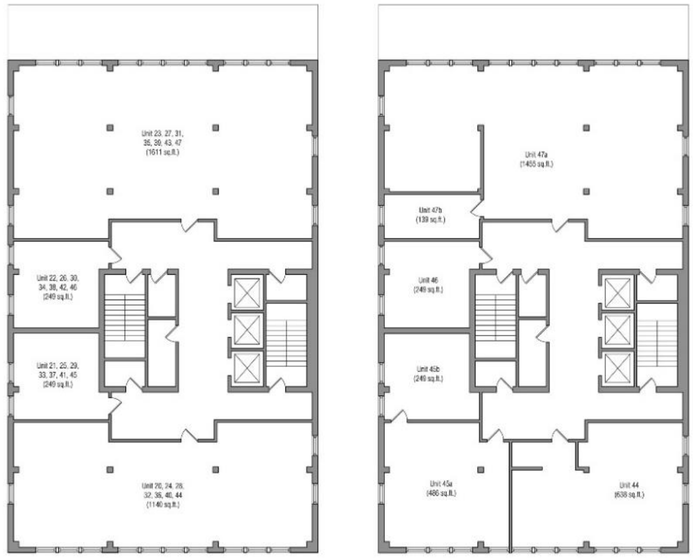
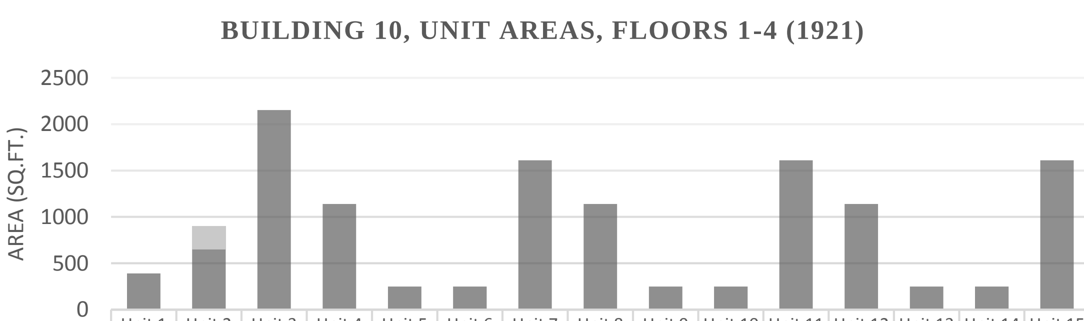


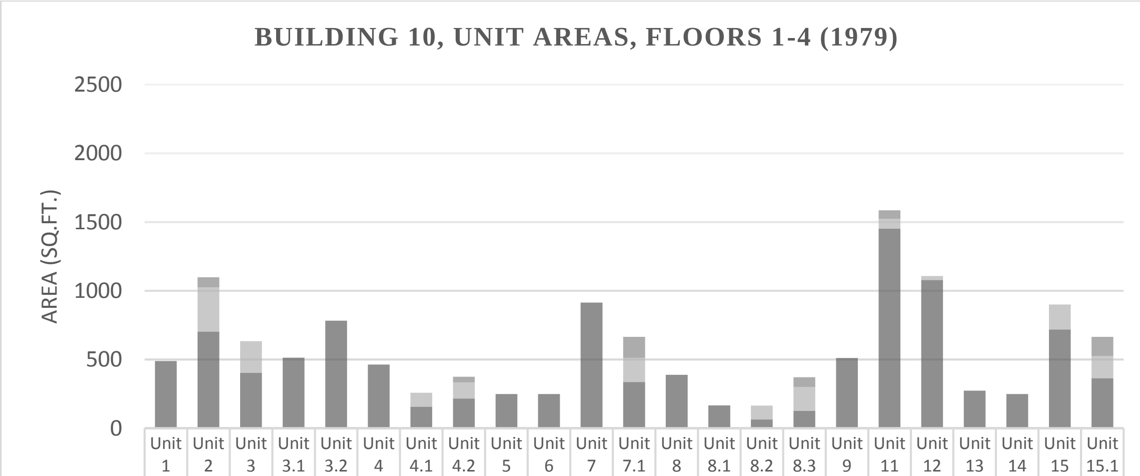
Figure 314, 315 (left to right): Building 10, twelfth floor (1921); same floor (1979). 1" = 32'. North is up.

In 1921, Building 10 had 47 units, with 3 units on the first (ground) floor, and 44 units on the eleven floors above. In 1979 by comparison, the total unit count of Building 10 had increased to 65, with 5 units on the first floor (2 more than in 1921), and with an increase to 60 units on the eleven floors above (16 more than in 1921). As can be observed in the graphics below, the 1979 state of Building 10 exhibits greater internal spatial diversity than its 1921 state. It should be noted though that the spatial diversity in Building 10 even in 1921 seems to be quite rich, especially given the presence of the small 249 square foot units, accompanied by the 1611 and 1140 square foot units, on each floor above the first floor.



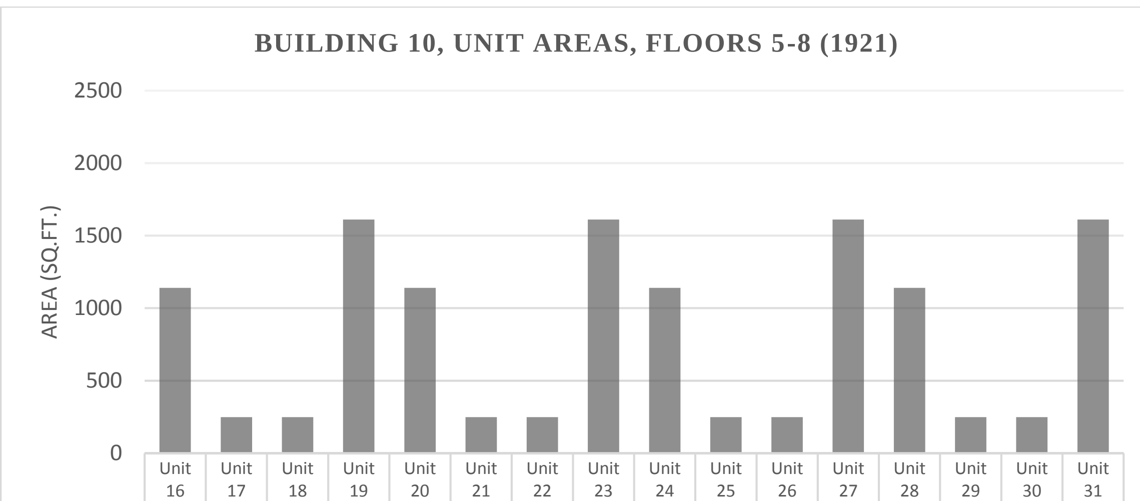
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15
Portion e															
Portion d															
Portion c															
Portion b		249													
Portion a	390	649	2153	1140	249	249	1611	1140	249	249	1611	1140	249	249	1611

Figure 316: Unit areas for Building 10, Floors 1–4 for 1921, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



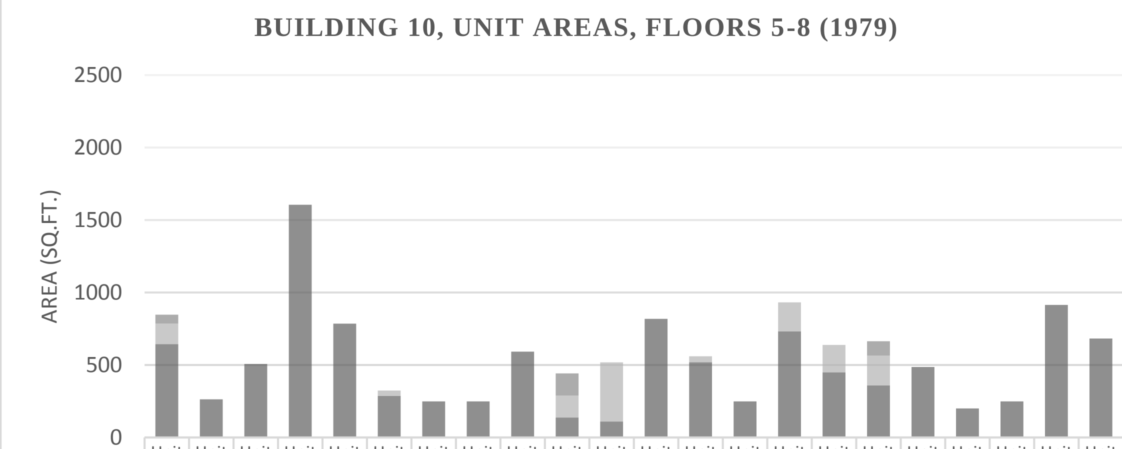
	Unit 1	Unit 2	Unit 3	Unit 3.1	Unit 3.2	Unit 4	Unit 4.1	Unit 4.2	Unit 5	Unit 6	Unit 7	Unit 7.1	Unit 8	Unit 8.1	Unit 8.2	Unit 8.3	Unit 9	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15	Unit 15.1
Portion e																							
Portion d																							
Portion c		73						41				153				71		63					140
Portion b		321	230				101	117				176			101	173		72	29			181	161
Portion a	489	704	404	514	783	464	157	217	249	249	914	336	389	167	64	127	511	1451	1079	274	249	719	364

Figure 317: Unit areas for Building 10, Floors 1–4 for 1979, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



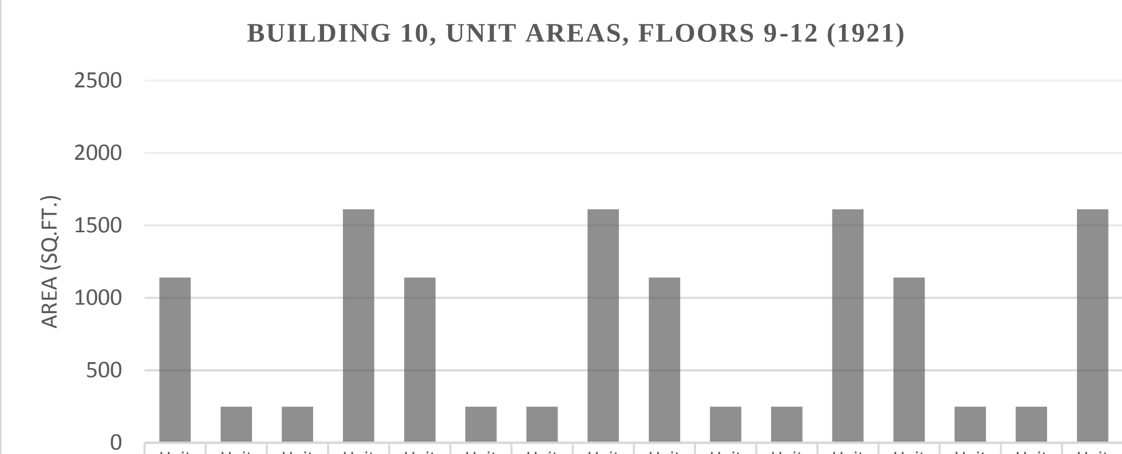
	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27	Unit 28	Unit 29	Unit 30	Unit 31
Portion e																
Portion d																
Portion c																
Portion b																
Portion a	1140	249	249	1611	1140	249	249	1611	1140	249	249	1611	1140	249	249	1611

Figure 318: Unit areas for Building 10, Floors 5–8 for 1921, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



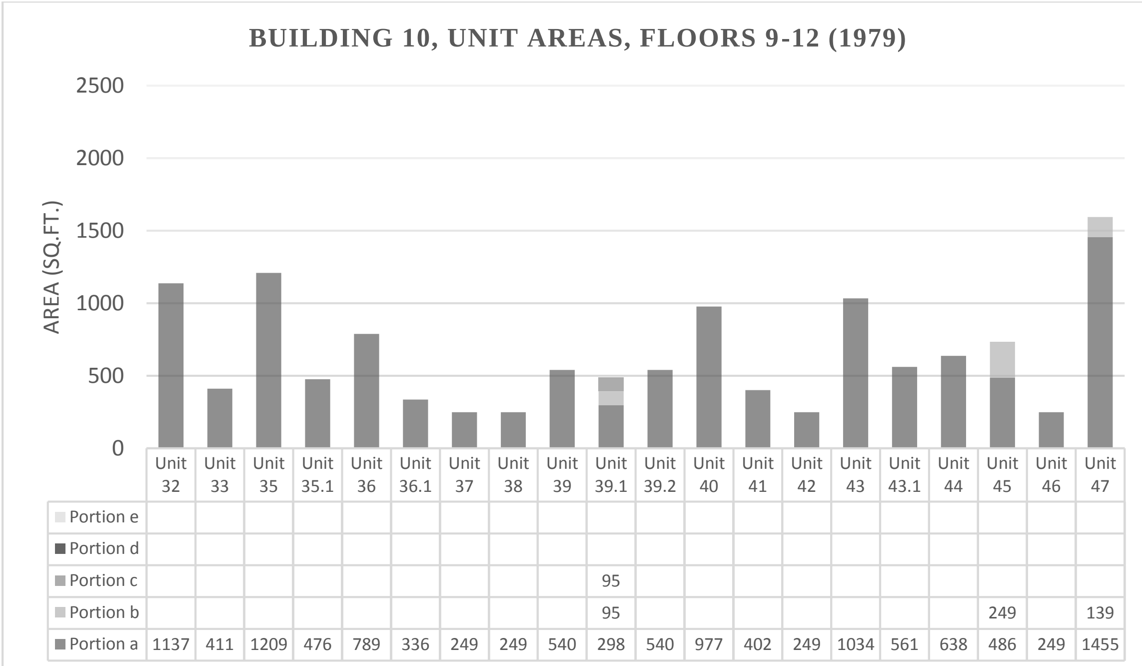
	Unit 16	Unit 16.1	Unit 17	Unit 19	Unit 20	Unit 20.1	Unit 21	Unit 22	Unit 23	Unit 23.1	Unit 23.2	Unit 24	Unit 25	Unit 26	Unit 27	Unit 27.1	Unit 28	Unit 28.1	Unit 29	Unit 30	Unit 31	Unit 31.1
Portion e																						
Portion d																						
Portion c	60									152							99					
Portion b	143					37				152	408		40		199	189	205					
Portion a	644	264	507	1605	785	287	249	249	592	138	110	819	520	249	733	450	360	486	201	249	914	683

Figure 319: Unit areas for Building 10, Floors 5–8 for 1979, with “portions” signifying internal subdivisions within individual units (“portion a” is the first space upon entry).



	Unit 32	Unit 33	Unit 34	Unit 35	Unit 36	Unit 37	Unit 38	Unit 39	Unit 40	Unit 41	Unit 42	Unit 43	Unit 44	Unit 45	Unit 46	Unit 47
Portion e																
Portion d																
Portion c																
Portion b																
Portion a	1140	249	249	1611	1140	249	249	1611	1140	249	249	1611	1140	249	249	1611

Figure 320: Unit areas for Building 10, Floors 9–12 for 1921, with “portions” signifying internal subdivisions within individual units (“portion a” is the first space upon entry).



	Unit 32	Unit 33	Unit 35	Unit 35.1	Unit 36	Unit 36.1	Unit 37	Unit 38	Unit 39	Unit 39.1	Unit 39.2	Unit 40	Unit 41	Unit 42	Unit 43	Unit 43.1	Unit 44	Unit 45	Unit 46	Unit 47
Portion e																				
Portion d																				
Portion c										95										
Portion b										95								249		139
Portion a	1137	411	1209	476	789	336	249	249	540	298	540	977	402	249	1034	561	638	486	249	1455

Figure 321: Unit areas for Building 10, Floors 9–12 for 1979, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1921, among the 44 units above the first (ground) floor, the average unit size was 812 square feet, with the smallest unit being 249 square feet and the largest being 1611 square feet. In 1979 by comparison, among the 60 units above the first floor, the average unit size had shrunk to 587 square feet, with the smallest unit size falling to 165 square feet and the largest unit remaining roughly the same, at 1605 square feet.

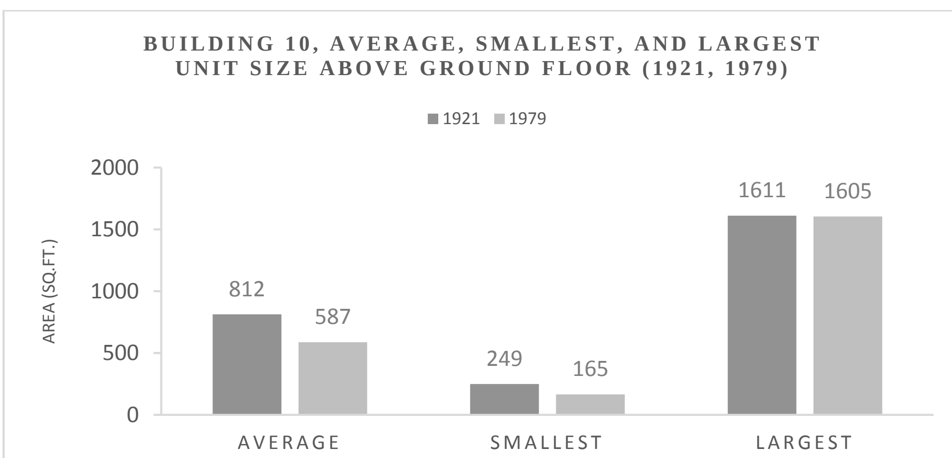
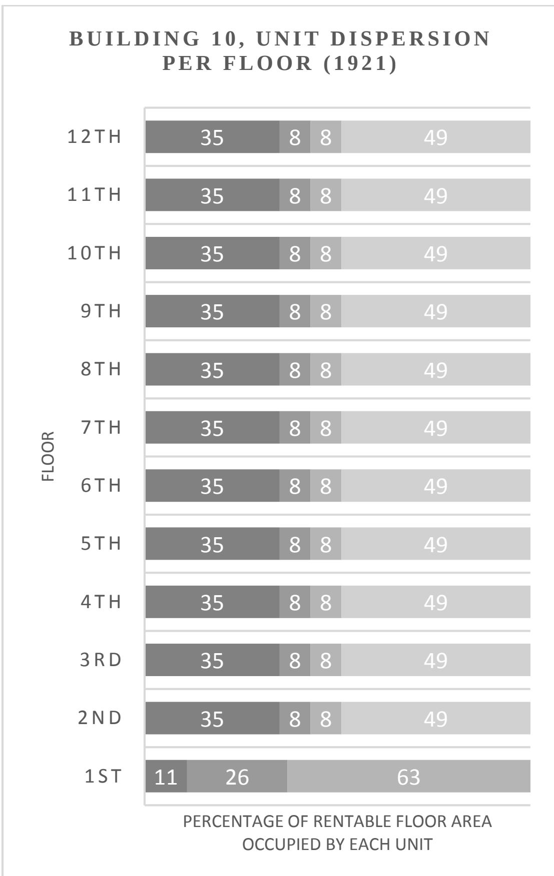


Figure 322: Building 10, average, smallest, and largest unit size above first (ground) floor for 1928 and 1977.

Below is a visualization showing the changes to the internal arrangement of Building 10, floor by floor. One observes that even in the 1921 state, the existence of the small and big units on each floor plate grants Building 10 considerable (albeit repetitive) internal spatial diversity, even prior to the incremental refinements it went through to manifest in its 1979 state. In terms of unit density per floor in 1979, the peak of 7 units per floor is observed on the second, sixth, and tenth floors, and the low of 4 units per floor is observed on the fifth, ninth, and twelfth floor.



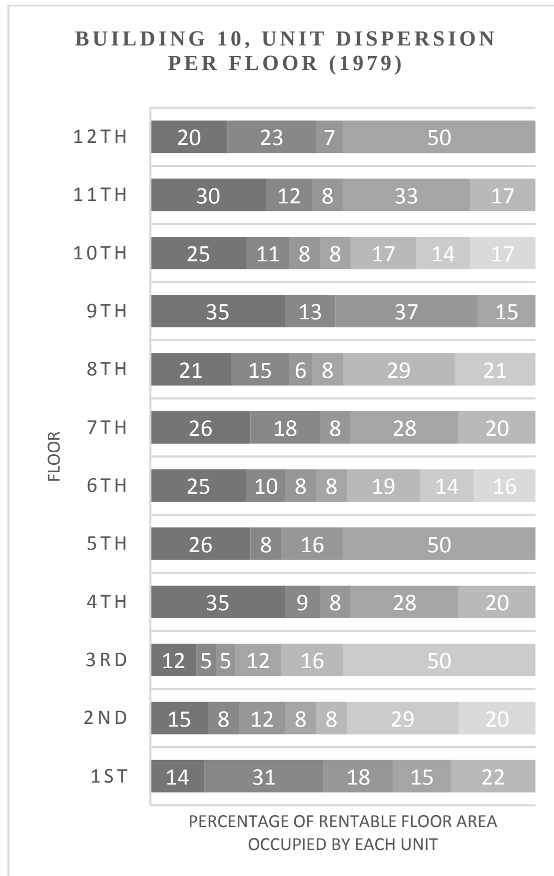


Figure 323, 324: Building 10, unit dispersion per floor, 1921 and 1979.

3.10.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 10 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933		1942	1958	1963	1973	
Architect	Retail	Engineer (1)	Fur (2)	Fur (3)	Jewelry (4)	Photography
Architect	Retail	Engineer (1)	Jewelry (2)	Jewelry (3)	Millinery Supp. (3)	Photography
Architect	Retail	Fur (1)	Jewelry (2)	Millinery (3)	Misc. Business (3)	Public Relations
Architect	Ribbons	Jewelry (1)	Millinery (2)	Millinery (3)	Stationery (3)	Publishing
Architect	Ribbons	Jewelry (1)	Millinery (2)	Fur (2)	Textiles (3)	Stationery
Architect	Ribbons & Veilings	Jewelry (1)	Millinery Equip. (2)	Millinery (2)	Union (3)	Textiles
Architect	Silks	Millinery (1)	Brokerage, Buy (1)	Millinery (2)	Veilings (3)	Trimmings
Architect	Silks	Millinery (1)	Building Mgmt. (1)	Millinery (2)	Attorney (2)	Watches
Architect	Silks	Millinery (1)	Building Mgmt. (1)	Millinery Supp. (2)	Feathers (2)	
Architect	Silks & Velvets	Millinery (1)	Designer (1)	Millinery Supp. (2)	Importing (2)	
Architect	Silks & Velvets	Millinery (1)	Fur (1)	Misc. Business (2)	Millinery Supp. (2)	
Artist	Straw Goods	Millinery (1)	Jewelry (1)	Stationery (2)	Misc. Business (2)	
Beads	Studio	Millinery (1)	Millinery (1)	Textiles (2)	Notions (2)	
Brocades	Textiles	Millinery Mach. (1)	Millinery (1)	Union (2)	Textiles (2)	
Brokerage	Textiles	Millinery Equip. (1)	Millinery (1)	Veilings (2)	Veilings (2)	
Brokerage	Textiles	Notions (1)	Millinery (1)	Veilings (2)	Brokerage, Sell. (1)	
Brokerage, Buying	Textiles	Retail (1)	Millinery Supp. (1)	Attorney (1)	Importing (1)	
Brokerage, Selling	Veilings	Ribbons (1)	Millinery Supp. (1)	Attorney (1)	Jewelry (1)	
Construction		Textiles (1)	Misc. Business (1)	Credit Agency (1)	Lighting Consult. (1)	
Embroidery		Accounting	Notions (1)	Credit Agency (1)	Textiles (1)	
Engineer		Agency	Notions (1)	Feathers (1)	Accessories	
Engineer		Artist	Realty (1)	Feathers (1)	Advertising	
Engineer		Attorney	Realty + Finance (1)	Import / Export (1)	Advertising	
Feathers		Brokerage, Buying	Stationery (1)	Messenger Svce. (1)	Advertising	
Finance		Brokerage, Buying	Textiles (1)	Millinery (1)	Apparel	
Fur		Building Mgmt.	Textiles (1)	Millinery (1)	Artist	
Fur		Building Mgmt.	Union (1)	Millinery (1)	Artist	
Importing		Buttons	Veilings (1)	Millinery (1)	Artist	
Importing		Contractor / Jobber	Accessories	Millinery Supp. (1)	Artist	
Jewelry		Credit Agency	Apparel	Millinery. Supp. (1)	Artist	
Jewelry		Designer	Artist	Misc. Business (1)	Artist	
Jewelry		Exporting	Attorney	Misc. Business (1)	Belts	
Knitwear		Feathers	Attorney	Monograms (1)	Brokerage	
Labels		Fur	Credit Agency	Notions (1)	Brokerage, Sell.	
Millinery		Importing	Credit Agency	Notions (1)	Consultant	
Millinery		Importing	Feathers	Textiles (1)	Copying	
Millinery		Importing	Feathers	Textiles (1)	Cotton Goods	
Millinery		Importing	Finance	Veilings (1)	Design Studio	
Millinery		Importing	Gloves	Woolens (1)	Designer	
Millinery		Jewelry	Goods	Beads	Designer	
Millinery		Mfg. Agency	Import / Export	Brokerage, Buy.	Designer	
Millinery		Mfg. Agency	Import / Export	Brokerage, Sell.	Employ. Agency	
Millinery		Millinery	Import / Export	Brokerage, Sell.	Engineer	
Millinery		Millinery	Jewelry	Importing	Feathers	
Millinery		Millinery	Messenger Svce.	Importing	Film	
Millinery		Millinery	Millinery	Importing	Film & Sound	
Millinery		Millinery	Millinery	Jewelry	Importing	
Millinery		Millinery	Millinery	Jewelry	Importing	
Millinery		Millinery	Millinery	Jewelry	Knit Apparel	
Millinery		Millinery	Millinery	Jewelry	Leather	
Millinery		Millinery	Millinery	Jewelry	Lighting Consult.	
Millinery		Millinery	Millinery Supp.	Lace	Marketing	
Millinery		Millinery	Millinery Supp.	Lighting Consult.	Metals	
Millinery		Millinery Supp.	Misc. Business	Millinery	Misc. Business	
Millinery		Millinery Supp.	Misc. Business	Millinery	Misc. Business	
Millinery		Millinery Supp.	Misc. Business	Misc. Business	Misc. Business	
Millinery		Millinery Supp.	Misc. Business	Misc. Business	Misc. Business	
Millinery		Misc. Business	Misc. Business	Misc. Business	Misc. Business	
Millinery Equip.		Misc. Business	Misc. Business	Misc. Business	Misc. Business	
Millinery Mach.		Misc. Business	Monograms	Misc. Business	Misc. Business	
Millinery Supp.		Misc. Business	Notions	Misc. Business	Misc. Business	
Millinery Supp.		Misc. Business	Notions	Photography	Misc. Business	
Misc. Business		Misc. Business	Painters	Studio	Misc. Business	
Misc. Business		Notions	Realty	Textiles	Misc. Business	
Misc. Business		Notions	Realty	Veilings	Misc. Business	
Misc. Business		Notions	Realty	Woolens	Misc. Business	
Misc. Business		Plastic Goods	Retail		Misc. Business	
Misc. Business		Realty	Studio		Misc. Business	
Misc. Business		Realty	Studio		Misc. Business	
Misc. Business		Realty	Textiles		Misc. Business	
Misc. Business		Silks	Textiles		Misc. Business	
Misc. Business		Stationery	Textiles		Misc. Business	
Misc. Business		Textiles	Textiles		Misc. Business	
Misc. Business		Textiles	Textiles		Misc. Business	
Misc. Business		Textiles	Textiles		Misc. Business	
Notions		Textiles	Textiles		Misc. Business	
Notions		Textiles	Textiles		Misc. Business	
Notions		Union	Textiles		Misc. Business	
Notions		Veilings	Veilings		Misc. Business	
Notions		Veilings	Veilings		Nettings	
Notions		Veilings	Woolens		Notions	
Publishing		Veilings			Notions	

Figure 325: Changing socioeconomic composition of Building 10 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 10 supported a peak of 100 tenants, with a total of 33 micro-specializations. In 1942 and 1958, roughly the same counts for both variables were observed, with 81–82 tenants, and 32–33 micro-specializations listed. In 1963, there is a brief slump, with tenants dropping to a count of 66, and micro-specializations to 25. In 1973, an increase to 90 tenants was observed, reaching a peak of 37 micro-specializations.

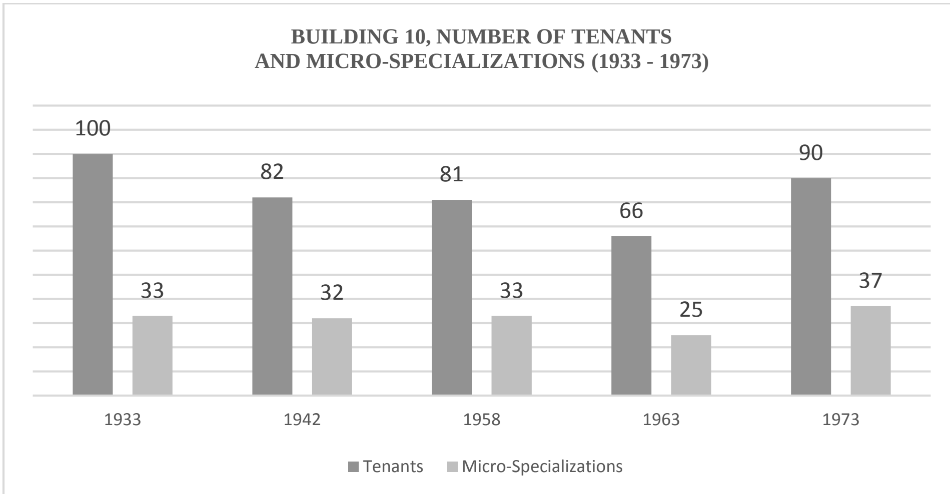
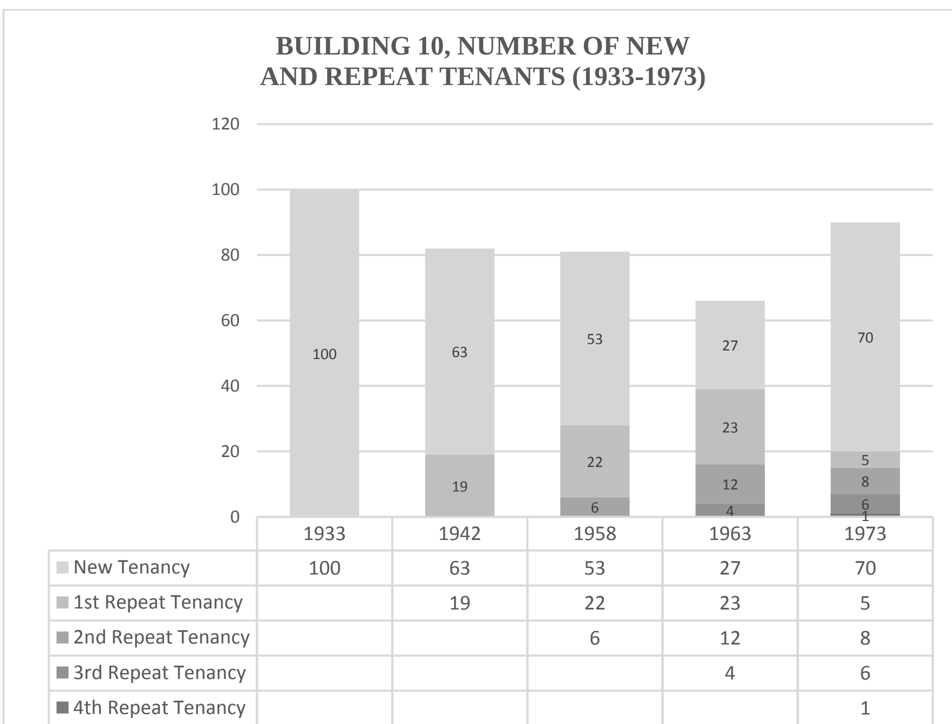


Figure 326: Building 10, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973



	1933	1942	1958	1963	1973
New Tenancy	100	63	53	27	70
1st Repeat Tenancy		19	22	23	5
2nd Repeat Tenancy			6	12	8
3rd Repeat Tenancy				4	6
4th Repeat Tenancy					1

Figure 327: Building 10, number of new and repeat tenants from 1933–1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 10, as listed in detail in the first table shown in this section, is presented above. As can be observed, in 1942 the building supported 19 repeat tenants. In 1958, there was an increase to 28 repeat tenants, 6 of which were tenants renewing for the second consecutive year set. In 1963, again an increase was observed, to a peak of 39 repeat tenants, with 12 second-time repeat tenancies, and 4 third-time repeat tenancies. In 1973 a decrease to 20 repeat tenants was observed, with 1 fourth-time repeat tenancy, 6 third-time repeat tenancies, and 8 second-time repeat tenancy.

There are a few narratives to note, in looking at the figure relating to socioeconomic composition below:

- There are 10 macro-categories that appear through all the year sets observed. These include *Apparel*, *Brokerage*, *Contractors*, *Decorative & Notions*, *Import & Export*, *Jewelry*, *Miscellaneous*, *Stationery & Printing*, *Studios*, and *Textiles.* Of these, only *Apparel* and *Miscellaneous* reach a point where they are represented by at least 20 tenants in one year set. *Apparel* is represented by 23–30 firms in four out of five year sets observed, with 1973 being the exception, at a low of 9 apparel-specific firms. The high of 30 apparel-specific firms was observed in 1933. *Miscellaneous* in comparison only surpassed the 20 tenant count in 1973, with 28 miscellaneous firms being represented by that macro-category in that year.
- Similar to what was observed in Building 8, each year set appears to have a dominant macro-category, with *Apparel* being represented by a large portion of the tenant pool in the first four year sets, and *Miscellaneous* taking over that position in 1973.
- In terms of macro-category counts, the low was observed in 1963 with 13 macro categories. In the remaining four year sets, 15–18 macro-categories were listed, with the peak of 18 macro-categories occurring in 1958.

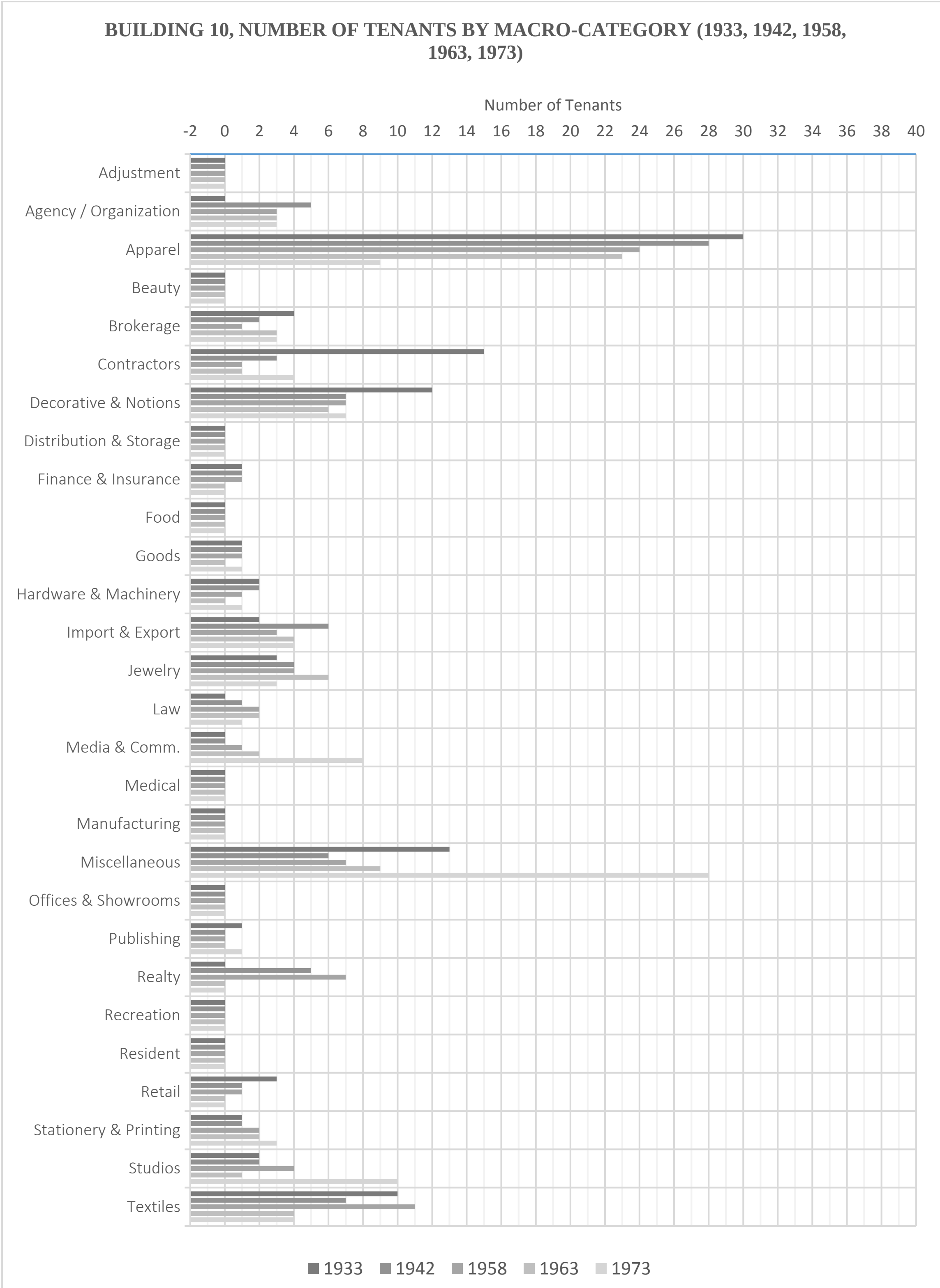


Figure 328: Building 10, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.11. BUILDING 11

3.11.1. ARCHITECTURE AND URBAN CONTEXT

Building 11 is a five-story structure built in 1930. It is 22’-0” wide and 58’-0” deep from the third floor up, 73’-0” deep on the second floor, and 99’-0” deep on the first (ground) floor. The street-front façade steps back 5’-0” starting on the third floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape located on the rear façade.

Figure 329, 330, 331, 332 (left to right): Building 11, first (ground) floor (1930); second floor (1930); floors 3–5 (1928); street-front elevation (1982). For plans, north is up.

The street-front façade of Building 11 faces south. In the rear (northern) portion of the site, Building 11 receives more than the minimum of access to air and northern light than would be achieved by minimum code standards, as documented in the rightmost graphic below.

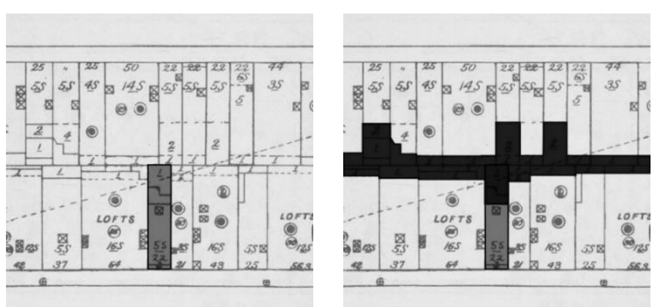


Figure 333, 334: Excerpt from Sanborn Map from 1976, with Building 11 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 11 highlighted in further darker tone. No set scale. North is up.

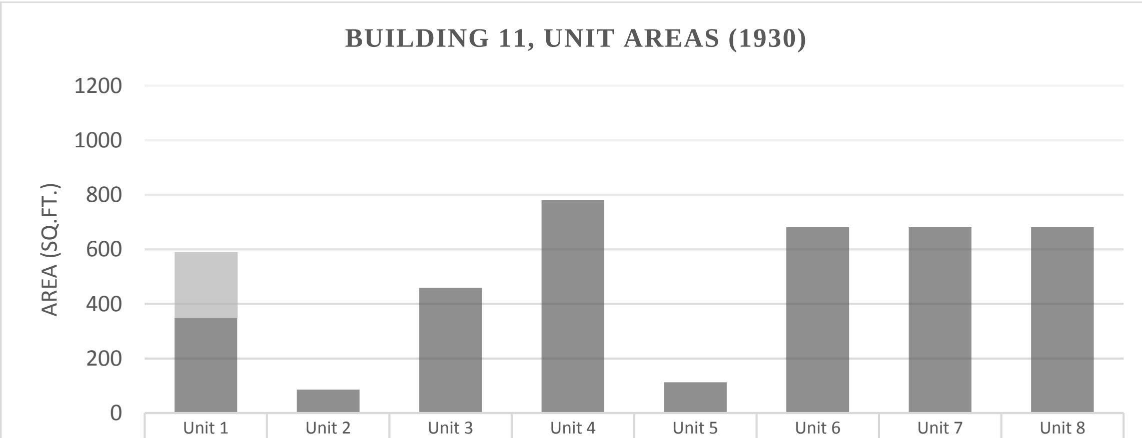
3.11.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 11 obtained for 1930 and 1982, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

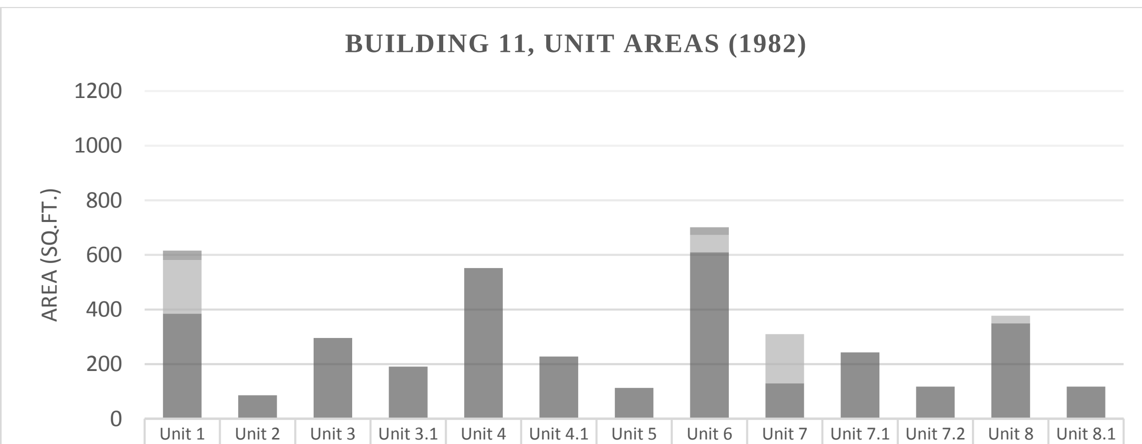
Figure 335, 336, 337, 338, 339, 340, (left to right): Building 11, first floor (1930); same floor (1982); second floor (1930); same floor (1982); third floor (1930); same floor (1982). 1" = 32'. North is up.

Figure 341, 342, 343, 344 (left to right): Building 11, fourth floor (1930); same floor (1982); fifth floor (1930); same floor (1982). 1" = 32'. North is up.

In 1930, Building 11 had 8 units, with 3 units on the first (ground) floor, and 5 units on the four floors above. In 1982 by comparison, the total unit count of Building 11 had increased to 13, with 4 units on the first floor (2 more than in 1930), and with an increase to 9 units on the four floors above (4 more than in 1930). As can be observed in the graphics below, the 1982 state of Building 11 exhibits greater internal spatial diversity than its 1930 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Portion e								
Portion d								
Portion c								
Portion b	240							
Portion a	349	86	459	780	113	681	681	681



	Unit 1	Unit 2	Unit 3	Unit 3.1	Unit 4	Unit 4.1	Unit 5	Unit 6	Unit 7	Unit 7.1	Unit 7.2	Unit 8	Unit 8.1
Portion e													
Portion d													
Portion c	35							28					
Portion b	196							63	180			27	
Portion a	385	86	296	191	552	228	113	610	130	243	118	350	118

Figure 345, 346: Unit areas for Building 11 for 1930 and 1982, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1930, among the 5 units above the first (ground) floor for Building 11, the average unit size was 587 square feet, with the smallest unit being 113 square feet and the largest being 780 square feet. In 1982 by comparison, among the 9 units above the first floor, the average unit size had shrunk to 307 square feet, with the smallest unit size remaining at 113 square feet, and the largest unit diminishing to 701 square feet.

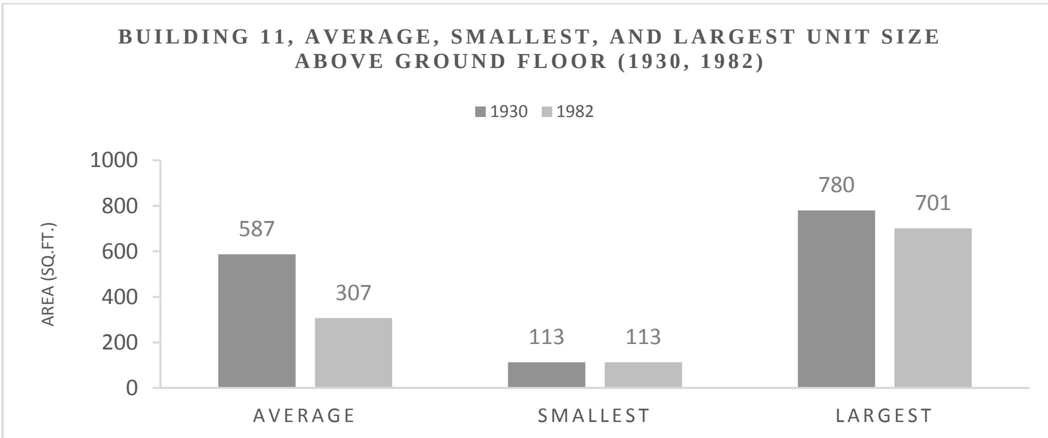
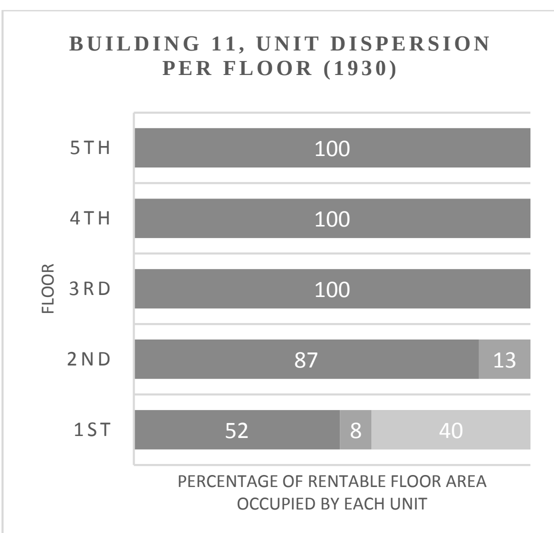


Figure 347: Building 11, average, smallest, and largest unit size above first (ground) floor for 1930 and 1982.

Below is a visualization showing the changes to the internal arrangement of Building 11, floor by floor. Comparing the 1930 and 1982 state of the building, one observes two new units added to the fourth floor, and one unit added in the fifth, second, and first (ground) floor. There are some changes also observed in the third floor, though not as significant as that observed on the second, fourth, and fifth floors, as noted in the plans listed two pages prior.



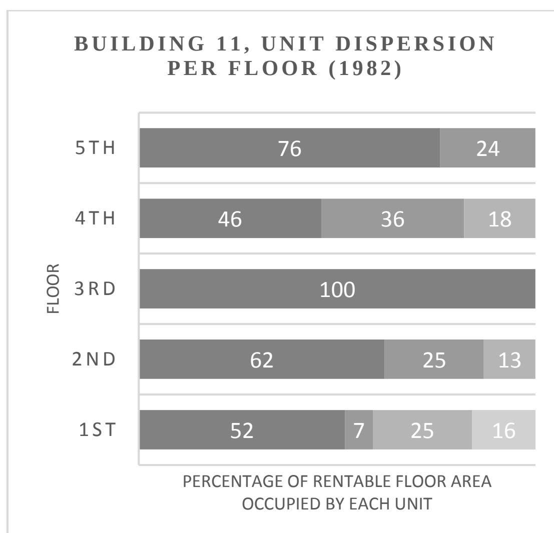


Figure 348, 349: Building 11, unit dispersion per floor, 1930 and 1982.

3.11.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 11 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Brokerage	Handblocking	Millinery (1)	Millinery (2)	Millinery (3)
Brokerage	Millinery	Misc. Business	Notions (1)	Notions (2)
Millinery	Millinery	Notions	Pharmaceuticals (1)	Ribbons (2)
Millinery	Millinery Supp.	Pharmaceuticals	Retail (1)	Brokerage
Millinery	Resident	Photography	Ribbons (1)	Misc. Business
Millinery Equip.		Photography		Resident
Millinery Linings		Ribbons		Resident
Millinery Supp.				
Millinery Supp.				
Notions				
Resident				

Figure 350: Changing socioeconomic composition of Building 11 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 11's total tenant and micro-specialization count came to a peak for the five year sets observed. 11 total tenants and 7 micro-specializations were listed. In 1942, there was a significant drop of total occupancy to 5 tenants, with micro-specializations also dropping to 4. In 1958, an increase to 7 tenants and 6 micro-specializations was observed. In 1963, a slight drop to 5 tenants and 5 micro-specializations was documented. And in 1973, again a rise matching the 1958 state, with 7 tenants and 6 micro-specializations listed.

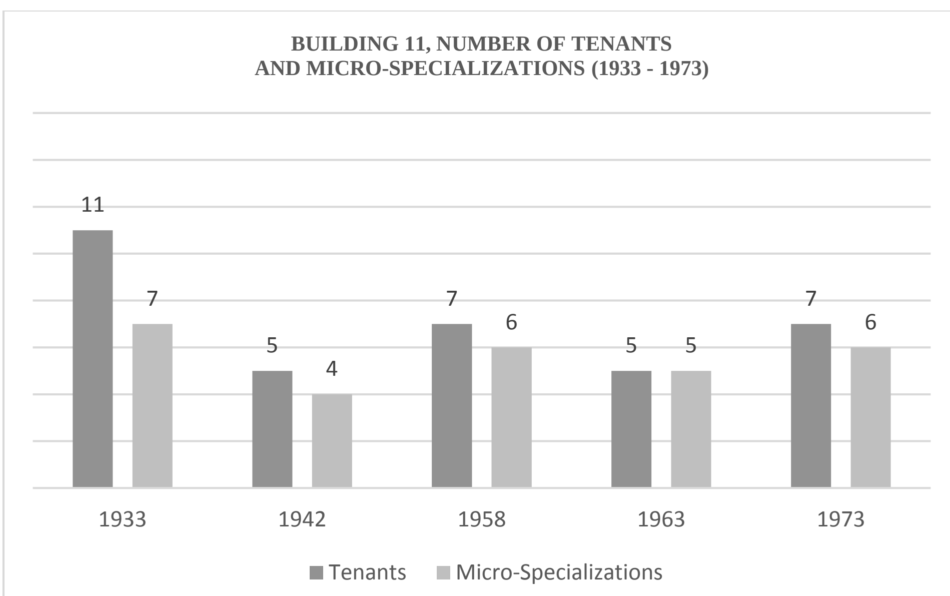


Figure 351: Building 11, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 11, as listed in the first table shown in this section, is summarized below. As can be observed, in 1958, 1 repeat tenant was observed for the building. In 1963, all the tenants of the building were repeat tenants, with a total count of 5, 1 of which (a millinery firm) was renewing tenancy for a second-consecutive year set. In 1973, 3 repeat tenants were observed, 2 of which were two-time repeat tenants, and the millinery firm from the previous two year sets was the third-time repeat tenant listed.

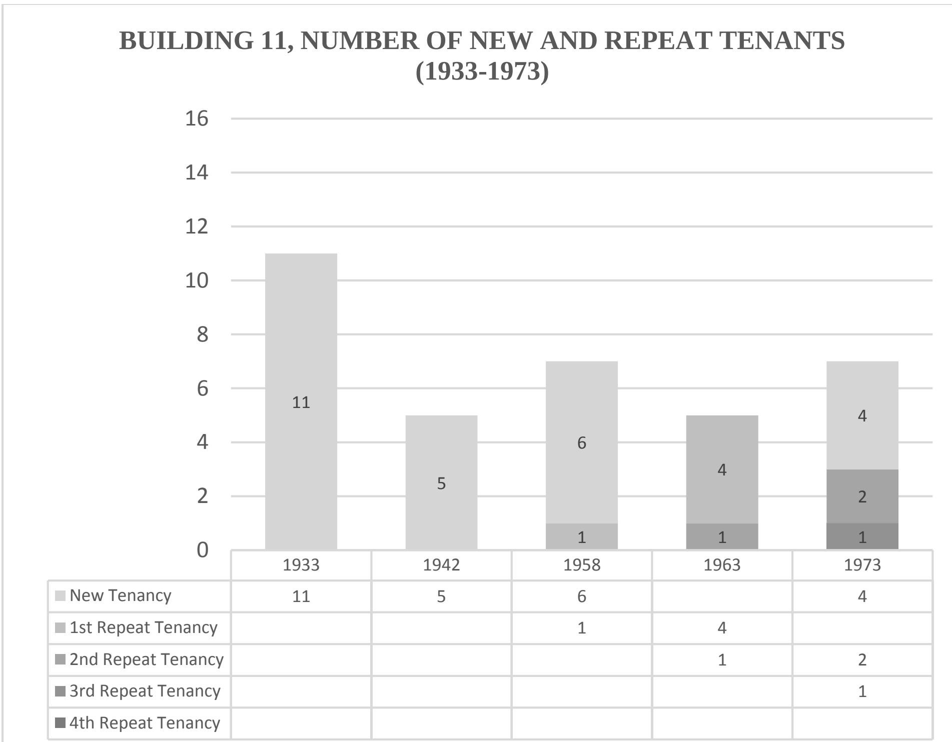


Figure 352: Building 11, number of new and repeat tenants from 1933–1973

The following chart in turn, show the macro-categorical changes, as opposed to the micro-specialization changes discussed above, in the socioeconomic fabric supported by Building 11, from 1933 to 1973. There are a few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- Similar to Building 13 and 15, *Apparel* is the only macro-category which is consistently represented in the five year sets observed for Building 11. This macro-category reaches a peak count in 1933, with 6 apparel-specific firms listed. In 1942, this number drop to 3 apparel-specific firms. The low, in turn, is observed in 1958, 1963, and 1973, with only 1 apparel-specific firm listed for Building 11.

- For the last three year sets (1958, 1963, and 1973), there are 4–5 macro-categories observed in each data set. The occupant count is rather evenly distributed in these years, with each macro-category being represented by 1–2 tenants. 1933, by comparison is dominated by the 6 apparel-specific firms, with the other 4 macro-categories for that year having 1–2 tenants each. 1942 in turn, falls into a middle ground in terms of relatively equalized versus lopsided tenant distribution.
- In terms of macro-categorical diversity, Building 11 consistently supports 4–5 macro-categories per year set, except for in 1942 when this drops to a count of 3.

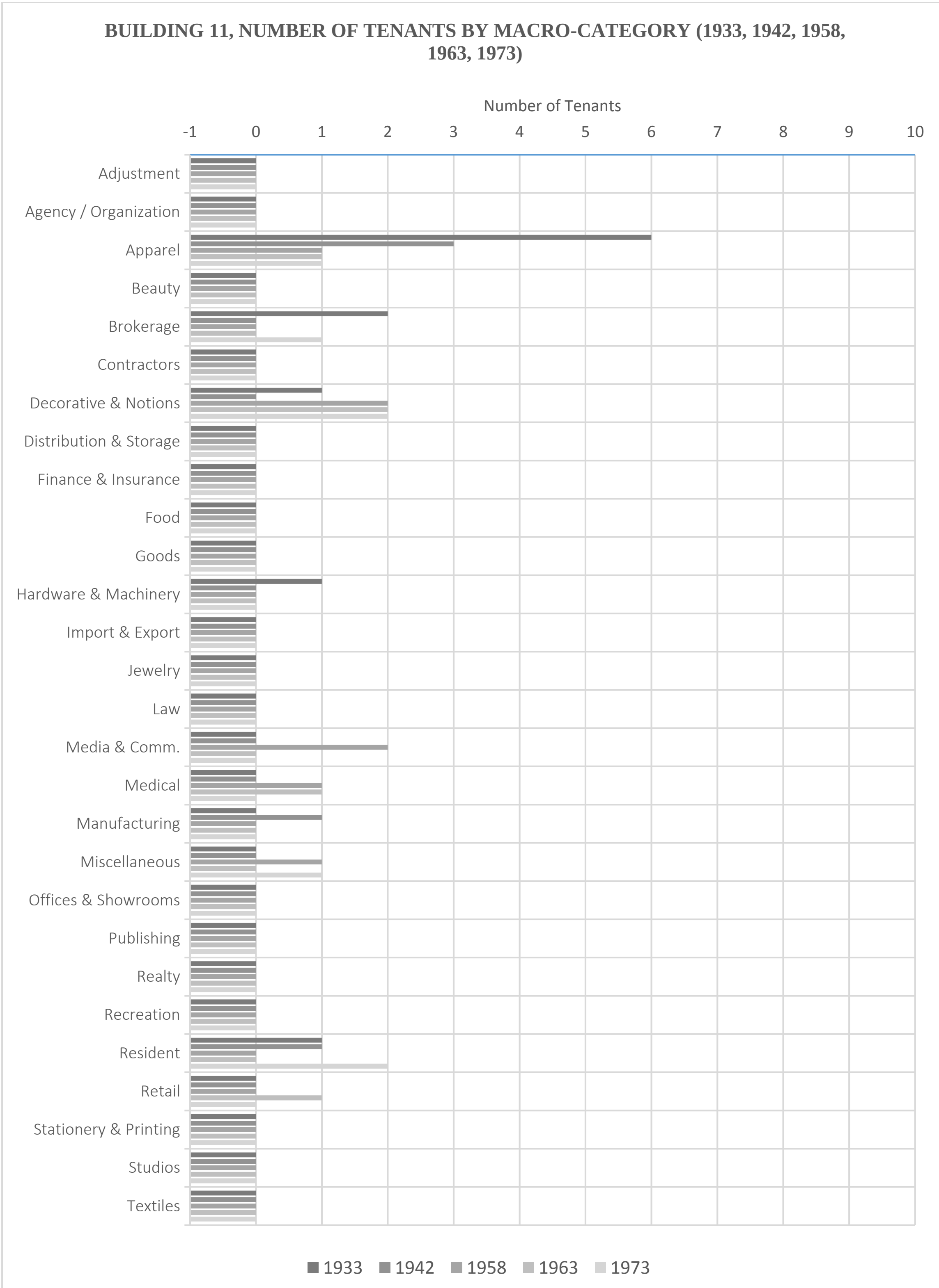


Figure 353: Building 11, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973.

3.12. BUILDING 12

3.12.1. ARCHITECTURE AND URBAN CONTEXT

Building 12 is a five-story structure built in 1925. It is 22’-4” wide and 89’-0” deep from the second floor up, and 99’-0” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape located on the rear façade.

Figure 354, 355, 356 (left to right): Building 12, first (ground) floor (1927); floors 2–5 (1927); street-front elevation (1979). For plans, north is up.

The street-front façade of Building 12 faces south. In the rear (northern) portion of the site, Building 12 receives roughly the bare minimum of access to air and northern light as achieved by minimum code standards. There is though, some lower building portions to the northwest that allow the upper floors of Building 12 some further access to light and air, as documented in the rightmost graphic below, as well as the plans from 1979 that follow.

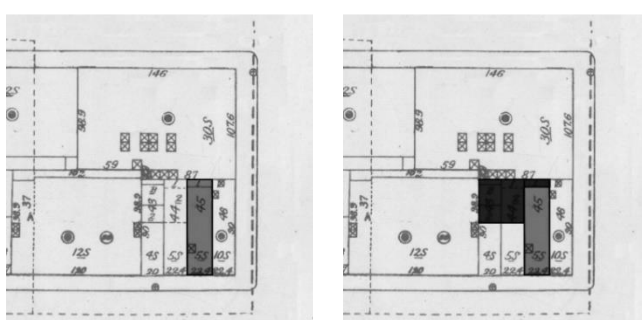


Figure 357, 358: Excerpt from Sanborn Map from 1976, with Building 12 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 12 highlighted in further darker tone. No set scale. North is up.

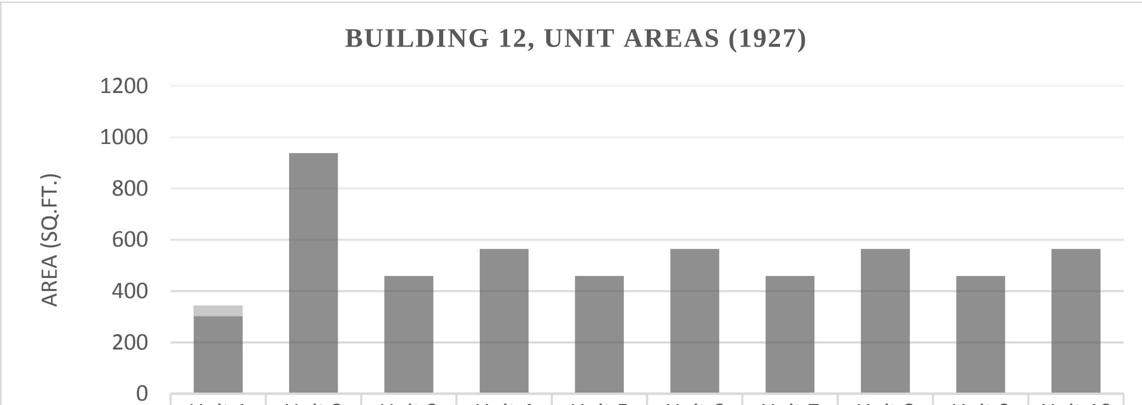
3.12.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 12 obtained for 1927 and 1979, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

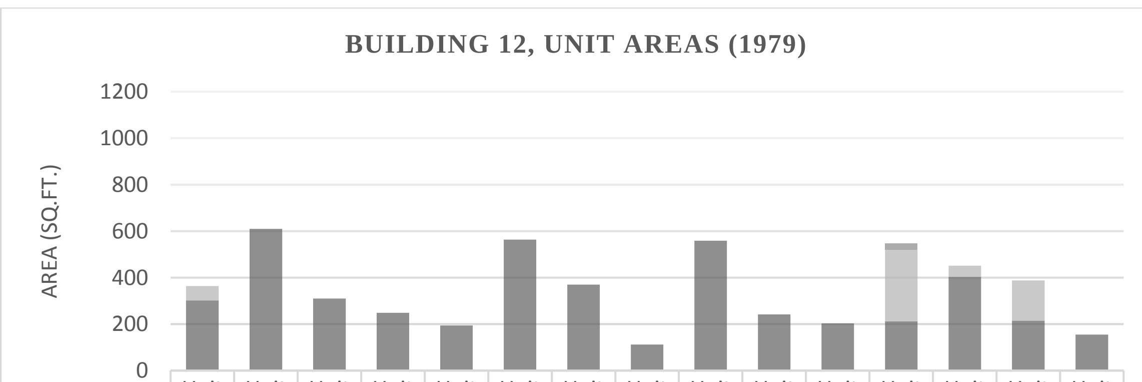
Figure 359, 360, 361, 362, 363, 364 (left to right): Building 12, first floor (1927); same floor (1979); second floor (1927); same floor (1979); third floor (1927); same floor (1979); 1" = 32'. North is up.

Figure 365, 366, 367, 368 (left to right): Building 12, fourth floor (1927); same floor (1979); fifth floor (1927); same floor (1979). 1" = 32'. North is up.

In 1927, Building 12 had 10 units, with 2 units on the first (ground) floor, and 8 units on the four floors above. In 1979 by comparison, the total unit count of Building 12 had increased to 15, with 3 units on the first floor (1 more than in 1927), and with an increase to 12 units on the four floors above (4 more than in 1927). As can be observed in the graphics below, the 1979 state of Building 12 exhibits greater internal spatial diversity than its 1927 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
Portion e										
Portion d										
Portion c										
Portion b	42									
Portion a	302	938	459	564	459	564	459	564	459	564



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 3.1	Unit 4	Unit 5	Unit 5.1	Unit 6	Unit 7	Unit 7.1	Unit 8	Unit 9	Unit 10	Unit 10.1
Portion e															
Portion d															
Portion c												28			
Portion b	62											308	48	173	
Portion a	302	610	310	249	194	564	370	112	559	242	203	212	403	215	155

Figure 369, 370: Unit areas for Building 12 for 1927 and 1979, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1927, among the 8 units above the first (ground) floor, the average unit size was 512 square feet, with the smallest unit being 459 square feet and the largest being 564 square feet. In 1979 by comparison, among the 12 units above the first floor, the average unit size had shrunk to 336 square feet, with the smallest unit size falling substantially to 112 square feet and the largest unit remaining at 564 square feet.

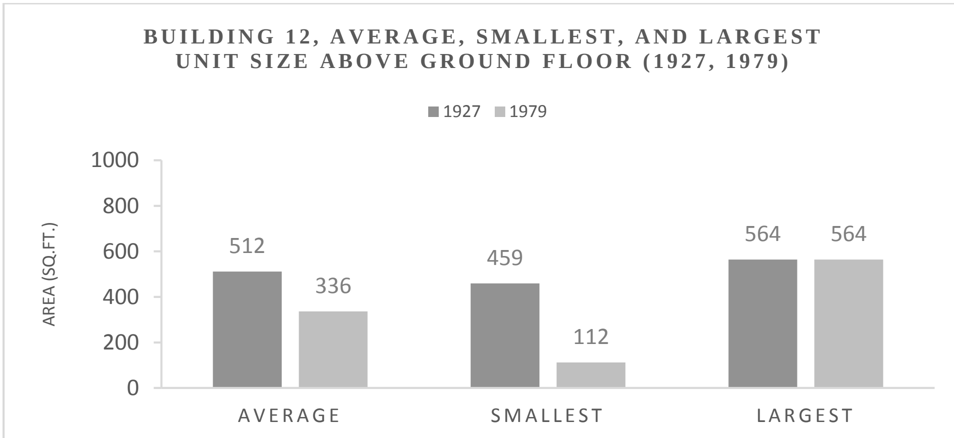
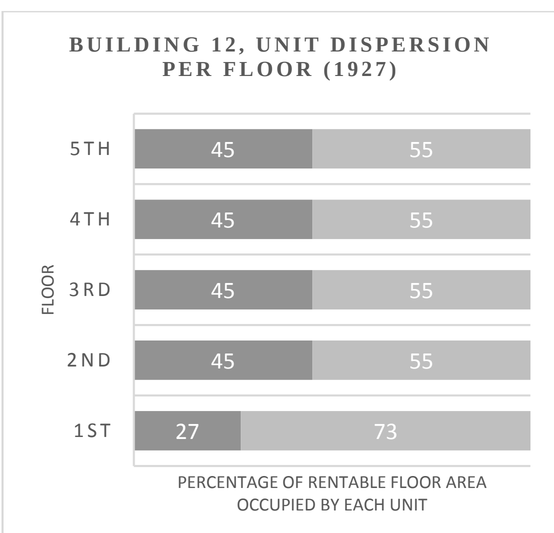


Figure 371: Building 12, average, smallest, and largest unit size above first (ground) floor for 1927 and 1979.

Below is a visualization showing the changes to the internal arrangement of Building 12, floor by floor. One observes that in the 1977 state of the building, a new unit has been added to each floor. This has been achieved on the first (ground) floor and fifth floor, by appropriating some space from the largest unit on each floor. Conversely, in floors 2–4, this has been achieved by appropriating space from the smaller of the two units on the floorplan, as observed in the graphic below.



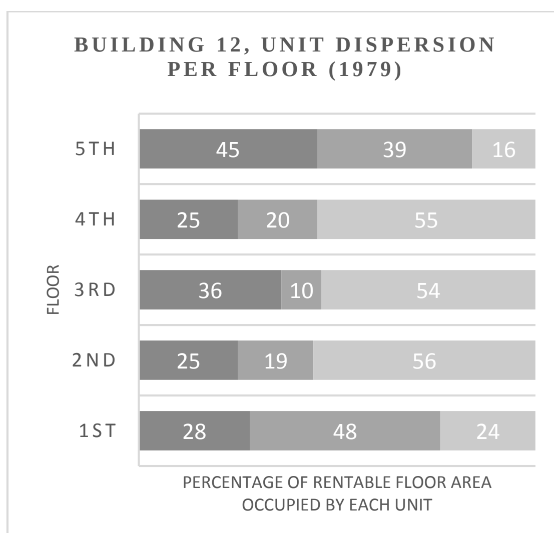


Figure 372, 373: Building 12, unit dispersion per floor, 1927 and 1979.

3.12.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 12 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Barber Shop	Braids (1)	Braids (2)	Beauty Salon (2)	Beauty Salon (3)
Braids	Beauty Salon	Beauty Salon (1)	Apparel (1)	Apparel (2)
Braids	Misc. Business	Apparel	Dresses (1)	Dresses (2)
Buttons	Notions	Dresses	Electrolysis (1)	Electrolysis (2)
Candy	Notions & Flowers	Dresses	Embroidery (1)	Buttons
Embroidery	Passementerie	Electrolysis	Liquor Store (1)	Jewelry
Millinery	Ping Pong	Embroidery	Liquor Store (1)	Misc. Business
Misc. Business		Liquor Store	Notions (1)	Misc. Business
		Liquor Store	Apparel	
		Notions	Dresses	
			Millinery	

Figure 374: Changing socioeconomic composition of Building 12 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 12 supported 8 tenants, totaling 7 micro-specializations. In 1942, total tenancy had dropped slightly to a count of 7, while micro-specializations remained stable at 7. In 1958, a rise in tenancy was observed to 10 occupants, accompanied with a slight rise of micro-specializations to a count of 8. In 1963, total occupancy again rose, this time to 11, while micro-specializations remained stable at 8. In 1973, the tenant and micro-specialization count reverted to its 1933 state, with a count of 8 and 7 respectively.

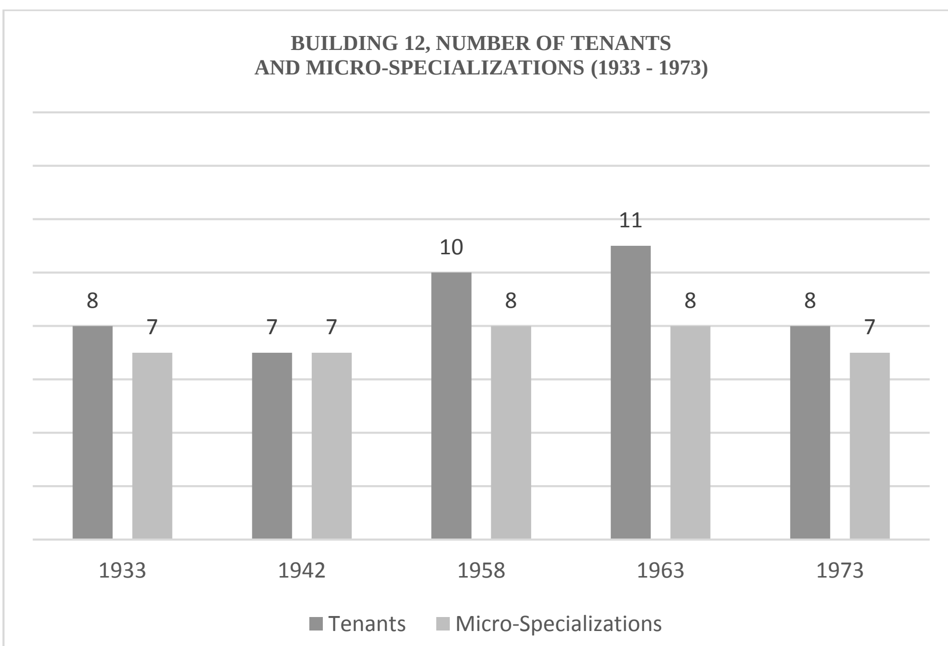
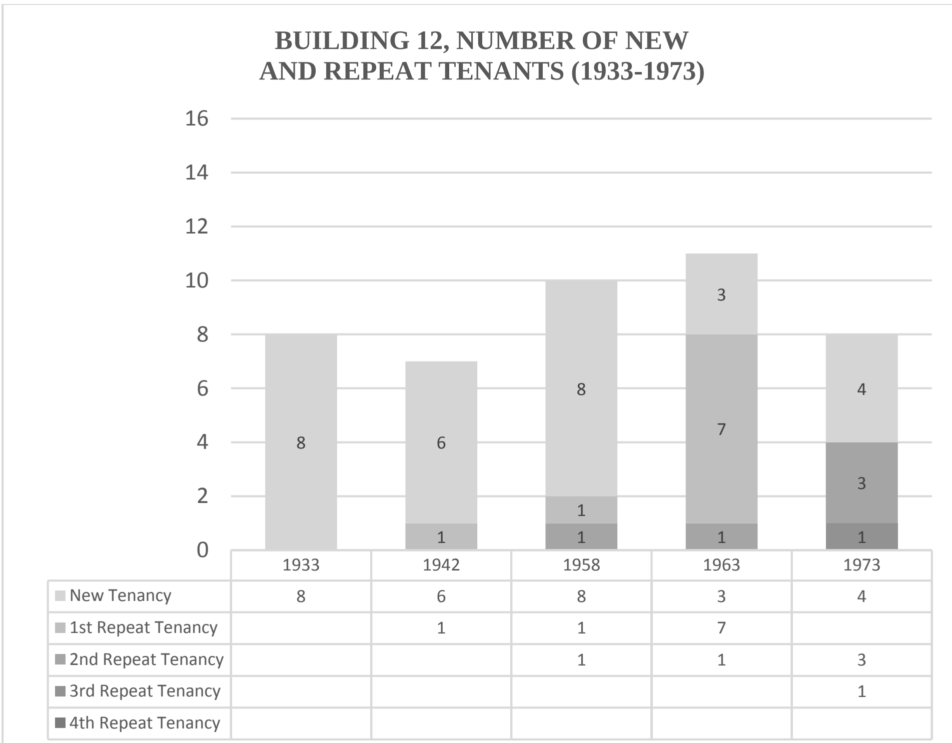


Figure 375: Building 12, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 12, as listed in detail in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 1 repeat tenant. In 1958, there was a growth to 2 repeat tenancies, 1 of which was a tenant renewing for the second consecutive year set. In 1963, again an increase was observed, to a high of 8 repeat tenants, 1 of which was an occupant renewing tenancy for a second consecutive year set. In 1973, there is a fall to 4 repeat tenants observed, 1 of which was a tenant renewing for the third consecutive year set, and 3 occupants renewing tenancy for a second time.



	1933	1942	1958	1963	1973
New Tenancy	8	6	8	3	4
1st Repeat Tenancy		1	1	7	
2nd Repeat Tenancy			1	1	3
3rd Repeat Tenancy					1
4th Repeat Tenancy					

Figure 376: Building 12, number of new and repeat tenants from 1933–1973

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- There are three macro-categories that are consistently represented throughout the five year sets observed for Building 12. These include *Apparel*, *Beauty,* and *Decorative & Notions.* Of these three, only *Apparel* and *Decorative & Notions* are represented by more than 4 occupants in one year set. For *Apparel*, this is observed in 1963 with 5 apparel-specific firms noted. For *Decorative & Notions,* this occurs in 1933 and 1942, with 4 such firms observed. *Beauty* on the contrary is represented by 1 tenant throughout all five year sets.

- In terms of macro-categorical diversity, Building 12 reaches a peak in 1973, with 6 macro-categories observed. In 1942, a low of 4 macro-categories is observed. In the remaining three year sets, 5 macro-categories are consistently represented.
- In 1958 and 1973, relatively more-equalized tenant counts are observed throughout the macro-categories listed. In comparison, 1933, 1942, and 1963, there appears to be a more dominant macro-category, namely *Decorative & Notions* in the first two year sets, and *Apparel* in the third.

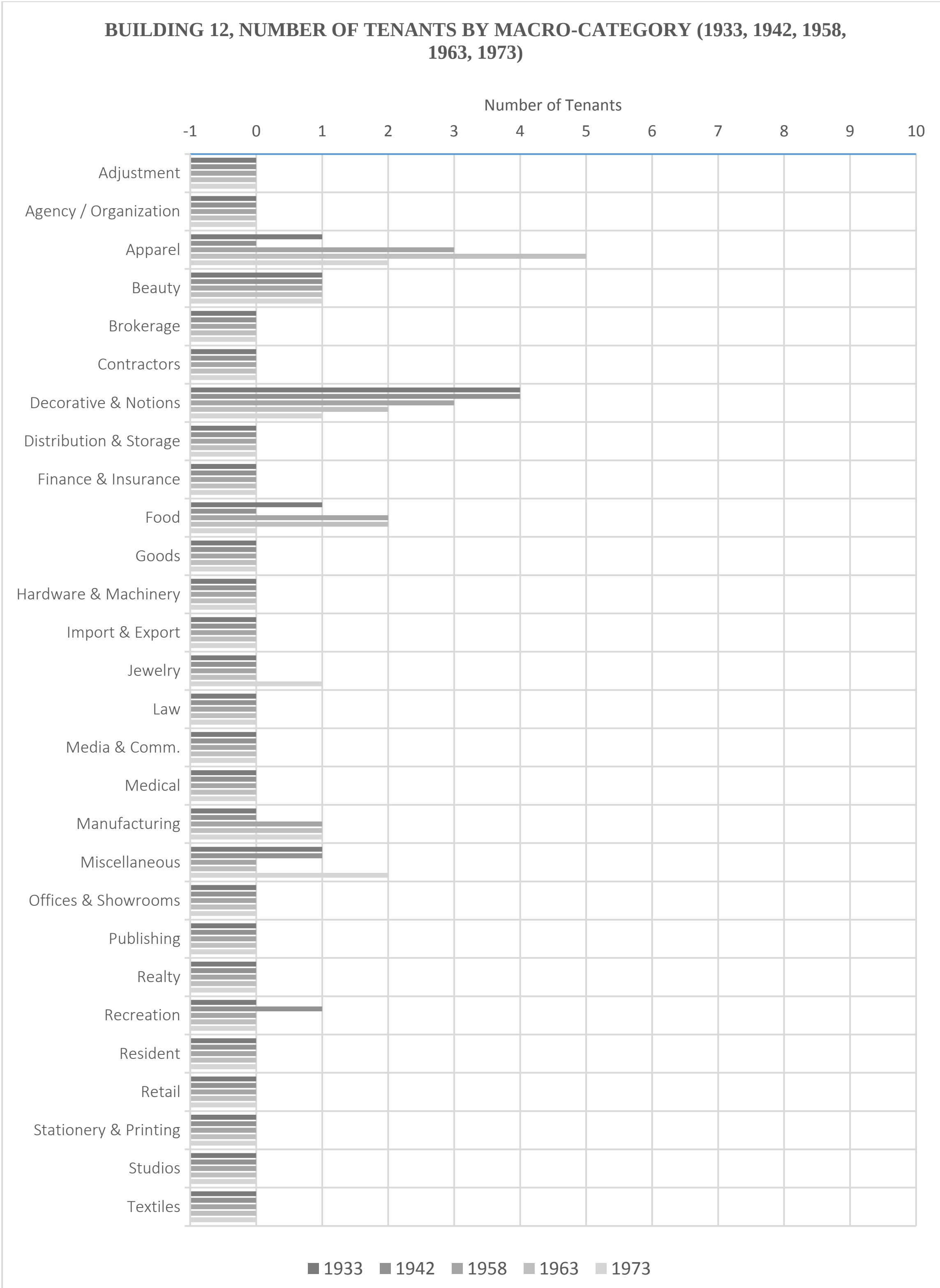


Figure 377: Building 12, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.13. BUILDING 13

3.13.1. ARCHITECTURE AND URBAN CONTEXT

Building 13 is a five-story structure built in 1928. It is 21’-0” wide and 60’-0” deep from the third floor up, 89’-0” deep on the second floor, and 99’-0” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape located on the rear façade.

Figure 378, 379, 380, 381 (left to right): Building 13, first (ground) floor (1930); second floor (1930); floors 3–5 (1930); street-front elevation (1983). For plans, north is up.

The street-front façade of Building 13 faces south. In the rear (northern) portion of the site, Building 13 receives more than the bare minimum of access to air and northern light than would be achieved by minimum code standards, as documented in the rightmost graphic below.

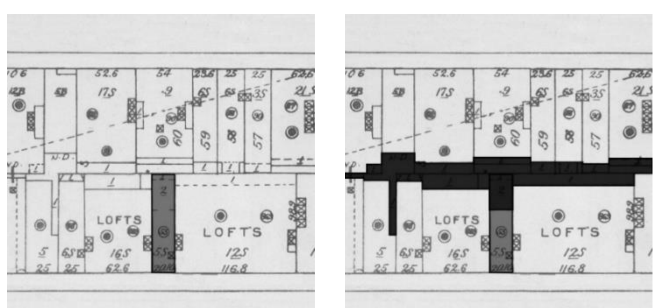


Figure 382, 383: Excerpt from Sanborn Map from 1976, with Building 13 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 13 highlighted in further darker tone. No set scale. North is up.

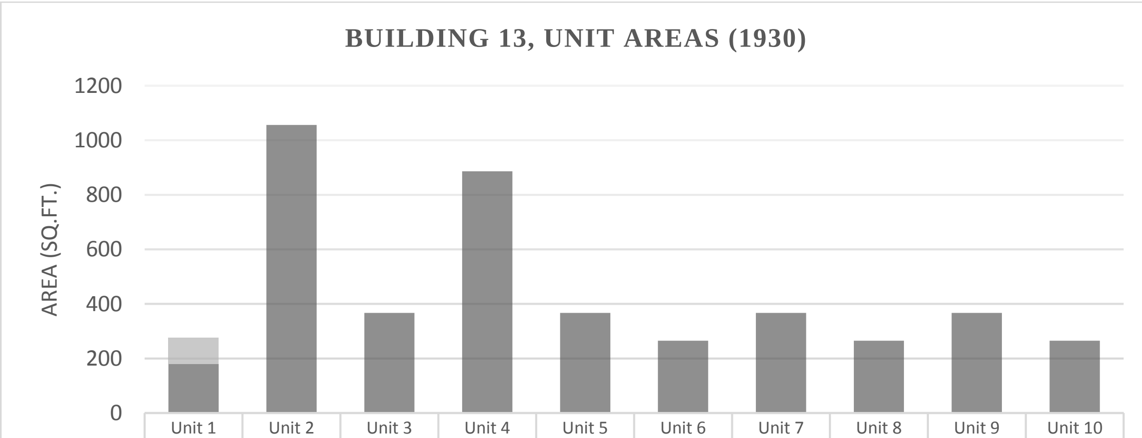
3.13.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 13 obtained for 1930 and 1983, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

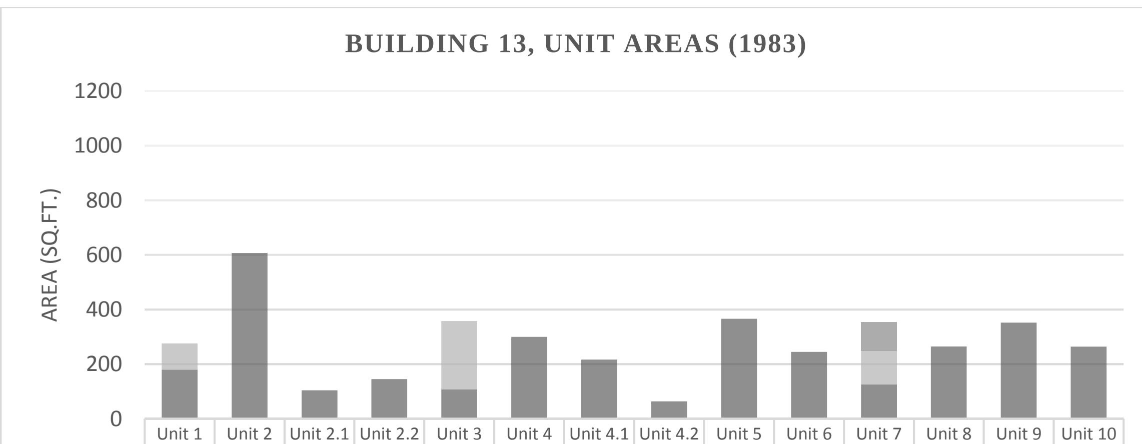
Figure 384, 385, 386, 387, 388, 389 (left to right): Building 13, first floor (1930); same floor (1983); second floor (1930); same floor (1983); third floor (1930); same floor (1983). 1" = 32'. North is up.

Figure 390, 391, 392, 393 (left to right): Building 13, fourth floor (1930); same floor (1983); fifth floor (1930); same floor (1983). 1" = 32'. North is up.

In 1930, Building 13 had 10 units, with 2 units on the first (ground) floor, and 8 units on the four floors above. In 1983 by comparison, the total unit count of Building 13 had increased to 14 (4 more than in 1930), with 4 units on the first floor (2 more than in 1930), and with an increase to 10 units on the four floors above (2 more than in 1930). As can be observed in the graphics below, the 1983 state of Building 13 exhibits greater internal spatial diversity than its 1930 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
Portion e										
Portion d										
Portion c										
Portion b	96									
Portion a	180	1056	367	886	367	265	367	265	367	265



	Unit 1	Unit 2	Unit 2.1	Unit 2.2	Unit 3	Unit 4	Unit 4.1	Unit 4.2	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
Portion e														
Portion d														
Portion c											105			
Portion b	96				250						123			
Portion a	180	607	104	145	108	300	217	64	366	245	126	265	352	264

Figure 394, 395: Unit areas for Building 13 for 1930 and 1983, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1930, among the 8 units above the first (ground) floor, the average unit size was 394 square feet, with the smallest unit being 265 square feet and the largest being 886 square feet. In 1983 by comparison, among the 10 units above the first floor, the average unit size had shrunk to 279 square feet, with the smallest unit size falling to 64 square feet and the largest unit diminishing substantially to 366 square feet.

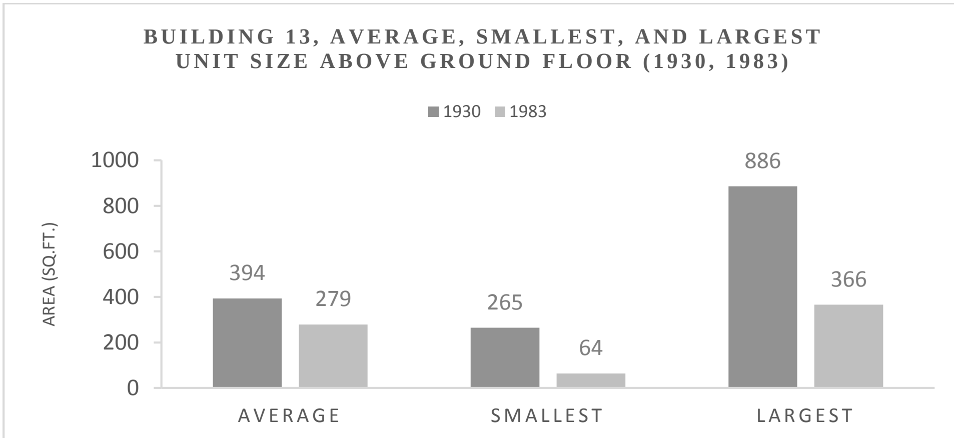
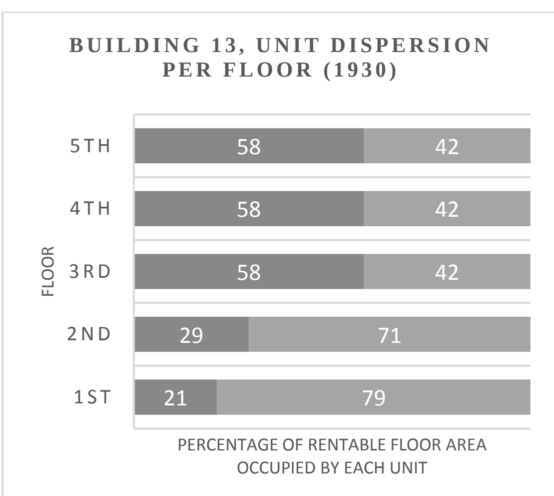


Figure 396: Building 13, average, smallest, and largest unit size above first (ground) floor for 1930 and 1983.

Below is a visualization showing the changes to the internal arrangement of Building 13, floor by floor. One observes that the unit count remains the same in the third, fourth, and fifth floors, whereas 2 units have been added to the first (ground) floor and second floor. As can be seen in the detailed plans listed two pages prior, the third and fifth floor remain largely unchanged among the two year sets, but there are significant internal changes observed in the front unit of the fourth floor—namely, with a singular space being subdivided into three rooms.



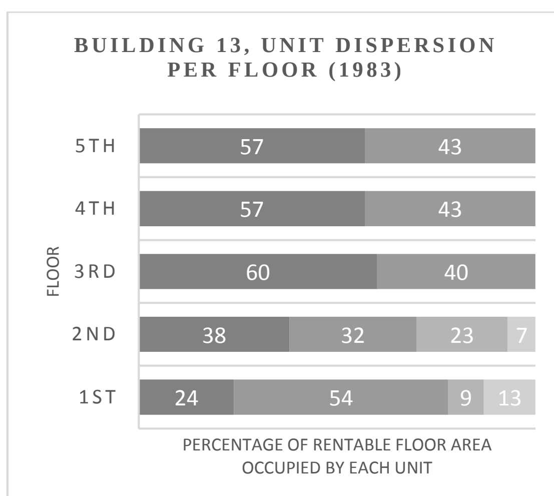


Figure 397, 398: Building 13, unit dispersion per floor, 1930 and 1983.

3.13.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 13 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Beauty Salon	Beauty Salon (1)	Retail (2)	Millinery (1)	Millinery (1)
Millinery	Misc. Business (1)	Shoes (2)	Apparel	Pharmaceuticals (1)
Millinery	Retail (1)	Misc. Business (1)	Apparel	Brokerage, Sell
Millinery	Shoes (1)	Millinery	Millinery	Misc. Business
Misc. Business	Chiropodist	Millinery	Millinery Supp.	Sewing Mach.
Retail	Millinery	Misc. Business	Pharmaceuticals	Textiles
Shoes	Millinery	Resident	Resident	

Figure 399: Changing socioeconomic composition of Building 13 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, the overall tenant and micro-specialization count of Building 13 remains intriguingly consistent throughout the five year sets observed, with 6–7 tenants and 5–6 micro-specializations documented in each data set.

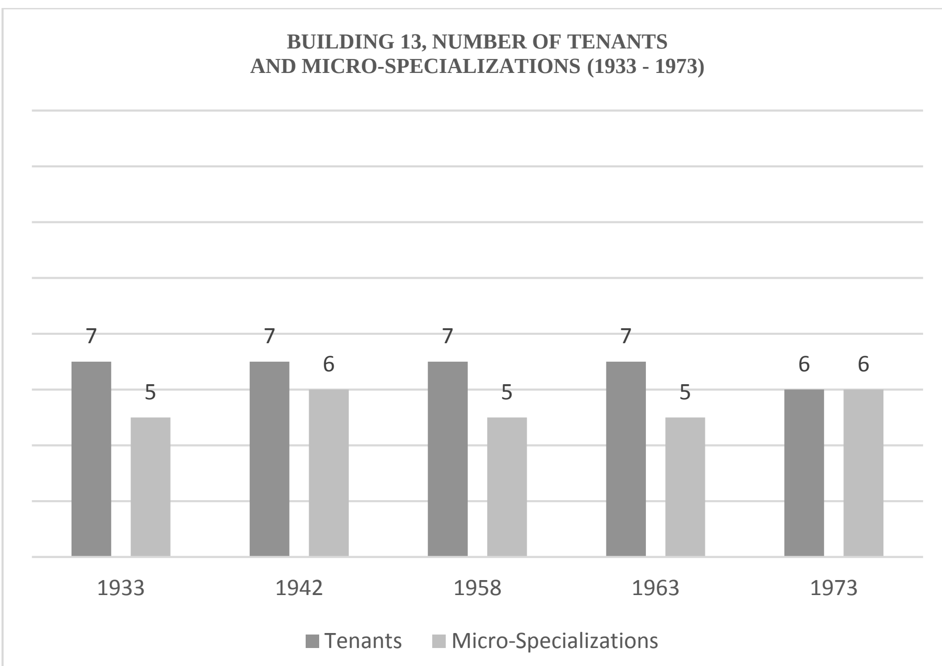


Figure 400: Building 13, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 13, as listed in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 1 repeat tenant. In 1958, there was a growth to 5 repeat tenancies, 1 of which was a tenant renewing for the second consecutive year set. In 1963, again an increase was observed, to a high of 8 repeat tenants, 3 of which were tenants renewing for a second consecutive year set. In 1973, there is a fall to 2 repeat tenants, 1 of which though, a firm specialized in shoulder pads, is a tenant renewing for the third consecutive year set.

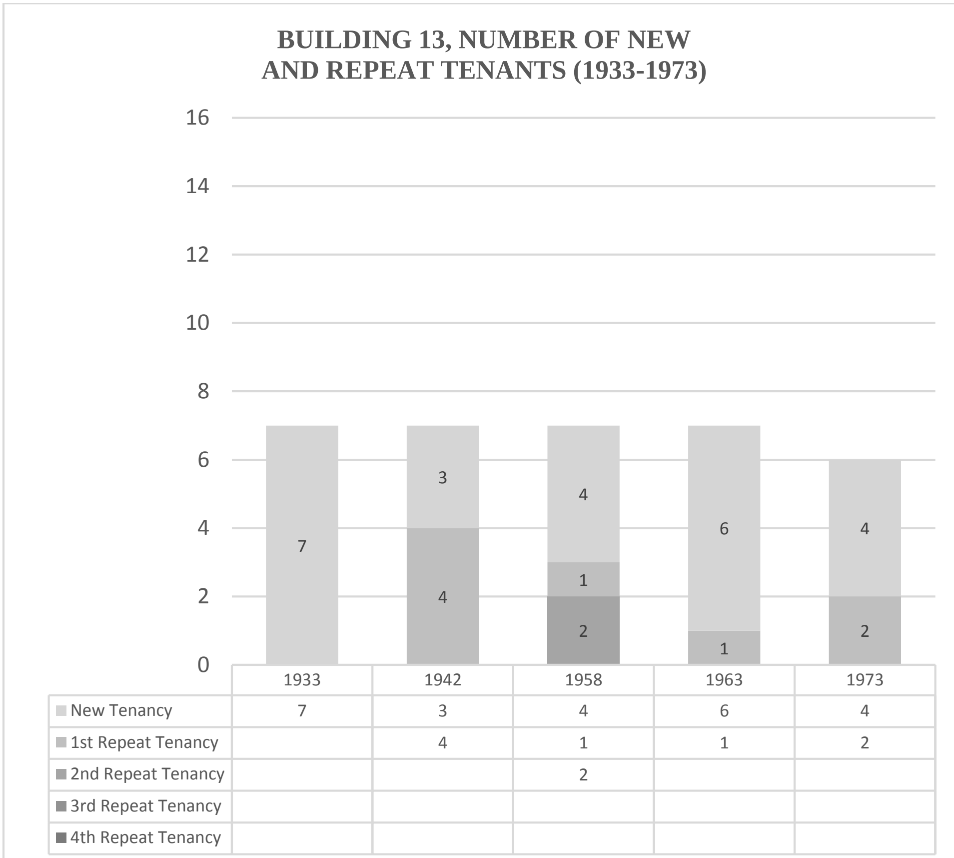


Figure 401: Building 13, number of new and repeat tenants from 1933–1973

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, on the page that follows:

- Similar to Building 11 and 15, *Apparel* is the only macro-category consistently represented throughout the five year sets observed for Building 13. There are 3–5 apparel-specific firms listed for Building 13 in the first four year sets, peaking with 5 in 1963. In 1973 however a reversal is observed, with only 1 apparel-specific firm observed in that year—namely, a millinery firm that is a repeat tenant from 1963.
- In terms of macro-categorical diversity, Building 13 reaches a peak in 1973 with 6 macro-categories represented. The low occurs in 1963 with 3 macro-categories. In the remaining year sets, in turn 4–5 macro-categories are observed.

- In regard to tenant distribution, 1973 exhibits even distribution of occupants among the 6 macro-categories listed, with 1 tenant per macro-category observed. 1933 and 1963 in turn are at the opposite end of the spectrum, with 4–5 apparel-specific firms being observed, and the remaining macro-categories representing just 1 tenant. The remaining year sets fall into somewhat of a middle ground between these two poles, with mostly 1 tenant being represented in each macro-category present, aside for *Apparel* which is represented by 3 tenants in each of those two years.

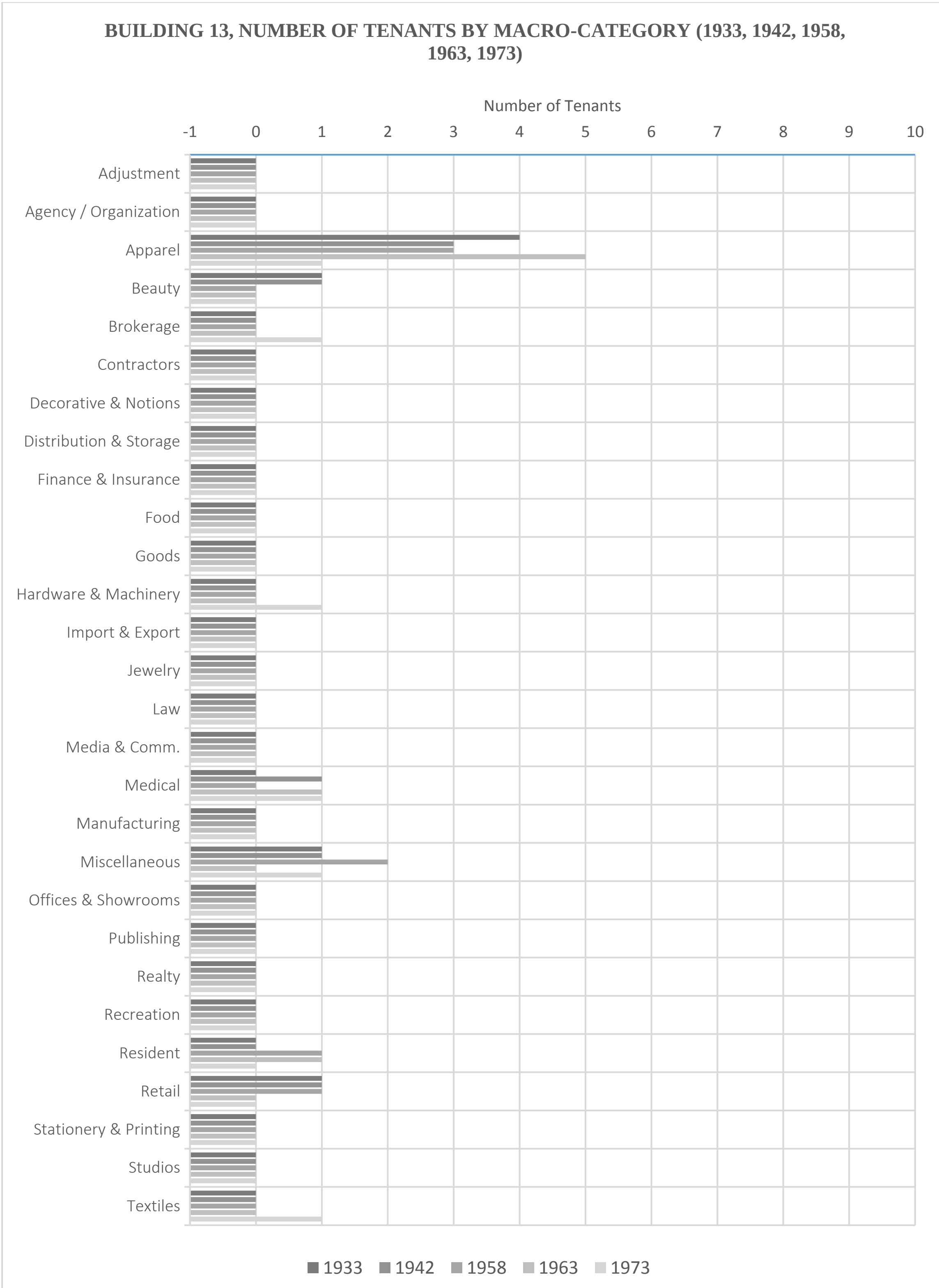


Figure 402: Building 13, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.14. BUILDING 14

3.14.1. ARCHITECTURE AND URBAN CONTEXT

Building 14 is a six-story structure built in 1910. It is 25’-0” wide and 90’-0” deep from the second floor up, and 99’-0” deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape located on the rear façade.

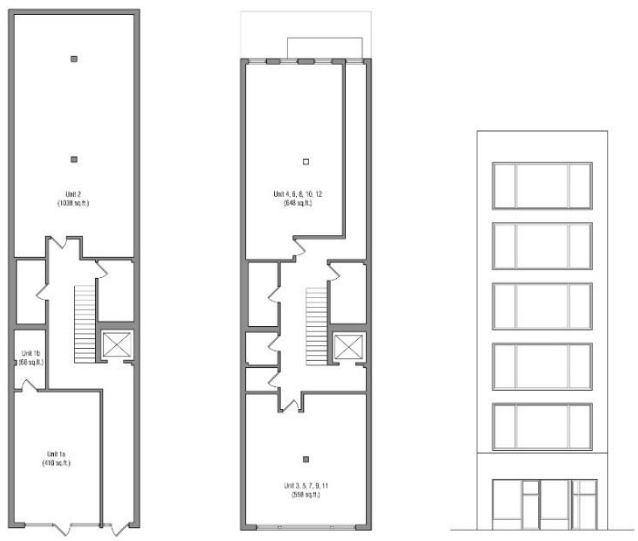


Figure 403, 404, 405 (left to right): Building 14 first (ground) floor (1911); floors 2–6 (1911); street-front elevation (1980). For plans, north is down.

The street-front façade of Building 14 faces north. In the rear (southern) portion of the site, Building 14 receives the bare minimum of access to air and southern light as achieved by minimum code standards, as documented in the rightmost graphic below.

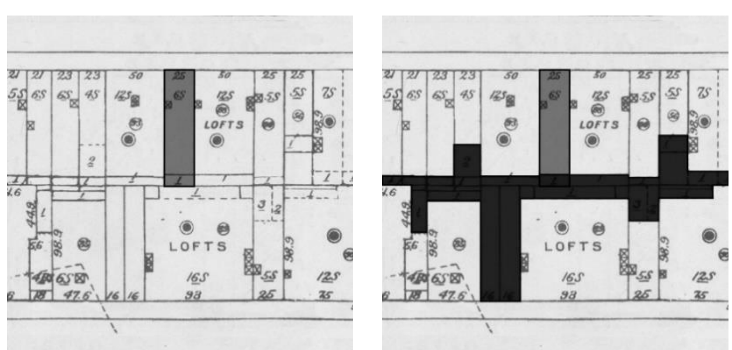


Figure 406, 407: Excerpt from Sanborn Map from 1976, with Building 14 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 14 highlighted in further darker tone. No set scale. North is up.

3.14.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 14 obtained for 1911 and 1980, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

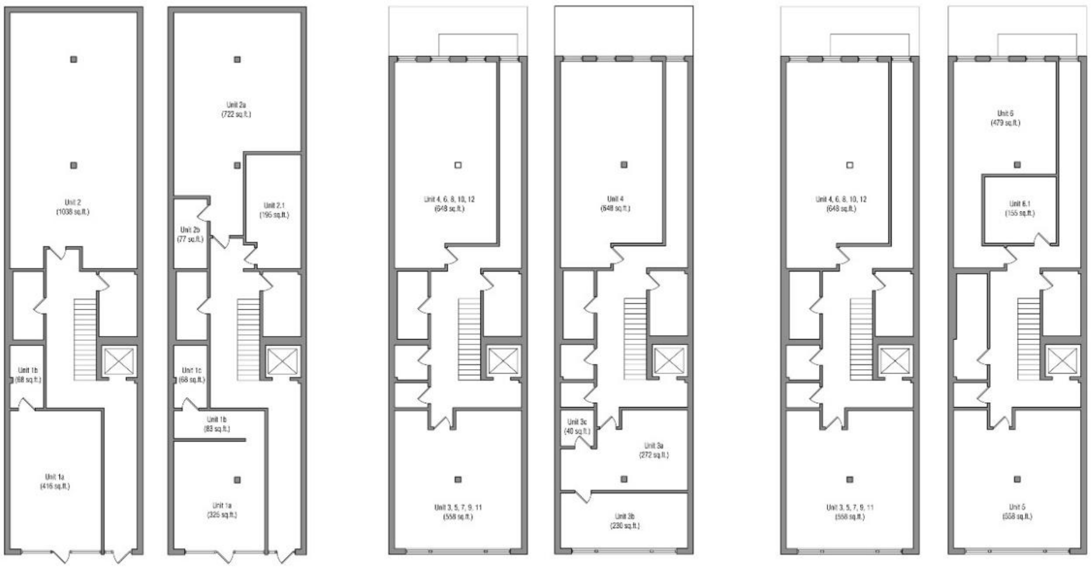
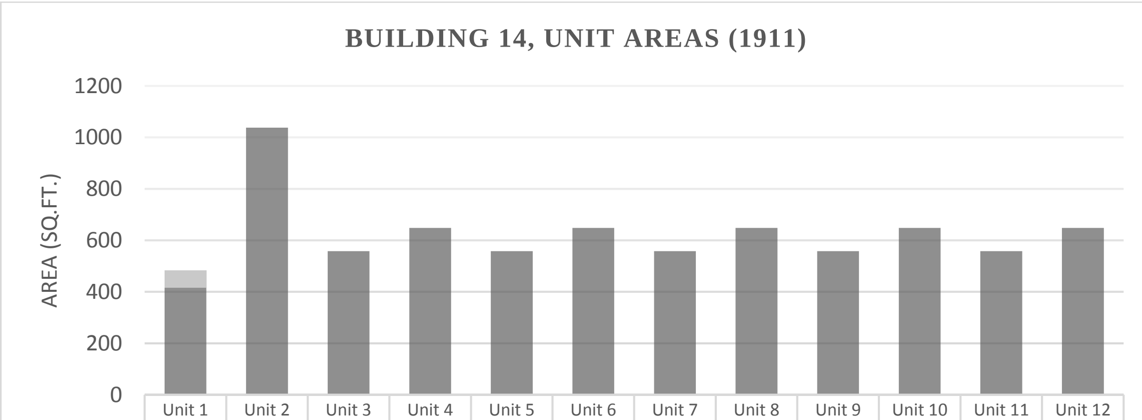


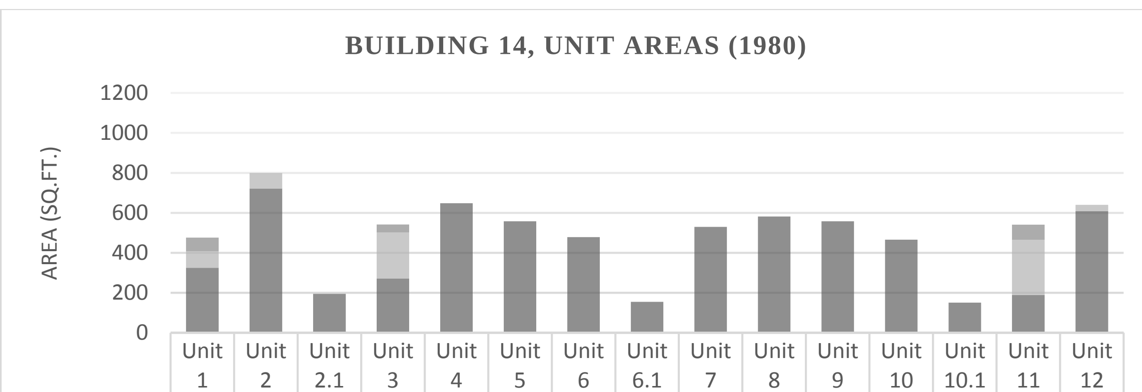
Figure 408, 409, 410, 411, 412, 413 (left to right): Building 14, first floor (1911); same floor (1980); second floor (1911); same floor (1980); third floor (1911); same floor (1980). 1" = 32'. North is down.

Figure 414, 415, 416, 417, 418, 419 (left to right): Building 14, fourth floor (1911); same floor (1980); fifth floor (1911); same floor (1980); sixth floor (1911); same floor (1980). 1" = 32'. North is down.

In 1911, Building 14 had 12 units, with 2 units on the first (ground) floor, and 10 units on the five floors above. In 1980 by comparison, the total unit count of Building 14 had increased to 15 (3 more than in 1911), with 3 units on the first floor (1 more than in 1911), and with an increase to 12 units on the five floors above (2 more than in 1911). As can be observed in the graphics below, the 1980 state of Building 14 exhibits greater internal spatial diversity than its 1911 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12
Portion e												
Portion d												
Portion c												
Portion b	68											
Portion a	416	1038	558	648	558	648	558	648	558	648	558	648



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 4	Unit 5	Unit 6	Unit 6.1	Unit 7	Unit 8	Unit 9	Unit 10	Unit 10.1	Unit 11	Unit 12
Portion e															
Portion d															
Portion c	68			40										76	
Portion b	83	77		230										276	32
Portion a	325	722	195	272	648	558	479	155	530	582	558	466	151	189	608

Figure 420, 421: Unit areas for Building 14 for 1911 and 1980, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1911, among the 10 units above the first (ground) floor, the average unit size was 603 square feet, with the smallest unit being 558 square feet and the largest being 648 square feet. In 1980 by comparison, among the 12 units above the first floor, the average unit size had shrunk to 488 square feet, with the smallest unit size falling substantially to 151 square feet and the largest unit remaining at 648 square feet.

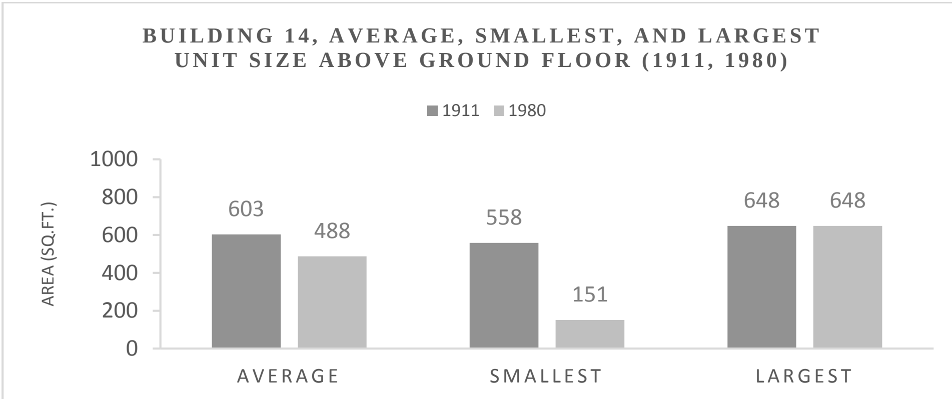
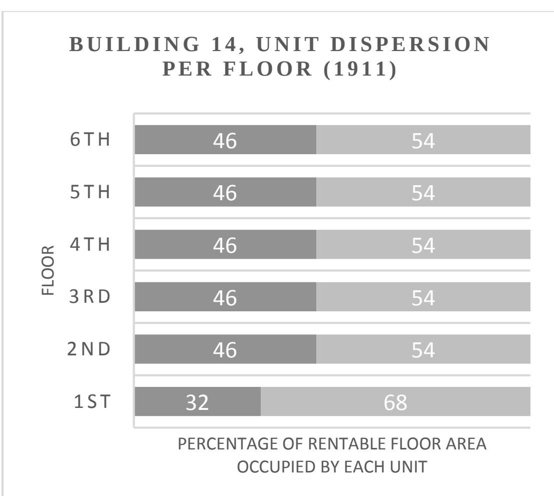


Figure 422: Building 14, average, smallest, and largest unit size above first (ground) floor for 1911 and 1980.

Below is a visualization showing the changes to the internal arrangement of Building 14, floor by floor. One observes that in the 1980 state, a new unit has been established on the fifth, third, and first (ground) floor. Given this, it may seem that the floors not mentioned have remained the same from 1911 to 1980, however this generally is not the case. There are significant changes observed on these floors that can't be captured by mere unit count. As is seen in the plans listed two pages prior, for instance, one notes that on the second and sixth floor, singular spaces in 1911 have been subdivided into 2–3 smaller spaces by 1980.



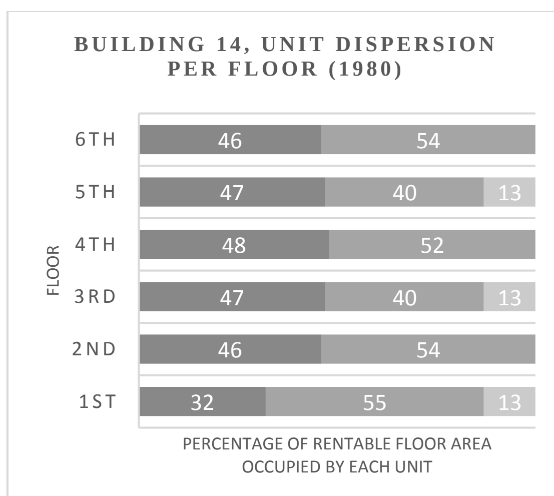


Figure 423, 424: Building 14, unit dispersion per floor, 1911 and 1980.

3.14.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 14 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Beauty Salon	Beauty Salon (1)	Handblocking (1)	Handblocking (2)	Misc. Business (2)
Chiropodist	Beauty Salon	Linings (1)	Linings (2)	Notions (1)
Millinery	Flowers & Feathers	Linings (1)	Massage Parlor (1)	Beauty Salon
Necklaces	Handblocking	Millinery (1)	Misc. Business (1)	Embroidery
Notions	Linings	Beauty Salon	Misc. Business (1)	Linings
Raw Silks	Linings	Embroidery	Podiatrist (1)	Millinery
Silks	Millinery	Massage Parlor	Beauty Salon	Millinery Equip.
Silks	Millinery Supp.	Millinery	Electrolysis	Monograms
Textiles	Neckwear	Misc. Business	Electrolysis	Resident
	Neckwear	Misc. Business	Handblocking	Textiles
	Notions	Podiatrist	Linings	
	Silks & Velvets		Notions	

Figure 425: Changing socioeconomic composition of Building 14 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 14 supported 9 occupants, totaling 8 micro-specializations. In 1942, total tenancy increased to a peak of 12 occupants, with a slight rise also to 9 micro-specializations. In 1958, total occupancy decreased slightly to 11 tenants, matched also by a decrease of micro-specializations to a count of 8. In 1963, again a rise to 12 total occupants was observed (matching 1942), while micro-specializations remained stable at 8. In 1973, total occupancy has fallen to 10, with micro-specializations reaching a peak also of 10.

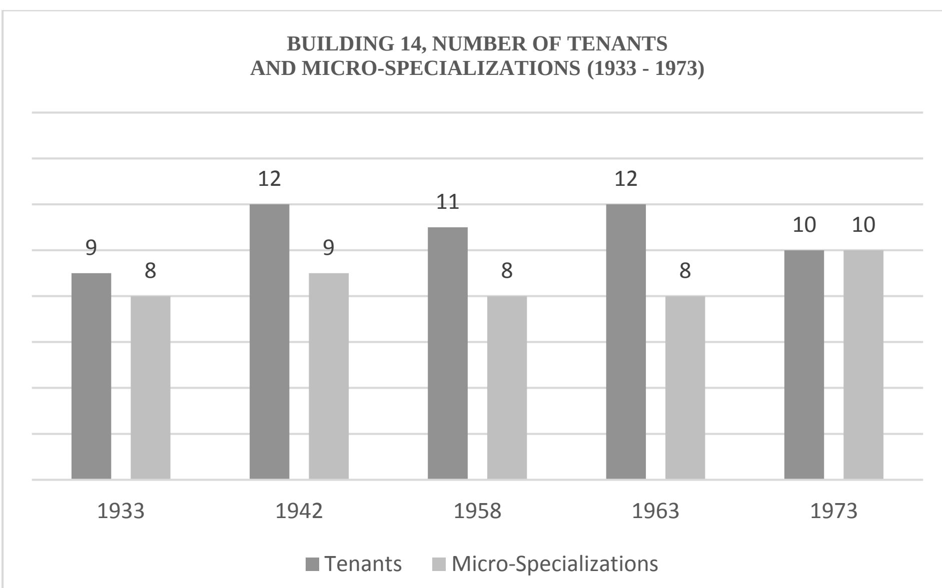


Figure 426: Building 14, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 14, as listed in detail in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 1 repeat tenant. In 1958, there was a growth to 4 repeat tenancies. In 1963, again an increase was observed, to a high of 6 repeat tenants, 2 of which were tenants renewing for a second consecutive year set. In 1973, there is a fall to 2 repeat tenants observed, 1 of which is a tenant renewing for the second consecutive year set.

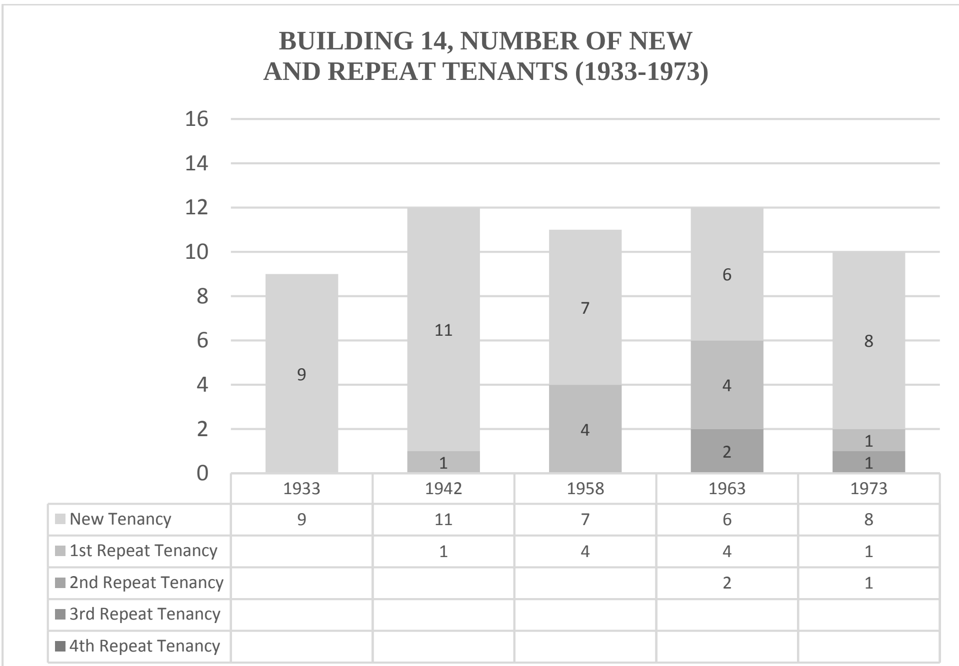


Figure 427: Building 14, number of new and repeat tenants from 1933–1973

There are a few narratives to note, in looking at the figure relating to socioeconomic composition, below:

- There are three macro-categories that are consistently present in Building 14 throughout all five year sets observed. These include *Apparel, Beauty,* and *Decorative & Notions.* Of these three, *Apparel* is the only macro-category that is represented by 3 or more firms in a year set—namely in 1942, 1958, and 1973. In 1958, the peak for apparel-specific firms for Building 14 is observed, with a count of 6. The low for *Apparel* is observed in 1933, with only 1 apparel-specific firm listed.
- In terms of macro-categorical diversity, Building 13 consistently represents 5–7 macro-categories throughout all the observed year sets, peaking in 1973 with a count of 7, and a low of 5 in 1942.

- In regard to tenant counts, 1933 and 1942 exhibited relatively lopsided distributions. In 1933, there are 4 textile-specific firms present, with the remaining macro-categories being represented by 1 tenant. In 1942 similarly, *Apparel* is the dominant macro-category, represented by 6 firms, with the remaining macro-categories having 1–2 tenants each. The remaining three year sets, though having somewhat more-dominant and less-dominant macro-categories, appear to be relatively more-evenly distributed when compared to 1933 and 1942.

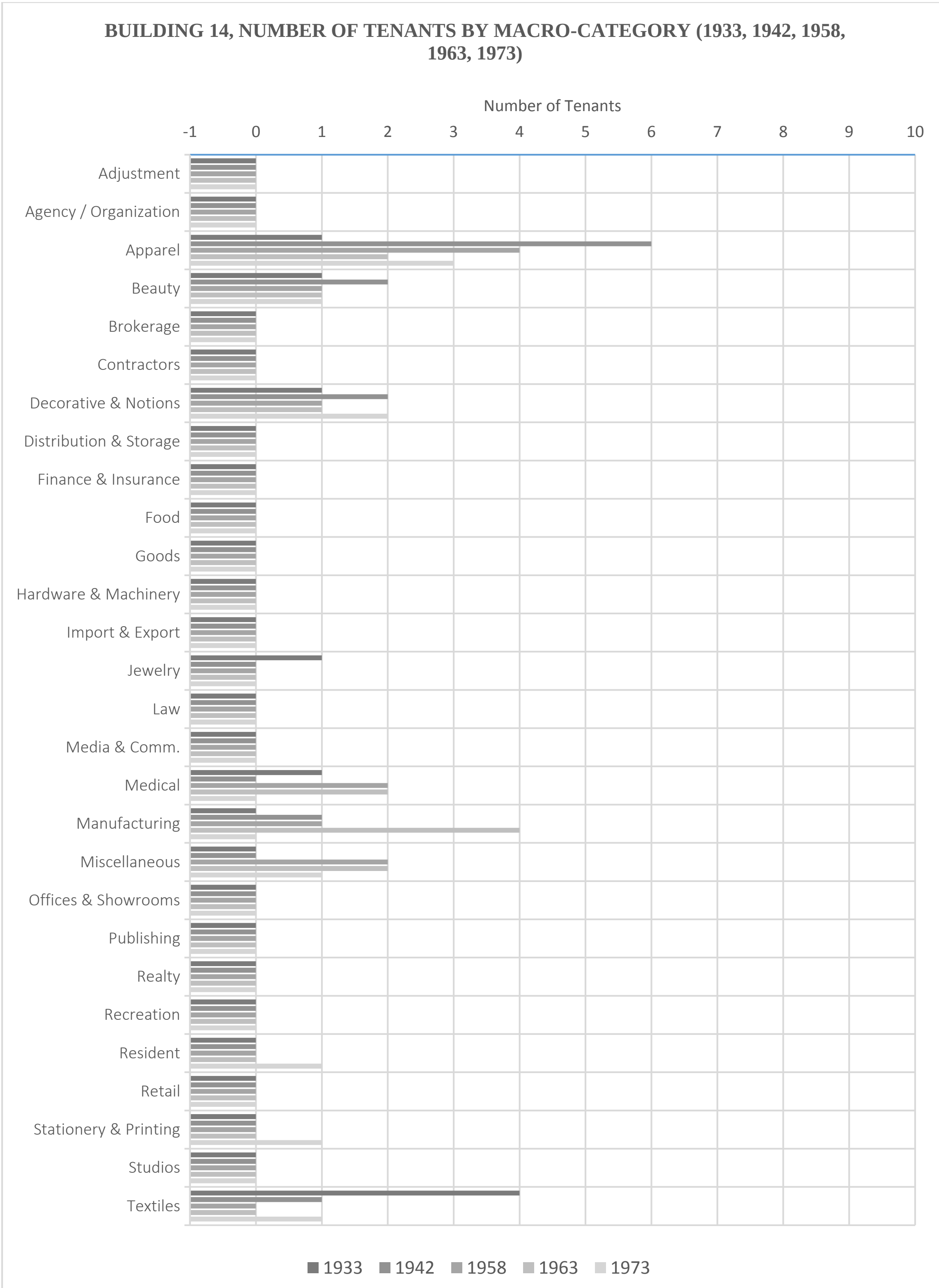


Figure 428: Building 14, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

3.15. BUILDING 15

3.15.1. ARCHITECTURE AND URBAN CONTEXT

Building 15 is a six-story structure built in 1920. It is 23'-0" wide and 90'-0" deep from the second floor up, and 99'-0" deep on the first (ground) floor. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has one elevator, one set of stairs, and one fire escape located on the rear façade.

Figure 429, 430, 431 (left to right): Building 15, first (ground) floor (1920); floors 2–6 (1920); street-front elevation (1974). For plans, north is down.

The street-front façade of Building 15 faces north. In the rear (southern) portion of the site, Building 15 receives more than the bare minimum of access to air and southern light than would be achieved by minimum code standards, specifically due to the lower urban context to the southwest of the building, as documented in the rightmost graphic below.

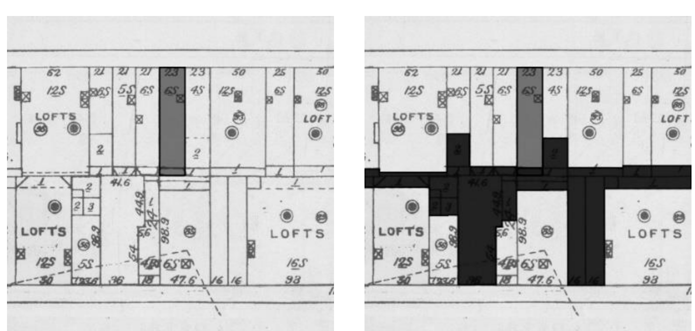


Figure 432, 433: Excerpt from Sanborn Map from 1976, with Building 15 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 15 highlighted in further darker tone. No set scale. North is up.

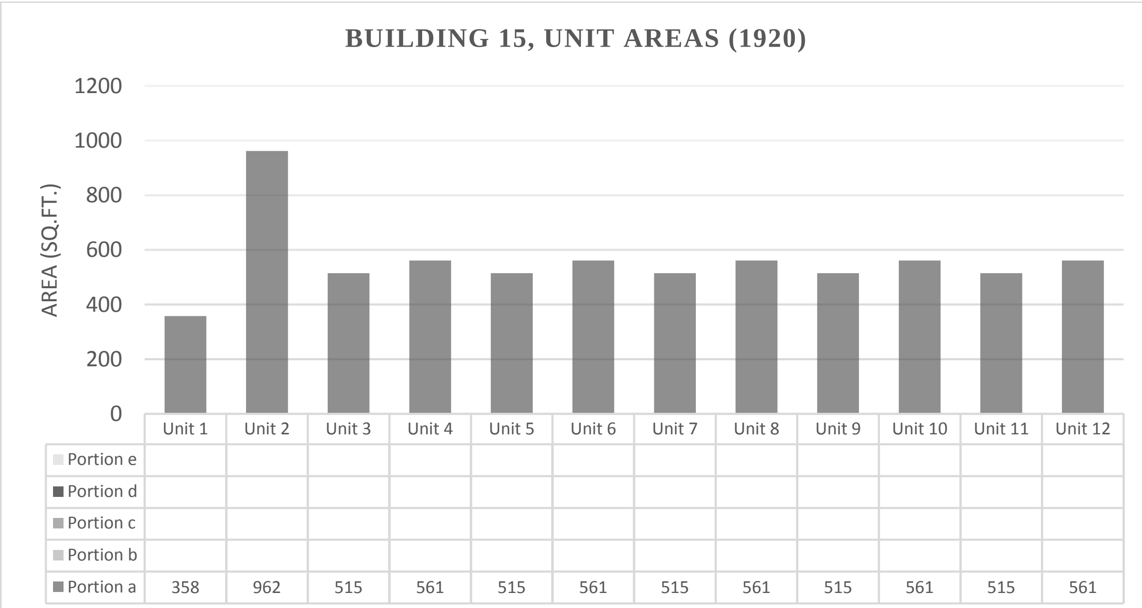
3.15.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 15 obtained for 1920 and 1974, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

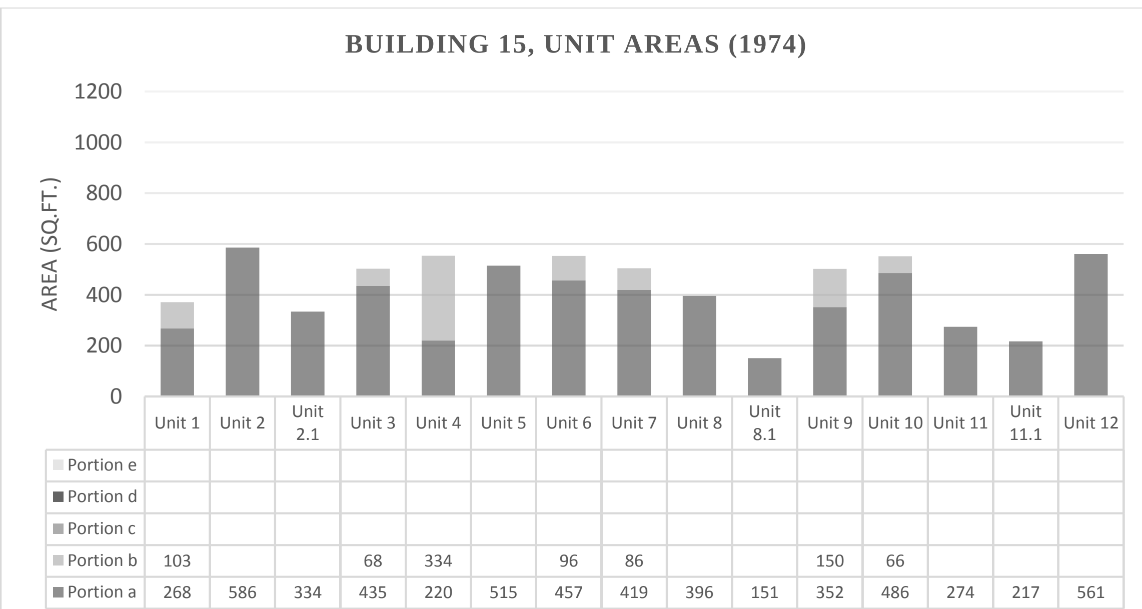
Figure 434, 435, 436, 437, 438, 439 (left to right): Building 15, first floor (1920); same floor (1974); second floor (1920); same floor (1974); third floor (1920); same floor (1974). 1" = 32'. North is down.

Figure 440, 441, 442, 443, 444, 445 (left to right): Building 15, fourth floor (1920); same floor (1974); fifth floor (1920); same floor (1974); sixth floor (1920); same floor (1974). 1" = 32'. North is down.

In 1920, Building 15 had 12 units, with 2 units on the first (ground) floor, and 10 units on the five floors above. In 1974 by comparison, the total unit count of Building 15 had increased to 15 (3 more than in 1920), with 3 units on the first floor (1 more than in 1920), and with an increase to 12 units on the five floors above (2 more than in 1920). As can be observed in the graphics below, the 1974 state of Building 15 exhibits greater internal spatial diversity than its 1920 state.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12
Portion e												
Portion d												
Portion c												
Portion b												
Portion a	358	962	515	561	515	561	515	561	515	561	515	561



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 8.1	Unit 9	Unit 10	Unit 11	Unit 11.1	Unit 12
Portion e															
Portion d															
Portion c															
Portion b	103			68	334		96	86			150	66			
Portion a	268	586	334	435	220	515	457	419	396	151	352	486	274	217	561

Figure 446, 447: Unit areas for Building 15 for 1920 and 1974, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1920, among the 10 units above the first (ground) floor, the average unit size was 538 square feet, with the smallest unit being 515 square feet and the largest being 561 square feet. In 1974 by comparison, among the 12 units above the first floor, the average unit size had shrunk to 440 square feet, with the smallest unit size falling substantially to 151 square feet and the largest unit remaining at 561 square feet.

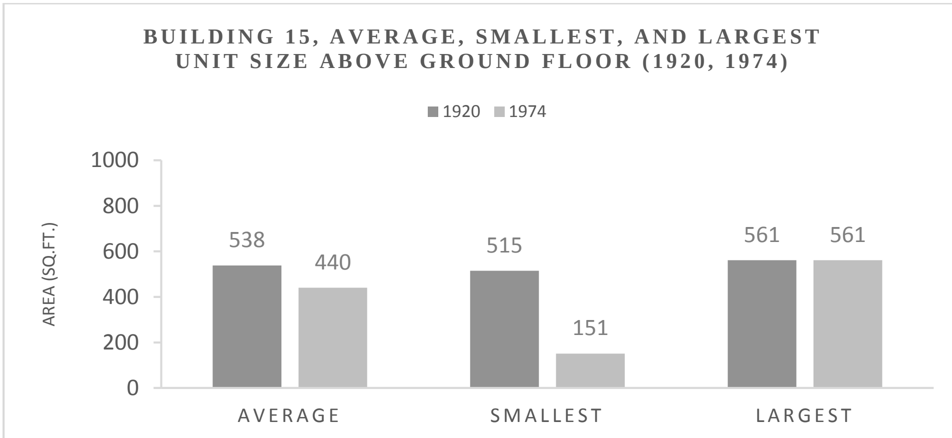
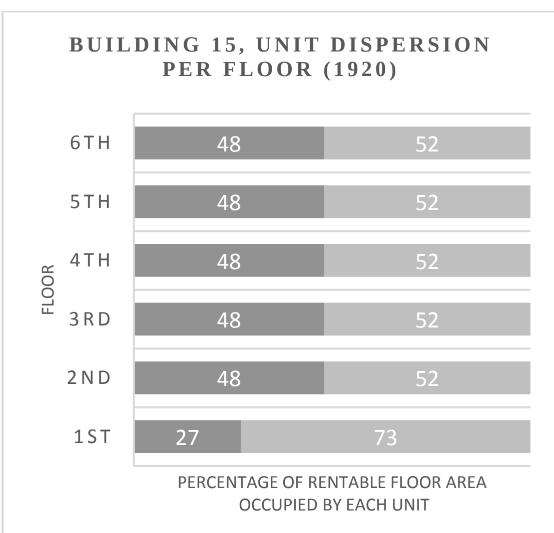


Figure 448: Building 15, average, smallest, and largest unit size above first (ground) floor for 1920 and 1974.

Below is a visualization showing the changes to the internal arrangement of Building 15, floor by floor. One observes, in the 1974 state of the building, that an additional unit has emerged on the first, fourth, and sixth floor. As can be seen in the detailed plans listed two pages prior, in turn, while the third floor remains largely unchanged, there are significant internal changes to be observed in the second floor, and to a lesser degree in the fifth floor.



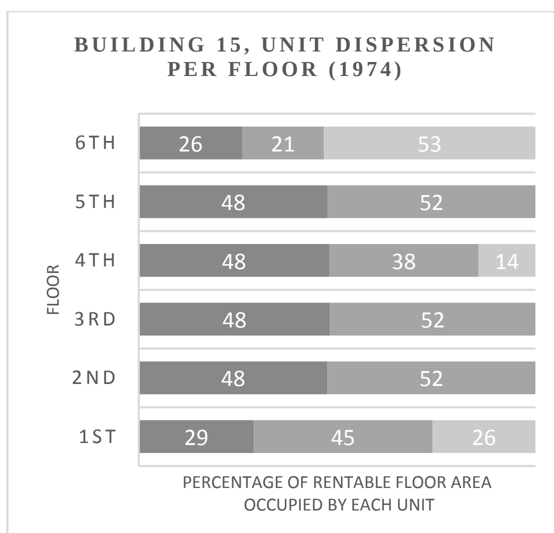


Figure 449, 450: Building 15, unit dispersion per floor, 1920 and 1974.

3.15.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 15 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Beauty Salon	Millinery (1)	Millinery (2)	Importing (2)	Feathers (2)
Brassieres	Importing	Importing (1)	Brokerage (1)	Feathers (2)
Chiropodist	Millinery	Brokerage	Feathers (1)	Gloves (1)
Millinery	Millinery	Feathers	Feathers (1)	Notions (1)
Millinery	Millinery Equip.	Feathers	Handbags (1)	Ostrich Feathers (1)
Millinery	Millinery Supp.	Handbags	Misc. Business (1)	Photography (1)
Millinery Equip.	Notions	Locksmiths	Gloves	Photography (1)
Millinery Supp.		Misc	Millinery	Delivery
Misc. Business		Notions	Ostrich Feathers	Feathers
Misc. Business		Photography	Photography	Gloves
Silks			Photography	Manufacturing
			Retail Displays	Photography
			Retail Displays	
			Notions	

Figure 451: Changing socioeconomic composition of Building 15 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the chart below, in 1933 Building 15 supported 11 occupants, totaling 8 micro-specializations. In 1942, these counts dropped to 7 total occupants and 5 micro-specializations. In 1958, there was an increase of total occupancy to 10, with a matched increase of micro-specializations to a count of 9. In 1963, in turn, the peak count of both total tenancy and micro-specializations is observed, with 13 total occupants and 11 micro-specializations observed. In 1973, there is a slight drop of total occupancy to a count of 12, with a greater drop of micro-specializations down to a count of 7.

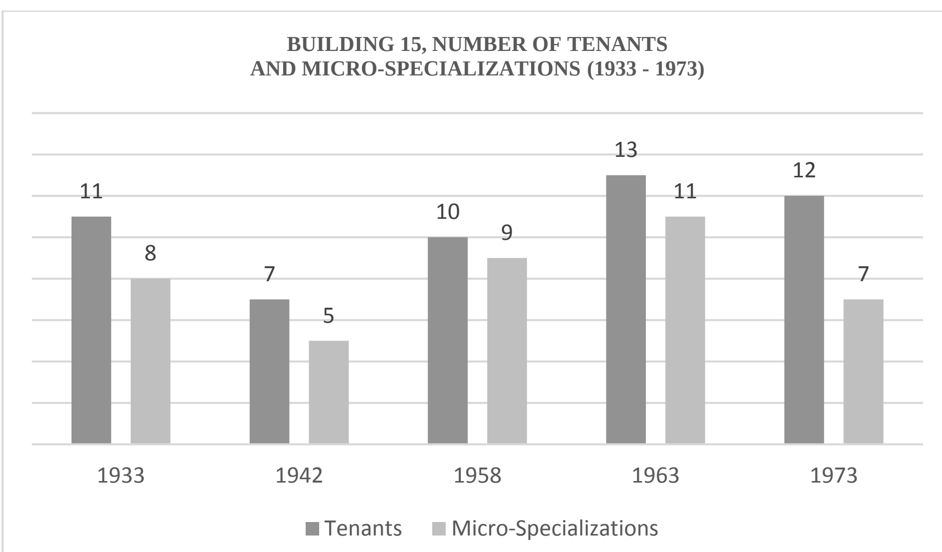


Figure 452: Building 15, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

A graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 4, as listed in the first table shown in this section, is presented below. As can be observed, in 1942 the building supported 1 repeat tenant. In 1958, there was a growth to 2 repeat tenancies, 1 of which was a tenant renewing for the second consecutive year set. In 1963, again an increase was observed, to 6 repeat tenants, 1 of which was a tenant renewing for a second consecutive year set. In 1973, a peak of repeat tenants is observed with a count of 7, 2 of which are tenants renewing for a second consecutive year set.

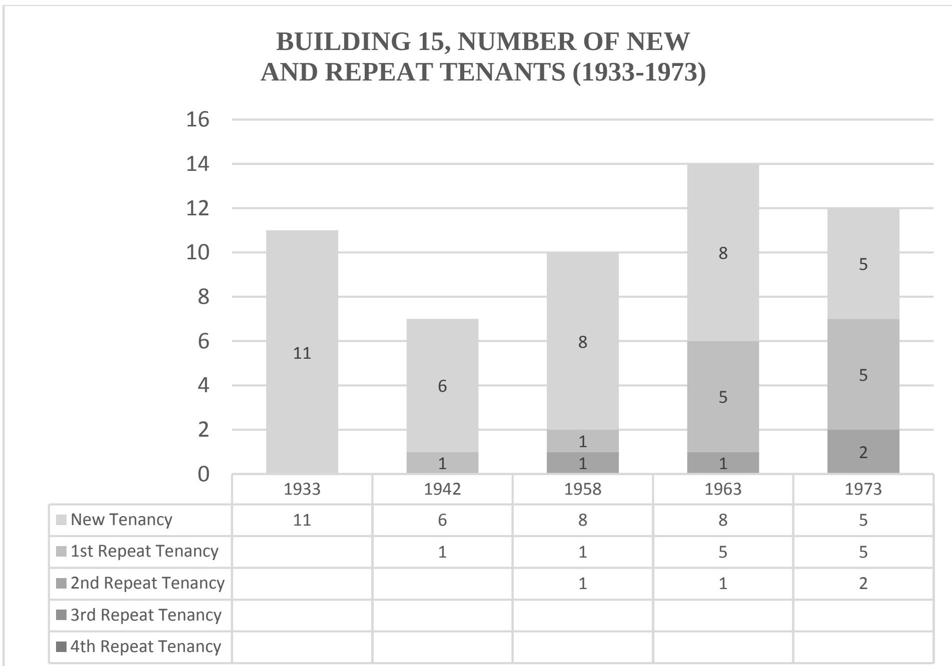


Figure 453: Building 15, number of new and repeat tenants from 1933–1973

There are a few narratives to note, in looking at the figures relating to socioeconomic composition, above:

- Similar to Building 11 and 13, *Apparel* is the only macro-category consistently represented throughout the five year sets observed for Building 15. There are 2–4 apparel-specific firms listed for Building 15 in the last four year sets, peaking with 5 in 1933. The low is observed in 1958 and 1973, with 2 apparel-specific firms observed in that year.
- *Decorative & Notions* is another dominant macro-category worth noting, consistently observed in the last four year sets. The macro-category peaks with a tenant count of 5 in 1973, has a low of 1 tenant in 1942, and represents 3 tenants in 1958 and 1963.

- In terms of macro-categorical diversity, Building 15 reaches a peak in 1958 and 1963 with 7 macro-categories represented. The low occurs in 1942 with 4 macro-categories. In the remaining year sets, in turn 5–6 macro-categories are observed.
- In regard to tenant distribution, 1958 and 1963 exhibits the relatively-equalized distribution of tenants among the macro-categories observed, with the 7 macro-categories in each year set being represented by 1–3 tenants. In 1933 and 1942, the tenant distribution is more lopsided, with *Apparel* representing the dominant portion of the occupant pool for those years. In 1973 in turn, *Decorative & Notions* takes on the dominant role in terms of tenant distribution, being represented by 5 firms.

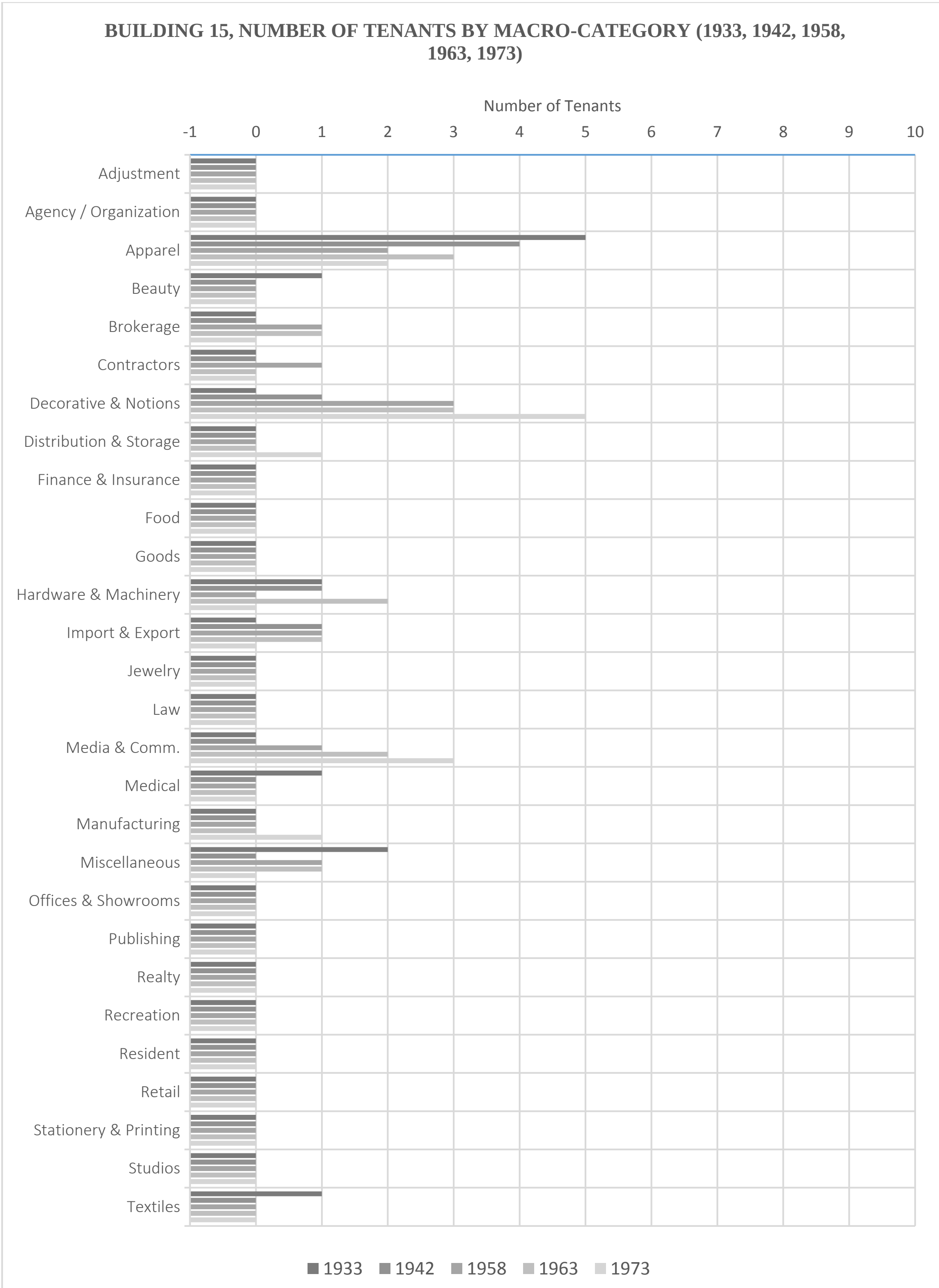


Figure 454: Building 15, number of tenants by macro-category, 1933, 1952, 1958, 1963, 1973

3.16. CONCLUSIONS AND BRIEF DISCUSSION

In examining the narratives of physical and socioeconomic change framed in Sections 3.1 through 3.15, a range of observations and further queries were uncovered. These points, to be analyzed in greater depth and detail in the final conclusions and discussion section of this dissertation, in the context of the findings of all three research phases, are framed briefly here.

(1) *SOUTHERN EXPOSURE:* Does increased southern exposure increase the likelihood of a building supporting higher densities of socioeconomic diversity?

As seen in the Sanborn Map excerpts shown below, 9 out of the 15 buildings exhibited south facing street-front facades (Buildings 1, 2, 4, 7, 9, 10, 11, 12, and 13). Of the 6 remaining non-south facing buildings in turn, 1 exhibited a rear facade that enjoyed more than the minimum of access to southern light (Building 3) in the rear of site, when compared to what would have been achieved if only the minimum rear setback requirements, and maximum density allowances (in terms of neighboring buildings) had been realized.

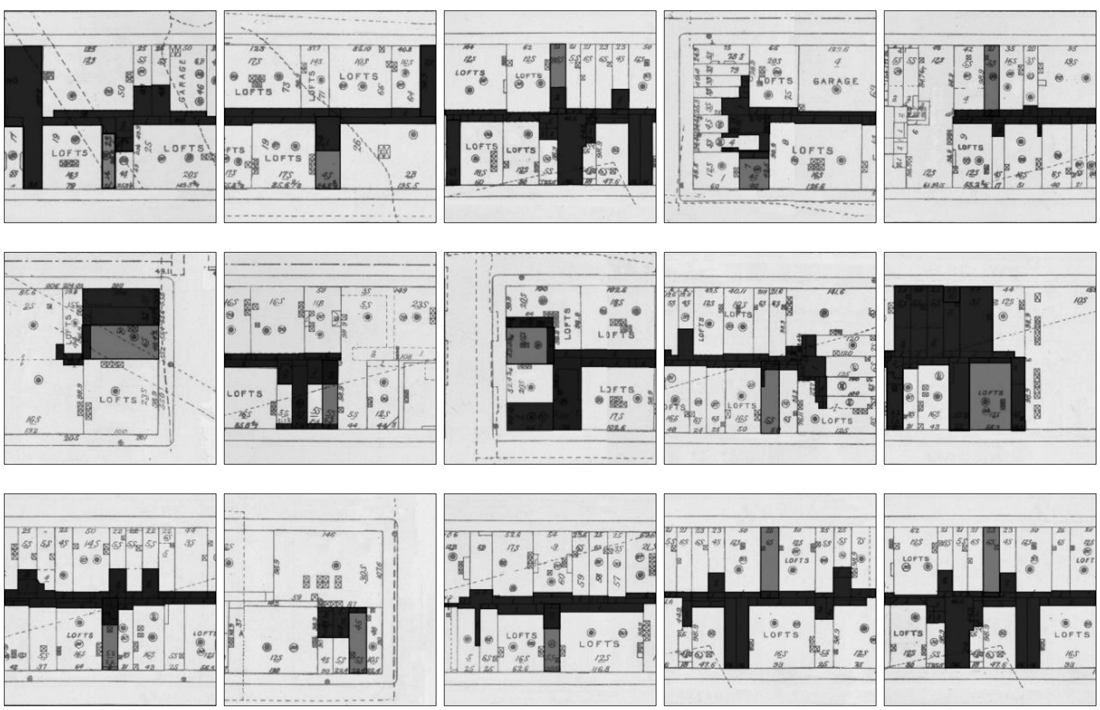


Figure 455: Excerpts from Sanborn Map from 1976, with Buildings 1-15 highlighted in dark tone, and the surrounding urban fabric that is shorter than or equal to half the height of Building 1-15 highlighted in further darker tone. No set scale. North is up.

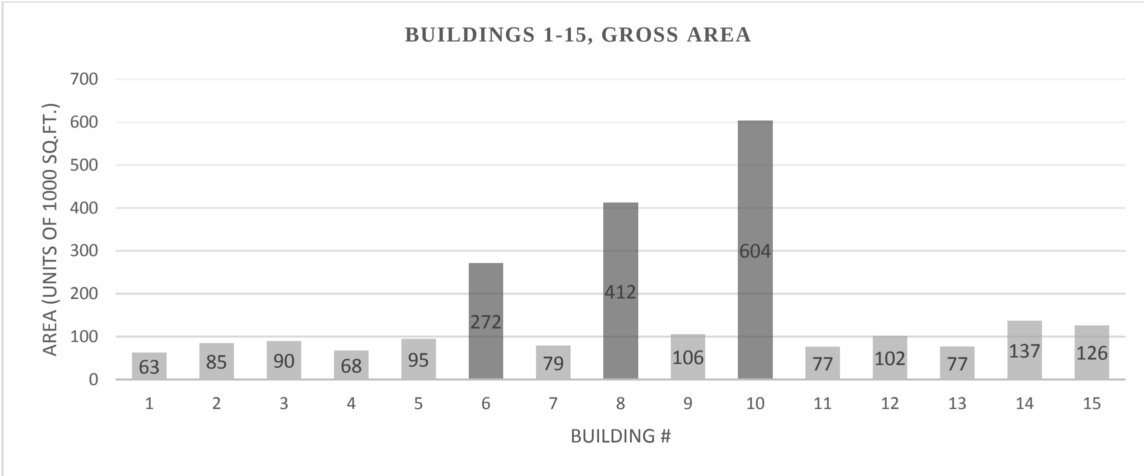
(2) *ACCESS TO LIGHT & AIR:* Does increased access to light & air in the rear and side portions of a floorplate increase the likelihood a building supporting higher densities of socioeconomic diversity?

Building off of the prior point, also visible in the Sanborn Map excerpts shown above, is that 10 out of 15 buildings (Buildings 1, 2, 3, 6, 7, 10, 11, 12, 13, 15) exhibited greater access to light & air via either the rear or sides of their respective sites, than would have been achieved had only the minimum code standards in terms of rear setbacks, and maximum density allowances in terms of heights of neighboring buildings, been realized.

(3) *BUILDING SIZE*: Do buildings with smaller gross areas have a higher likelihood of having more-diversified (i.e., less-homogenized) tenant pools?

This point is framed in the context that smaller buildings might have a higher likelihood of being overseen by more-localized and more-flexible property management structures. Although property management firms and building-support offices (that were permanently housed inside of the buildings they were overseeing) were often observed throughout the Garment District, for these higher-performing 15 buildings, there were no such listings found in the tenant pools. Although 2 building management firms were observed in Building 10 in 1942 and 1958, it was verified that these management companies were in charge of properties unrelated to Building 10 itself.

As seen in the first chart on the page that follows (Figure 456), 12 out of the 15 buildings studied had gross building areas under 150,000 square feet. The chart that follows, in turn, shows the micro-specialization-to-tenant-count ratio for the peak occupancy year for each building. As observed, the smaller buildings display higher ratios of micro-specializations in relation to total occupancy counts. It must be remembered though that these larger buildings were still among the highest performing buildings in regard to consistent densities of socioeconomic diversity supported from 1930–1980. A key point for the next phase therefore, is to see how these larger buildings compare to buildings of similar size that performed consistently poorer in terms of densities of socioeconomic diversity. Regarding repeat tenancies in turn, although it was expected that this would be a useful socioeconomic parameter of consideration, no significant patterns or data behaviors were observed within the analyses of Buildings 1–15.



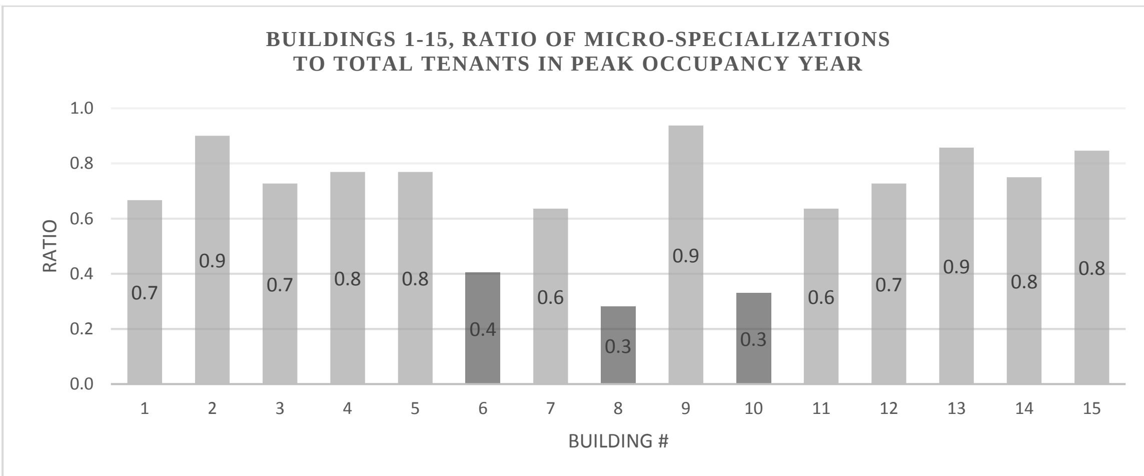


Figure 456, 457: Chart showing gross area for Buildings 1–15, with 3 larger buildings highlighted in darker grey scale; and chart showing the ratio of micro-specializations to total tenants observed in Buildings 1–15 during the peak occupancy year for each building.

(4) *ASSYMETRIC CORE PLACEMENT*: Do buildings with asymmetrically placed cores exhibit an increased likelihood of developing a richness internal spatial diversity?

As observed below, all of the 15 buildings studied exhibit asymmetrically placed cores. Such a configuration seems to support the subdividing of the floorplan into a more-heterogeneous diversity of spaces, when compared to the more-homogeneous arrangement of spaces that often occur in plans with centralized cores. This richness regarding spatial diversity can be observed in the second subsection of Sections 3.1 through 3.15 (e.g., Section *3.14.2 Internal Spatial Composition*), specifically within the Unit Area and Unit Dispersion charts found therein.

Figure 458 (left to right): Initial plans of Buildings 1-7, 15 (top row) and 8-14 (bottom row) with core areas highlighted in dark tone. 1" = 32'. Plans oriented so that the street front would be down.

While this type of asymmetric core placement seems to be a common method for logically achieving the largest possible rentable floor area in smaller buildings, the intriguing point to take note of here, is that the three larger buildings seen below (Building 6, 8, and 10), also exhibit the same type of core placement and subsequent richness of internal spatial diversity.

This is a key piece of information to analyze in the context of the findings of Phase III, with similarly-sized buildings which consistently performed poorly in terms of supporting densities of economic diversity, being studied. The question is, bluntly, are Buildings 6, 8, 10 big versions of small building logic, as opposed to big versions of big building logic? In looking at the building stock of the Garment District, can a differentiation of two such big-building typologies be constructed?

(5) *FAÇADE RHYTHM:* Do facades that exhibit more regularized increments of solid walls or thick mullions allow for greater flexibility in internal partitioning?

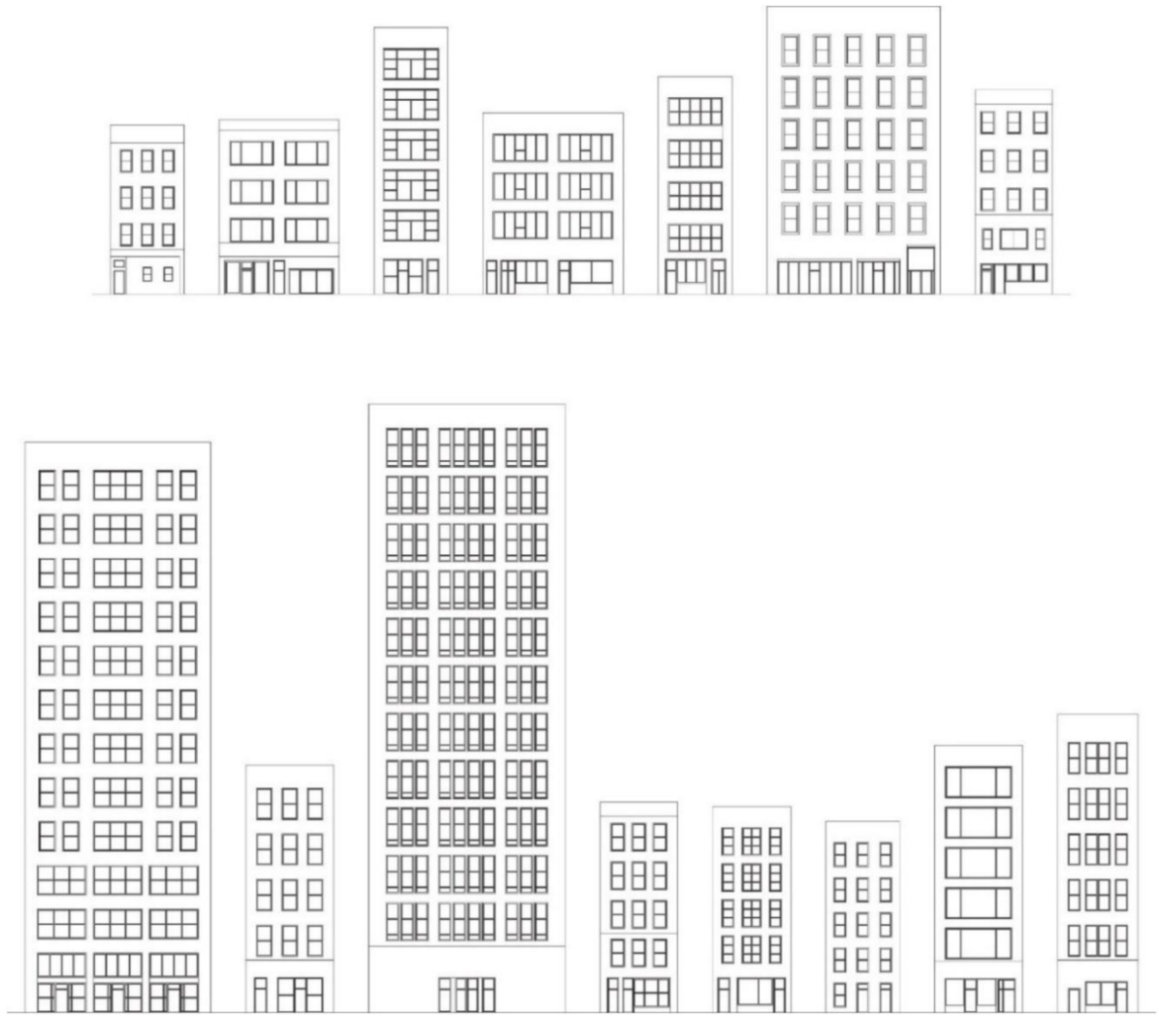
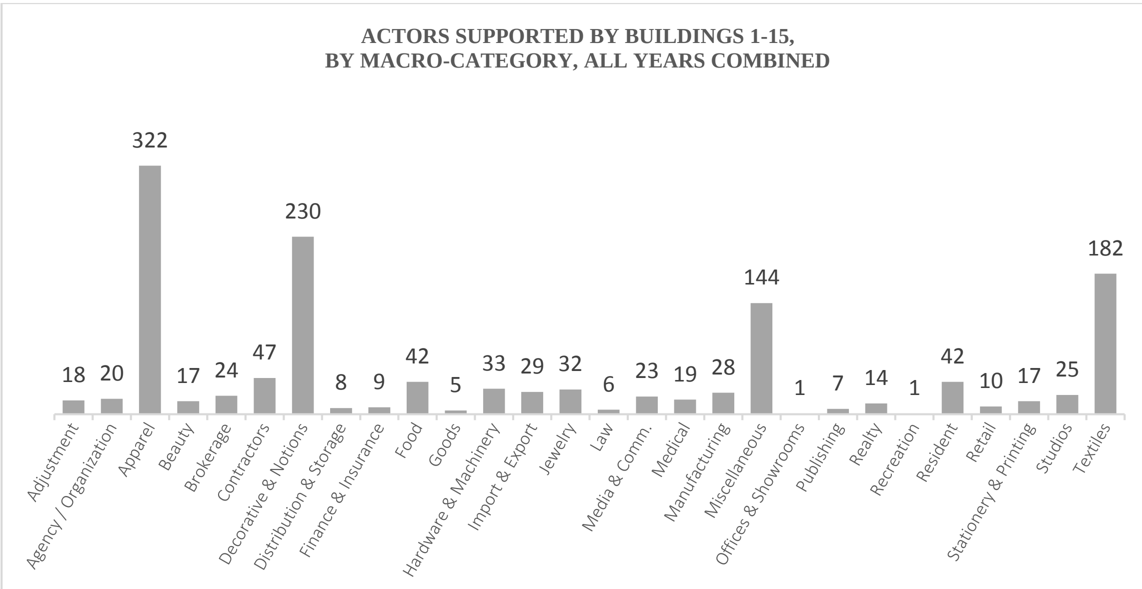


Figure 459: Street-front elevations of Buildings 1–15. 1" = 32'.

As can be seen in the image above, 12 out of the 15 building studied exhibited facades with rather steady increments of solid walls or thick mullions (with Buildings 3, 5, and 14 being the exceptions). As can be observed in the range of plans exhibited in Sections 3.1 through 3.15, the existence of such regularized increments in the façade would seem to support the capacity of a plan to be partitioned to accommodate a range of unit widths, and therefore sizes. Contrary to the Corbusian espousal of the ribbon window therefore, it can be extrapolated that the façade that supports the freer plan (free in terms of its ability to support a range of internal partitioning schemes) may in fact be one with regularized intervals that grant the process of internal partitioning some proverbial *wiggle room*. Also important to note here is the materiality of the buildings. With the facades of the buildings being ubiquitously composed of brick, this low-tech material palette would seem to further support an ease of internal partitioning via a range of building cultures.

(6) WHAT WAS THE GARMENT DISTRICT? Is the narrative accurate, robust, complete?



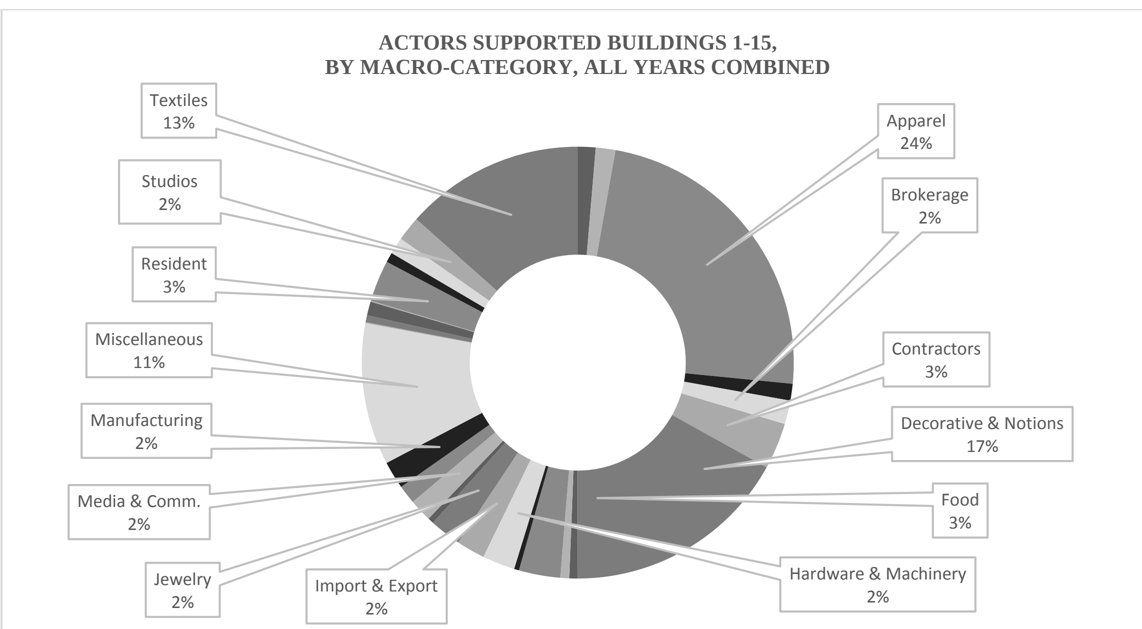


Figure 460, 461: (top) Showing number of actors by macro-category for all year sets combined, for Buildings 1–15; and (bottom) pie chart showing same data, with only macro-categories representing 2% or more of the total actor pool, labeled.

In studying the types and number of actors supported by these 15 buildings, it was particularly eye opening to note the sheer range of socioeconomic diversity present in the observed year sets. The greater surprise though, was that in the buildings being studied, apparel-specific firms did not seem to appear in the occupant listings as consistently as would be expected. This can be seen above, in the two graphics showing the occupant distribution by macro-category as supported by the fifteen buildings studied. While the macro-category of *Apparel*, at 24%, is clearly a major shareholder of the broader socioeconomic fabric being supported, the diversity inherent to the overall the socioeconomic portfolio of Buildings 1–15 has quite a significant amount of depth when compared to, for instance, the socioeconomic fabrics supported by buildings over 150,000 gross square feet, in the entirety of the Garment District, seen below.

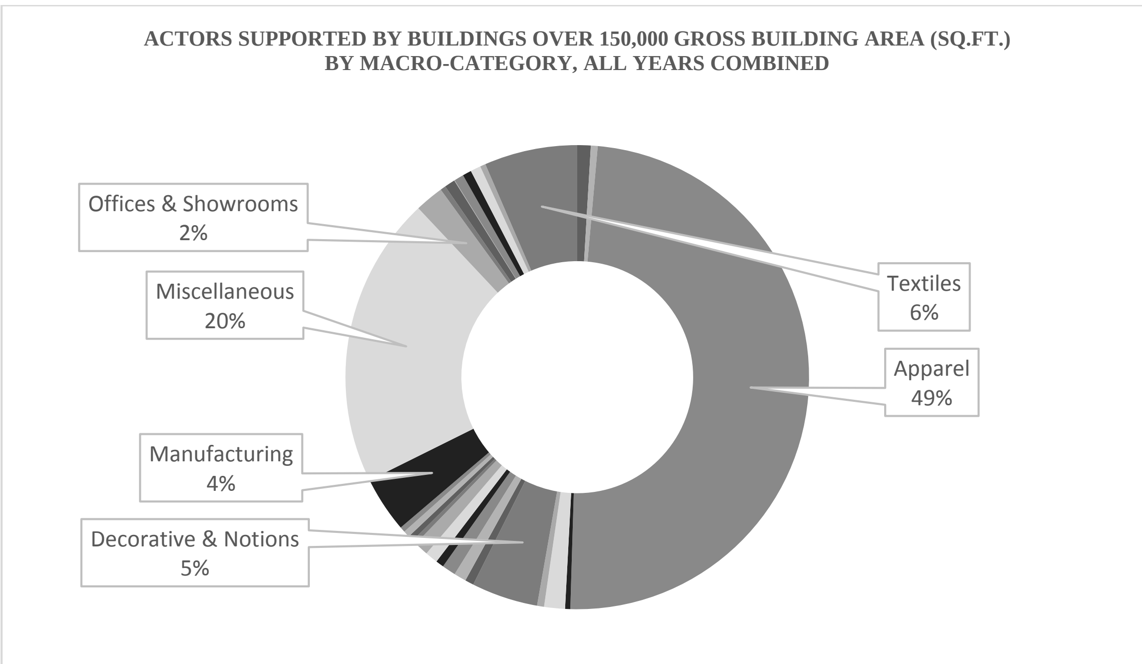


Figure 462: Pie chart showing socioeconomic composition for all buildings of the Garment District over 150,000 square feet in gross building area, for all year sets, with only macro-categories representing 2% or more of the total actor pool, labeled.

The narratives being framed by these graphics are of course *similar* in nature, but they are by no means equivalent. Specifically in the context of contemporary efforts to *save the Garment District*, it seems first a more basic question must be posed: What was the Garment District? Is there a difference between the Garment District supported by big buildings and the Garment District supported by smaller buildings? This point is all the more important to revisit, as the socioeconomic fabric supported by the poorer performing buildings, is detailed in full in Phase III of this research.

CHAPTER IV

PHASE THREE: INTRODUCTION

Phase III of this research was framed as a mixed-method study looking at a smaller sample of buildings that were found to have consistently supported a lower diversity of socioeconomic actors from 1930–1980 in the Midtown Garment District of New York City, as determined via the data unveiled in Phase I, in order to further test some of the findings uncovered during Phase II. In total, five buildings were examined during this phase. While it would have been ideal to establish a larger sample size, in order to obtain the same depth of information per building as was obtained in Phase II, while still remaining within a viable research timeline, an overall reduction of the number of buildings being looked at had to be pursued in Phase III, with a systematized-randomization process being put into place in order to avoid selection bias. The objectives in analyzing these five buildings were: (1) to understand how the buildings in question changed physically, internally and externally, during this time period; (2) to understand how the socioeconomic fabrics supported by these buildings changed during this time period; and (3) to analyze whether certain commonalities or patterns became visible when comparing these narratives of physical and socioeconomic change.

For each of the five buildings studied during this phase, the following information was obtained, compiled, analyzed, and reproduced in a legible format: (1) Two sets of architectural drawings, documenting the physical / spatial conditions of the building as close to 1930 and 1980 as was possible to obtain information for; and (2) the detailed occupant listings for each building from 1933, 1942, 1958, 1963, and 1973.

As was the case in Phase II of this research, various resources were used in order to frame a robust and detailed understanding of these buildings. The architectural information being pursued was largely gathered through archival work at the New York City's Department of Buildings, via the examination of various historic records, ranging from New Building Permits, Demolition Permits, Alteration Permits, and Certificates of Occupancy. A range of architectural, engineering, and real estate offices in Manhattan, choosing to remain anonymous, also provided critical information in regard to these five buildings being studied. Most of the obtained documents however were hand-drawn plans, elevations, and sections, often covering only portions of the buildings in question. A substantial degree of compilation was required prior to re-drafting all of the architectural drawings for these buildings into a legible and consistent format. Just as in Phase II, for each of the buildings being studied, two complete sets of plans were produced (from a date as close as possible to 1930 as well as 1980), along with one street-front façade (from a date as close as possible to 1980).

In obtaining the data and information pertaining to the detailed socioeconomic fabrics supported by these buildings, the New York Public Library, the Library of Congress, and the Boston Public Library were the main resources used. Much of the archival work revolved around the examination of microfiche and physical archival sources. These were then documented and recoded into a legible format. Any missing information regarding these socioeconomic narratives was subsequently filled through additional research done in local newspaper archives. The digital archives of the New York Times proved of great substance during this phase. In the end, for each of the five buildings, a complete and detailed occupant list was produced for the years of 1933, 1942, 1958, 1963, and 1973.

While detailed historic narratives were also compiled and produced for each building, since it was required that the building addresses themselves be anonymized due to various non-disclosure agreements signed while obtaining the necessary architectural / spatial information, these narratives were omitted from the research, just as in Phase II.

In the following five sections (Sections 4.1 through 4.5), one will find the following provided for each building: (1) a brief description of the building on an architectural and urban-contextual level; (2) detailed information regarding the changes observed in the internal spatial composition of the building; and (3) detailed information regarding the changes to the socioeconomic fabric supported by the building, observed between 1933–1973. Section 4.6 in turn is a brief discussion section that serves to summarize these findings through a more analytical framework, seeking to uncover whether certain commonalities or patterns can be observed through the collective narratives of physical / spatial and socioeconomic change exhibited by these buildings.

4.1. BUILDING 16

4.1.1. ARCHITECTURE AND URBAN CONTEXT

Building 16 is a twelve-story structure built in 1914. It is 93’-0” wide and 99’-0” deep on the first (ground) floor, and 89’-0” deep on the remaining eleven floors. It is classified as a Fireproof Structure—one of three among the five building being studied in this research phase (the others being Building 17 and 18). Its outer envelope is brick, while its primary structure is composed of steel with robust concrete reinforcement. It has three elevators, and two set of stairs.

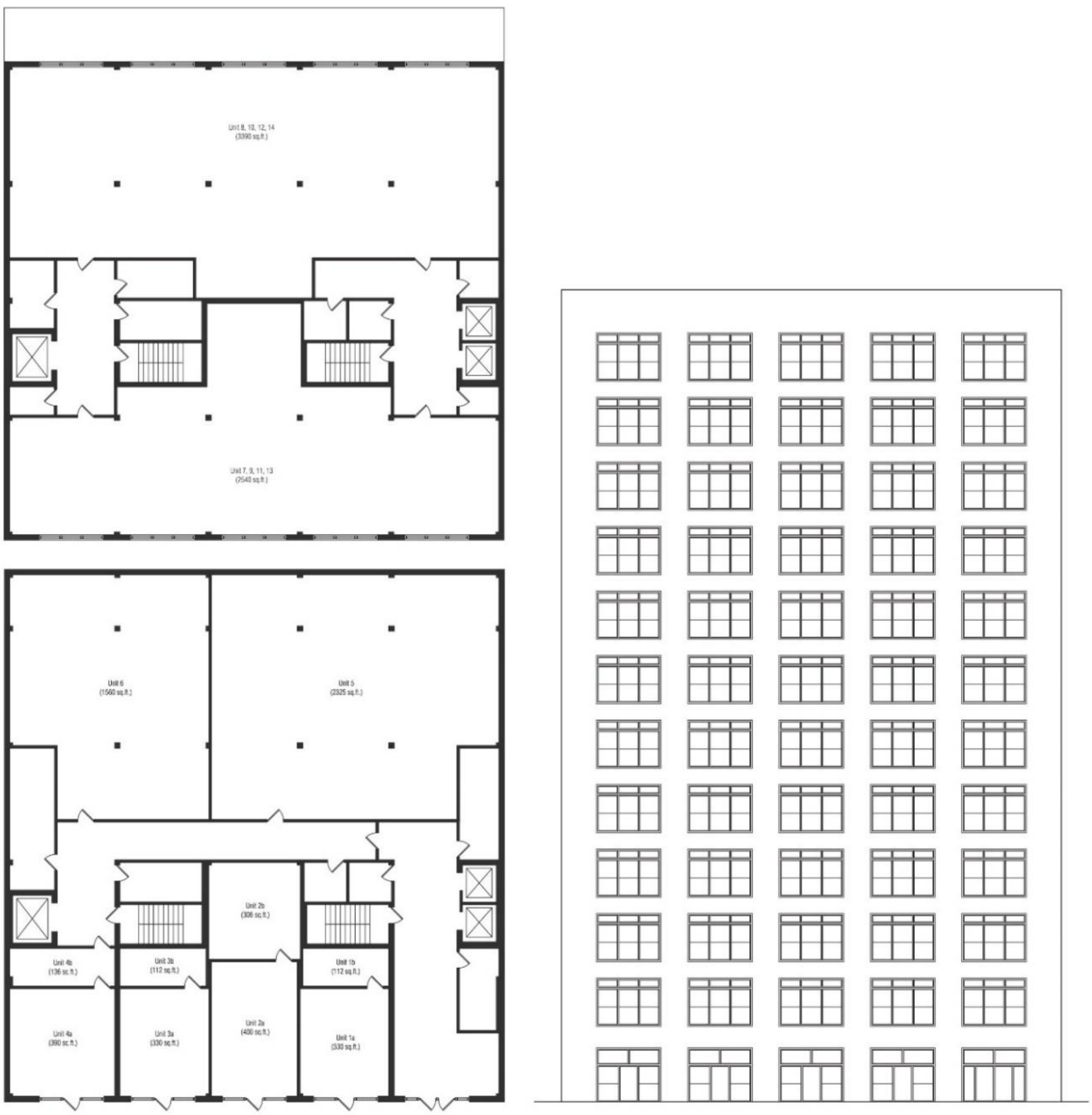


Figure 463, 464, 465: (top left) Building 16, first (ground) floor (1914); (bottom left) floors 2–12 (1914); (right) street-front elevation (1973). 1” = 32’. For plans, north is down.

The street-front façade of Building 16 faces north. In the rear (southern) and side (eastern) portion of the site, Building 16 also has more access to air light than what would have been provided if only the minimum rear setbacks required by code had been achieved, as is documented in the rightmost graphic below. It is important also to note that the building to the west is also only seven stories tall, leaving the top four floors of Building 16 with additional access to light and air.

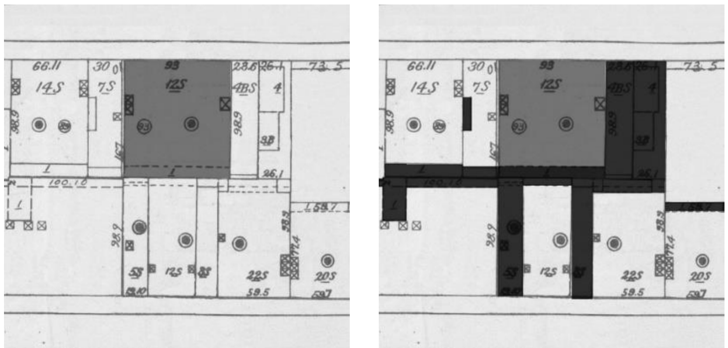
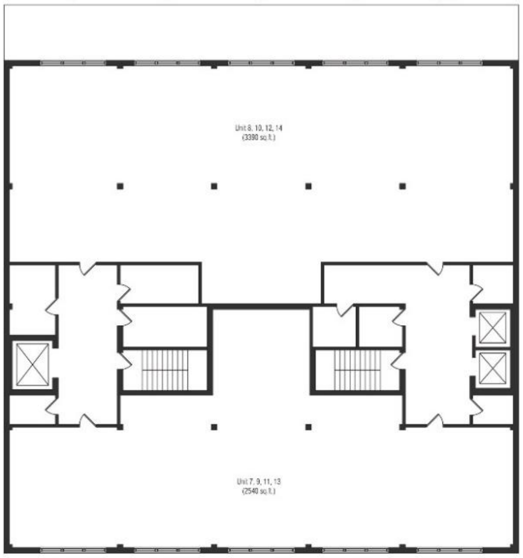


Figure 466, 467: Excerpt from Sanborn Map from 1976, with Building 16 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 16 highlighted in further darker tone. No set scale. North is up.

4.1.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 16 obtained for 1914 and 1973, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 468, 469 (left to right): Building 16, first floor (1914); same floor (1973); 1" = 32'. North is down.



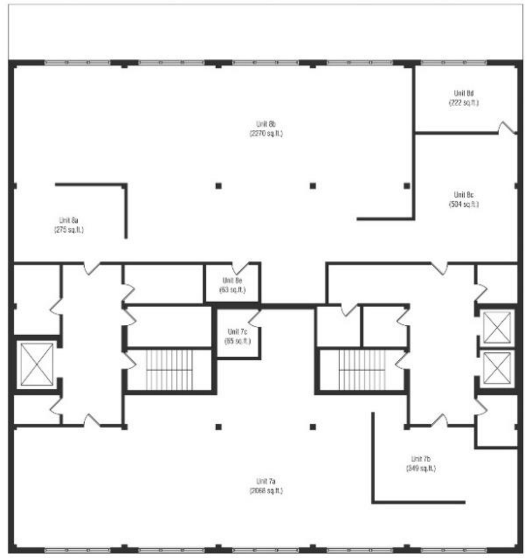
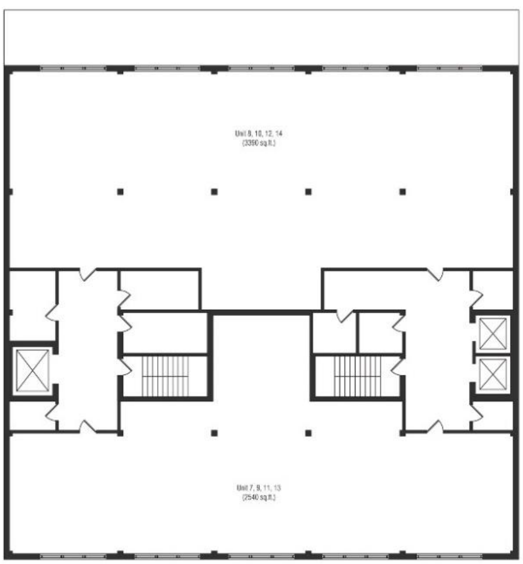


Figure 470, 471 (left to right): Building 16, second floor (1914); same floor (1973); 1" = 32'. North is down.



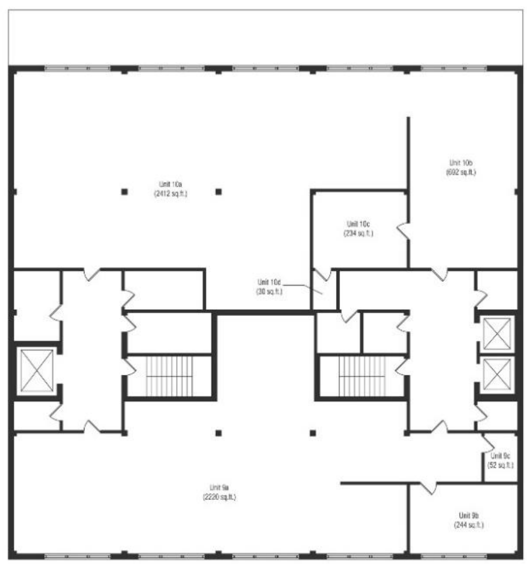


Figure 472, 473 (left to right): Building 16, third floor (1914); same floor (1973); 1" = 32'. North is down.

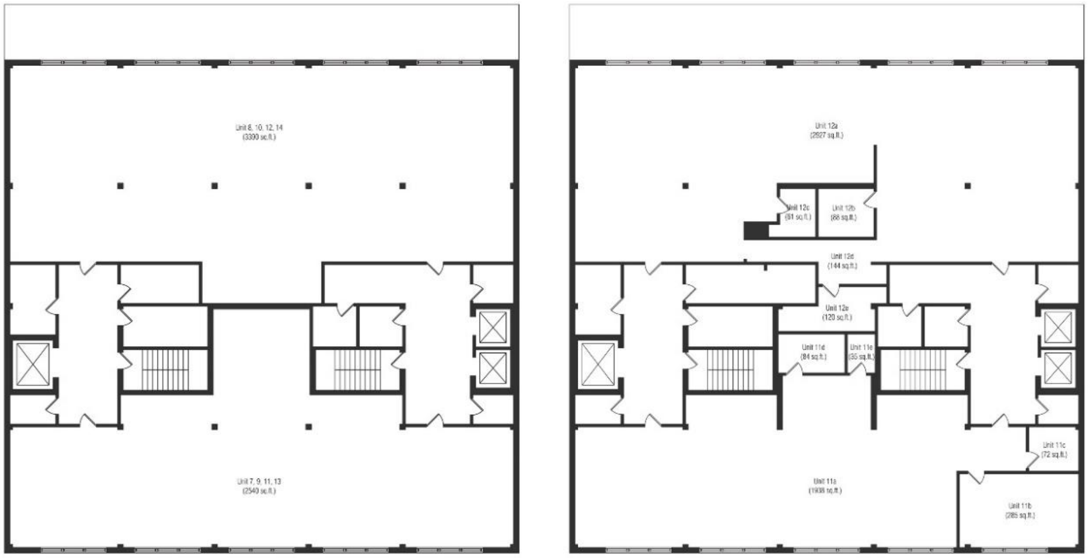
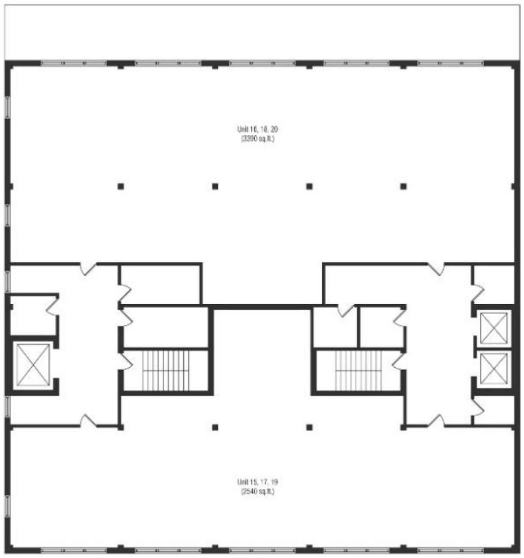


Figure 474, 475 (left to right): Building 16, fourth floor (1914); same floor (1973); 1" = 32'. North is down.

Figure 476, 477 (left to right): Building 16, fifth floor (1914); same floor (1973); 1" = 32'. North is down.



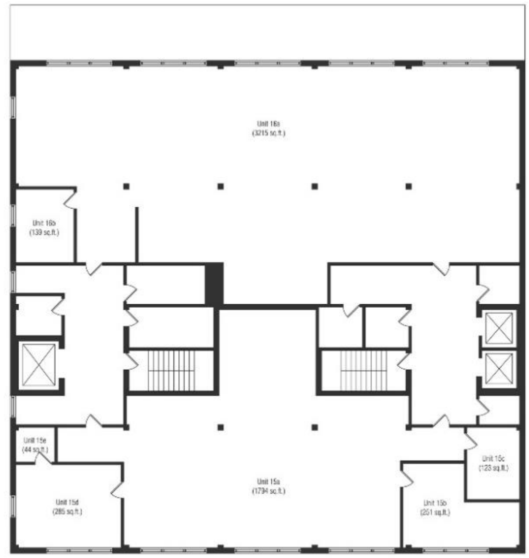
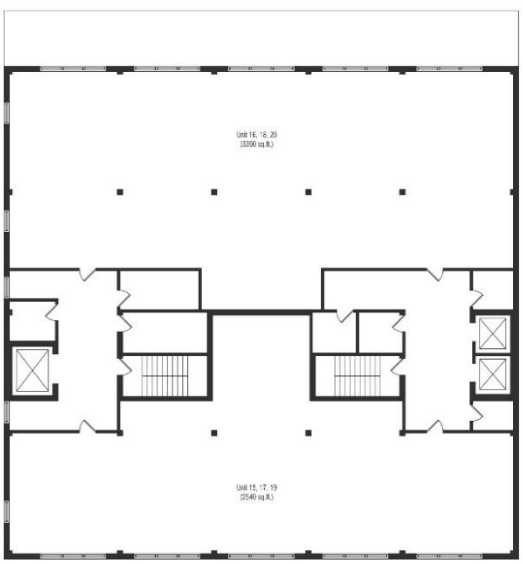


Figure 478, 479 (left to right): Building 16, sixth floor (1914); same floor (1973); 1" = 32'. North is down.



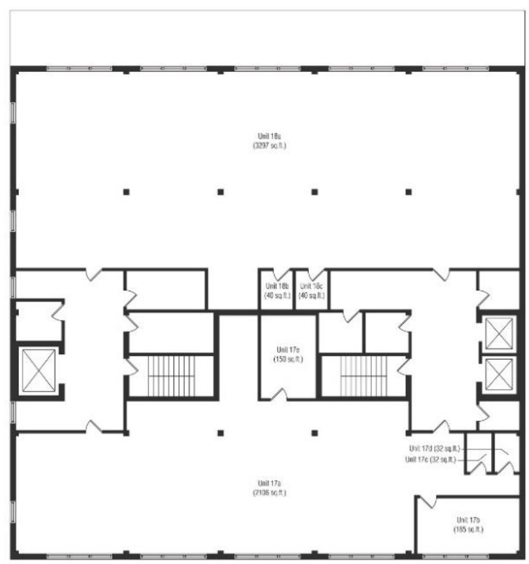


Figure 480, 481 (left to right): Building 16, seventh floor (1914); same floor (1973); 1" = 32'. North is down.

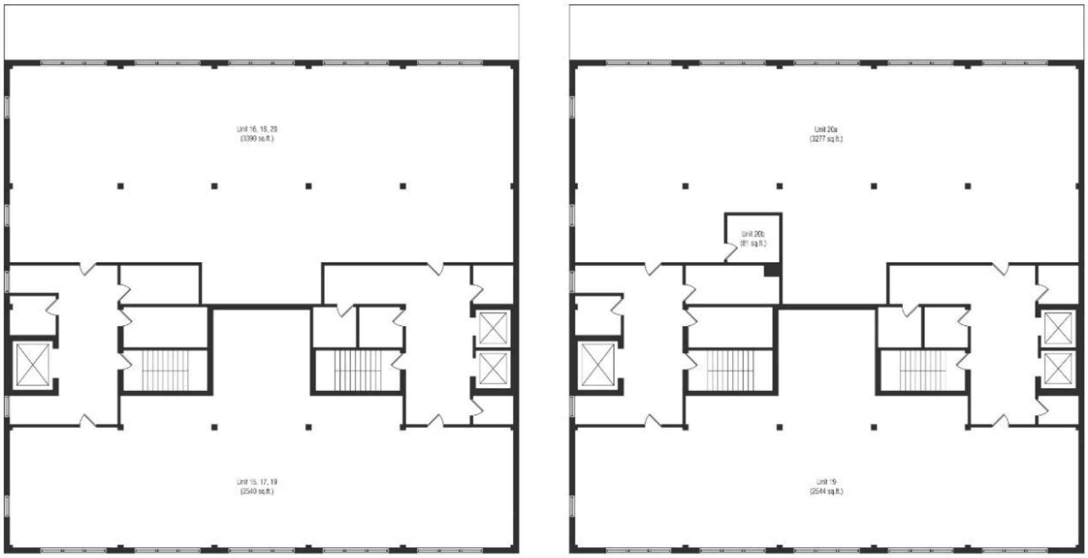


Figure 482, 483 (left to right): Building 16, eighth floor (1914); same floor (1973); 1" = 32'. North is down.

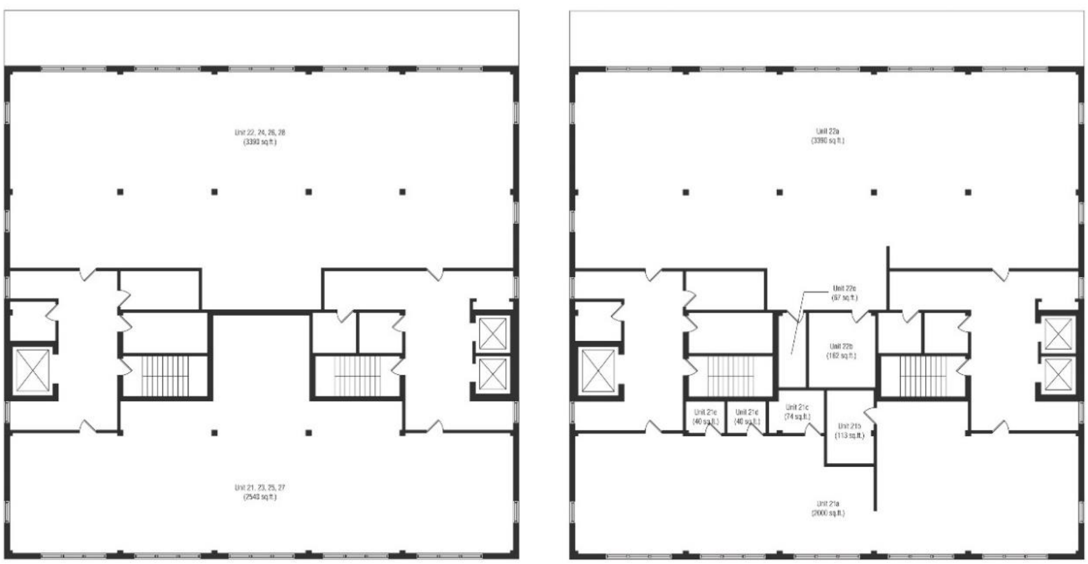
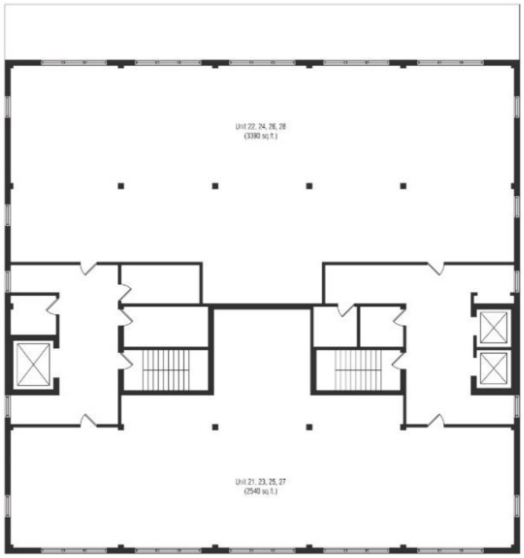


Figure 484, 485 (left to right): Building 16, ninth floor (1914); same floor (1973); 1" = 32'. North is down.



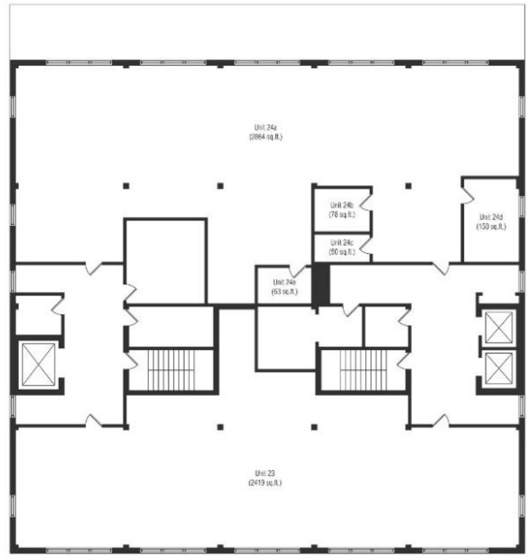
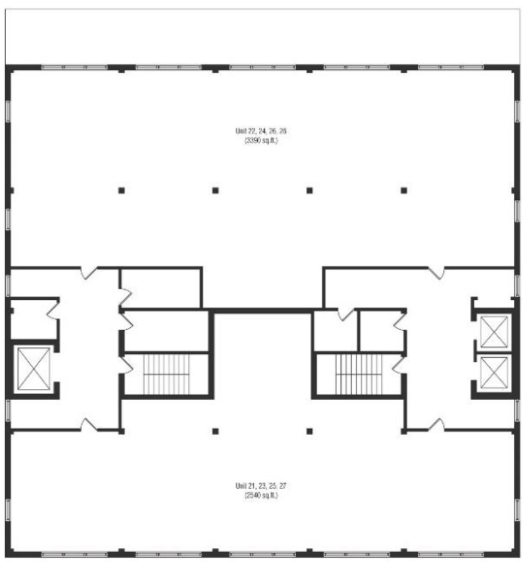


Figure 486, 487 (left to right): Building 16, tenth floor (1914); same floor (1973); 1" = 32'. North is down.



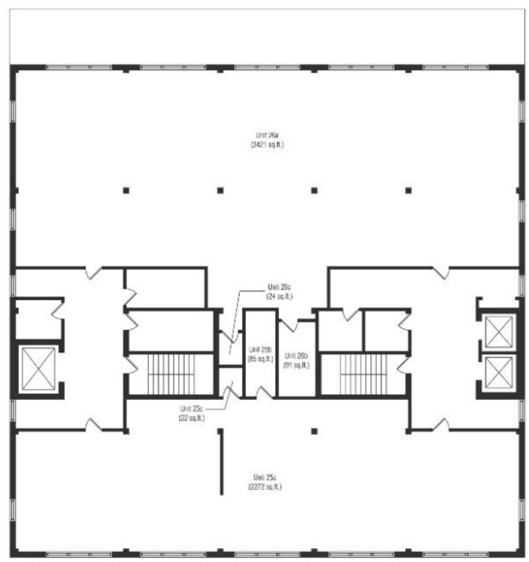
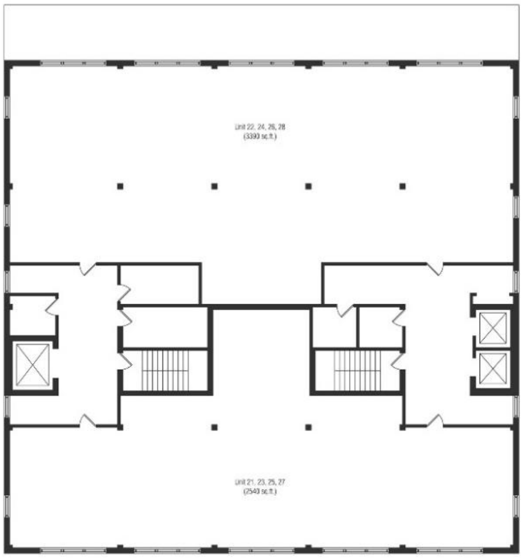


Figure 488, 489 (left to right): Building 16, eleventh floor (1914); same floor (1973); 1" = 32'. North is down.



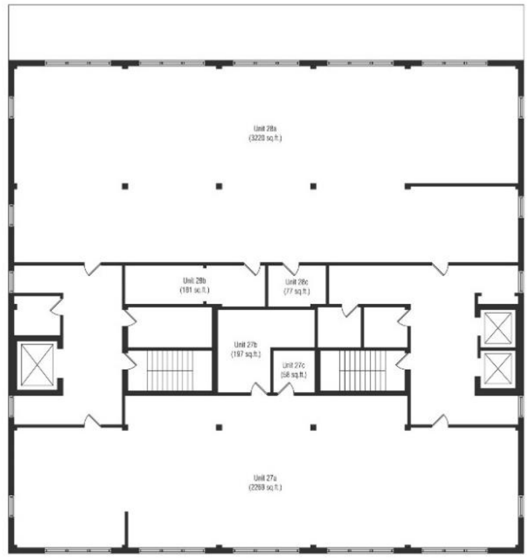
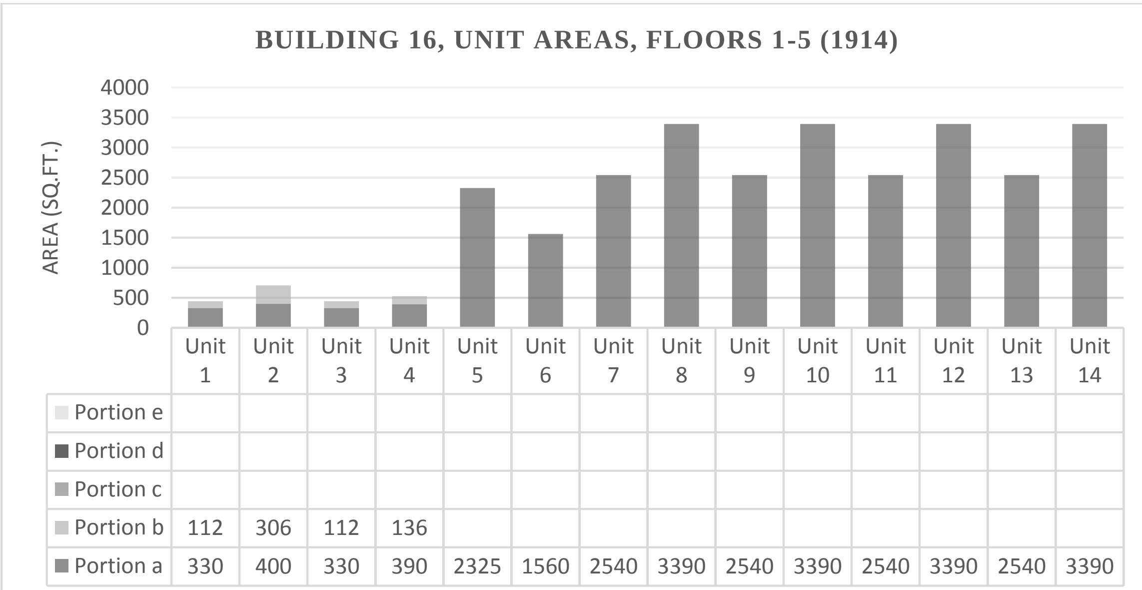
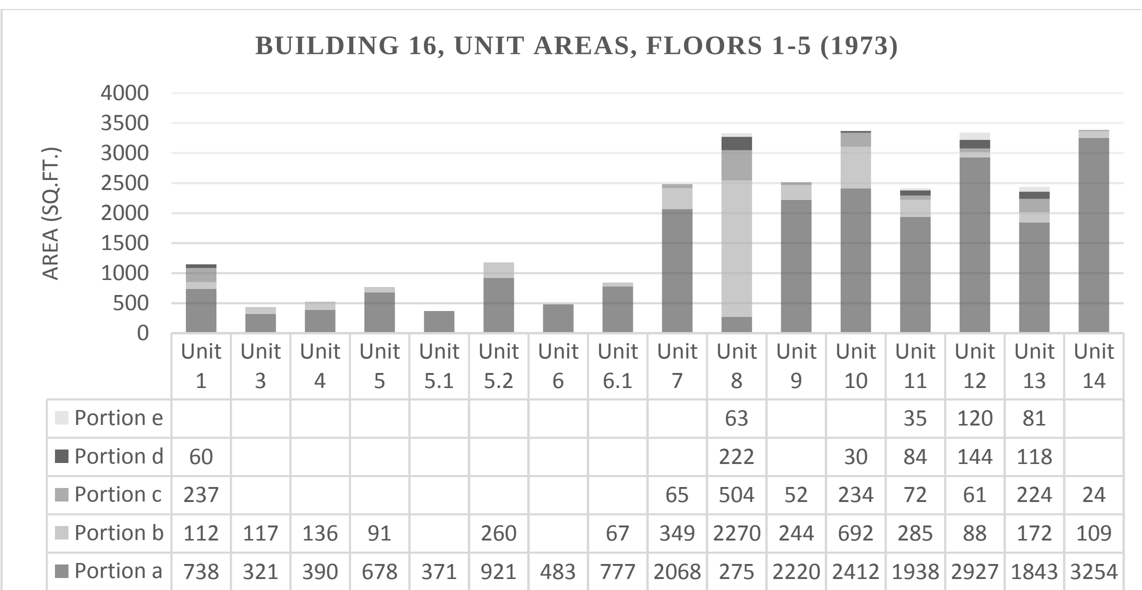


Figure 490, 491 (left to right): Building 16, twelfth floor (1914); same floor (1973); 1" = 32'. North is down.

In 1914, Building 16 had 28 units, with 6 units on the first (ground) floor, and 22 units on the eleven floors above. In 1973 by comparison, an increase of the total unit count to 30 was observed, with 8 units being on the first floor (2 more than in 1914) and 22 units on the eleven floors above (same as in 1914). As can be observed in the graphics below, the 1973 state of Building 16 exhibits rather similar internal spatial diversity (especially from Unit 7 onwards), when compared to its 1914 state.

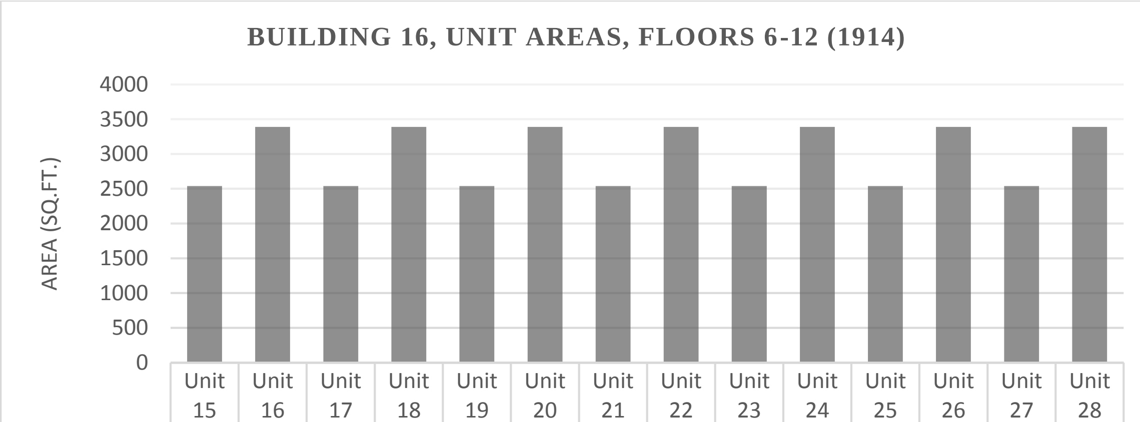


	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14
Portion e														
Portion d														
Portion c														
Portion b	112	306	112	136										
Portion a	330	400	330	390	2325	1560	2540	3390	2540	3390	2540	3390	2540	3390

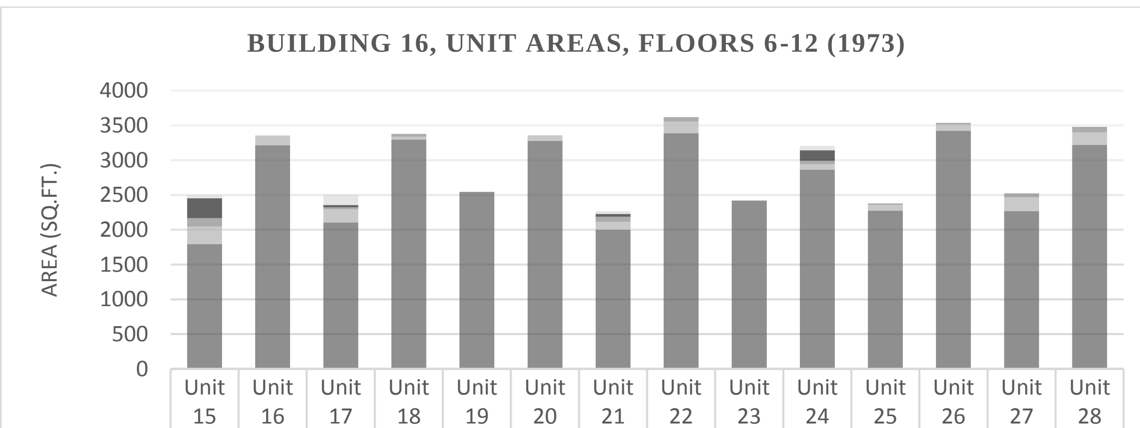


	Unit 1	Unit 3	Unit 4	Unit 5	Unit 5.1	Unit 5.2	Unit 6	Unit 6.1	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14
Portion e										63			35	120	81	
Portion d	60									222		30	84	144	118	
Portion c	237								65	504	52	234	72	61	224	24
Portion b	112	117	136	91		260		67	349	2270	244	692	285	88	172	109
Portion a	738	321	390	678	371	921	483	777	2068	275	2220	2412	1938	2927	1843	3254

Figure 492, 493: Unit areas for Building 16, floors 1–5, for 1914 and 1973, with “portions” signifying internal subdivisions within individual units (“portion a” is the first space upon entry).



	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27	Unit 28
Portion e														
Portion d														
Portion c														
Portion b														
Portion a	2540	3390	2540	3390	2540	3390	2540	3390	2540	3390	2540	3390	2540	3390



	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27	Unit 28
Portion e	44		150				40			63				
Portion d	285		32				40			150				
Portion c	123		32	40			74	67		50	22	24	58	77
Portion b	251	139	185	40		81	113	162		78	85	91	197	181
Portion a	1794	3215	2106	3297	2544	3277	2000	3390	2419	2864	2272	3421	2269	3220

Figure 494, 495: Unit areas for Building 16, floors 6–12, for 1914 and 1973, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1914, among the 22 units above the first (ground) floor, the average unit size for Building 16 was 2965 square feet, with the smallest unit being 2540 square feet and the largest being 3390 square feet. In 1973 by comparison, among the 22 units above the first floor, the average unit size had remained roughly the same at 2925 square feet, with the smallest unit falling to 2267 square feet but the largest inversely expanding to 3619 square feet.

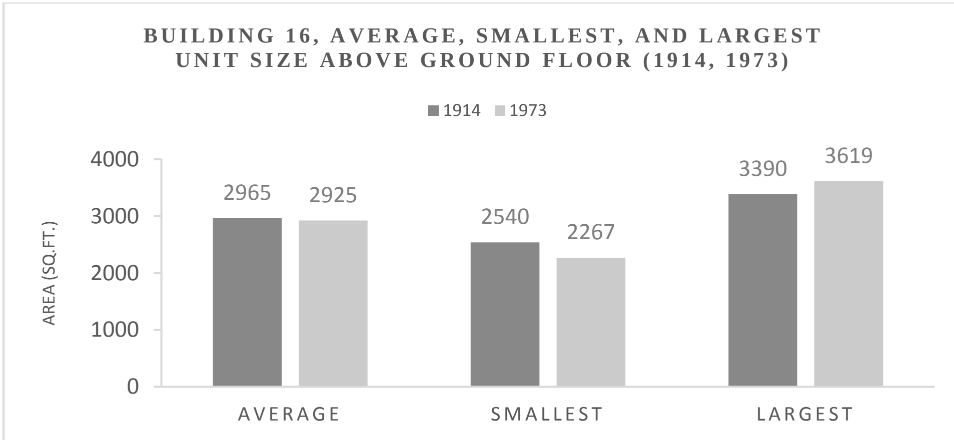
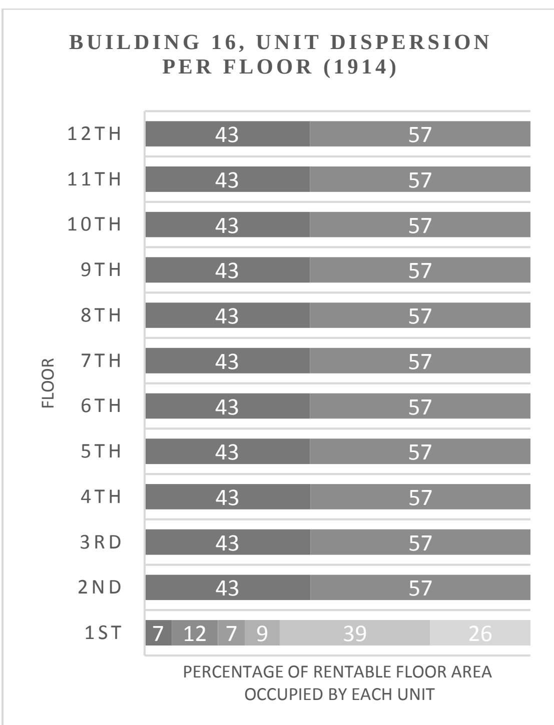


Figure 496: Building 16, average, smallest, and largest unit size above first (ground) floor for 1914 and 1973.

Below is a visualization showing the changes to the internal arrangement of Building 16, floor by floor. One observes that while there are changes between 1914 and 1973, the floor-to-floor unit dispersion remains roughly the same.



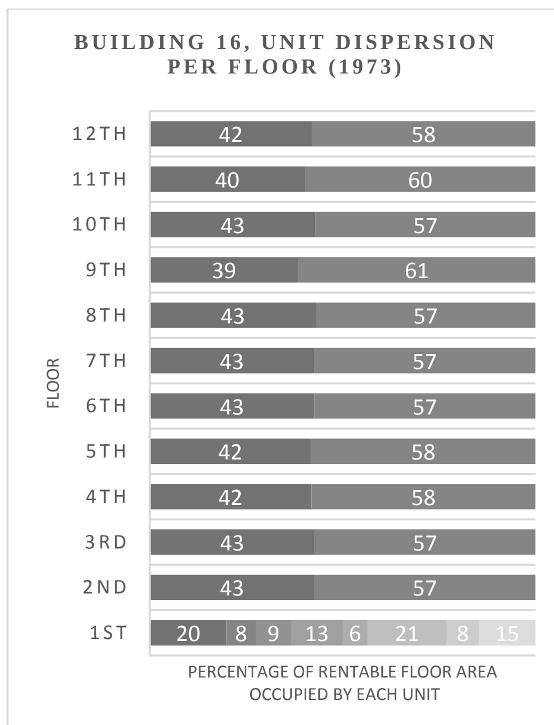


Figure 497, 498: Building 16, unit dispersion per floor, 1914 and 1973.

4.1.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 16 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Cloaks & Suits	Dresses (1)	Converting (1)	Dresses (2)	Dresses (2)
Coats & Suits	Apparel	Dresses (1)	Dresses (1)	Miscellaneous (2)
Dresses	Apparel	Dresses (1)	Dresses (1)	Notions (2)
Dresses	Apparel	Apparel	Dresses (1)	Offices (2)
Dresses	Apparel	Apparel	Dresses (1)	Apparel (1)
Dresses	Cloaks	Apparel	Dresses (1)	Distribution (1)
Dresses	Dresses	Apparel	Junior Apparel (1)	Dresses (1)
Dresses	Dresses	Dresses	Knit Apparel (1)	Offices (1)
Dresses	Dresses	Dresses	Manufacturing (1)	Textiles (1)
Dresses	Dresses	Dresses	Miscellaneous (1)	Dentistry
Dresses	Dresses	Dresses	Miscellaneous (1)	Dentistry
Dresses	Dresses	Dresses	Notions (1)	Dresses
Dresses	Dresses	Dresses	Notions (1)	Miscellaneous
Dresses	Dresses	Dresses	Shoulder Pads (1)	Miscellaneous
Dresses	Dresses	Dresses	Textiles (1)	Miscellaneous
Dresses	Dresses	Dresses	Apparel	Miscellaneous
Dresses	Dresses	Dresses	Apparel	Notions
Dresses	Dresses	Dresses	Apparel	Textiles
Dresses & Waistcoats	Dresses	Knit Apparel	Apparel	Textiles
Miscellaneous	Dresses	Manufacturing	Distribution	Textiles
Miscellaneous	Dresses	Miscellaneous	Dresses	
Retail	Dresses	Miscellaneous	Dresses	
Silks	Dresses	Miscellaneous	Dresses	
Trucking	Dresses	Miscellaneous	Dresses	
Trucking	Insurance	Notions	Junior Apparel	
	Miscellaneous	Notions	Junior Apparel	
	Miscellaneous	Printing & Stationery	Miscellaneous	
	Realty	Shoulder Pads	Miscellaneous	
	Silks	Sport Apparel	Offices	
		Sport Apparel	Sport Apparel	
		Textiles	Textiles	
		Textiles	Textiles	
		Textiles	Textiles	
		Women's Apparel	Textiles	
			Women's Apparel	

Figure 499: Changing socioeconomic composition of Building 16 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 16 had 25 tenants, totaling 8 micro-specializations. In 1942, total tenancy rose to a count of 29, while micro-specializations dropped slightly to 7. In 1958, there was an increase to 34 tenants and 12 micro-specializations. In 1963, a rise again, this time slight, in both occupancy and micro-specialization was witnessed, achieving a peak count of 35 and 13, respectively. In 1973 in turn, a significant drop to 20 total tenants and 8 micro-specializations was observed.

Below, in addition to a graphic summarizing the tenant and micro-specialization counts, there is also a graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 16. For Building 16, the first repeat tenancy occurs in 1942, with a count of 1 being documented. In 1958, 3 repeat occupants are observed. In 1963, 15 repeat tenants are observed, one of which (an apparel firm specialized in dresses) is a second-time repeat tenant. In 1973, among the 9 repeat tenants, 4 are firms renewing tenancy for a second consecutive year set.

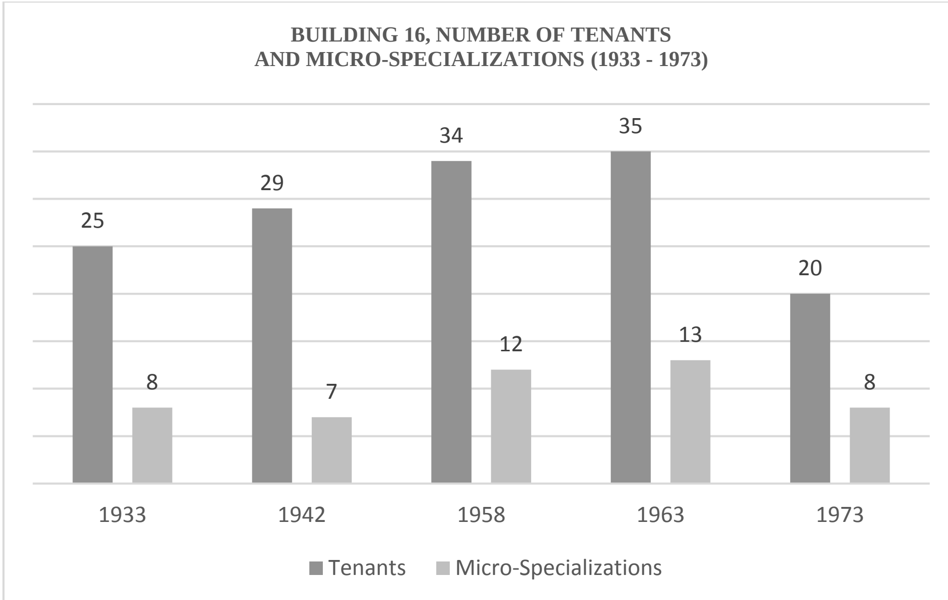
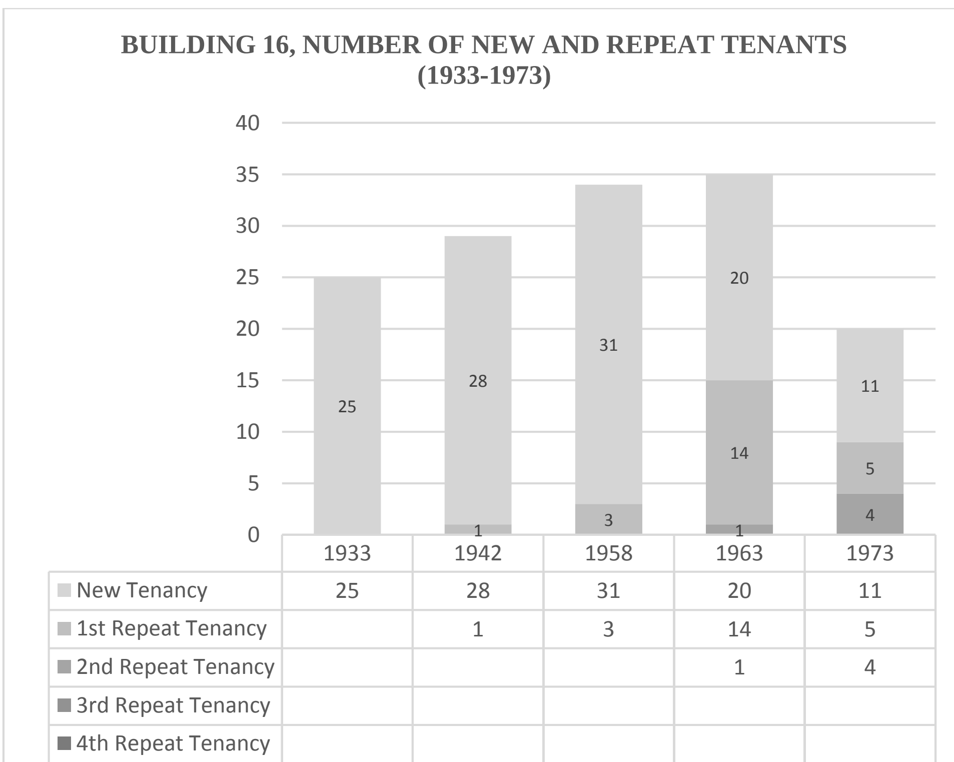


Figure 500: Building 16, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973



	1933	1942	1958	1963	1973
New Tenancy	25	28	31	20	11
1st Repeat Tenancy		1	3	14	5
2nd Repeat Tenancy				1	4
3rd Repeat Tenancy					
4th Repeat Tenancy					

Figure 501: Building 16, number of new and repeat tenants from 1933–1973

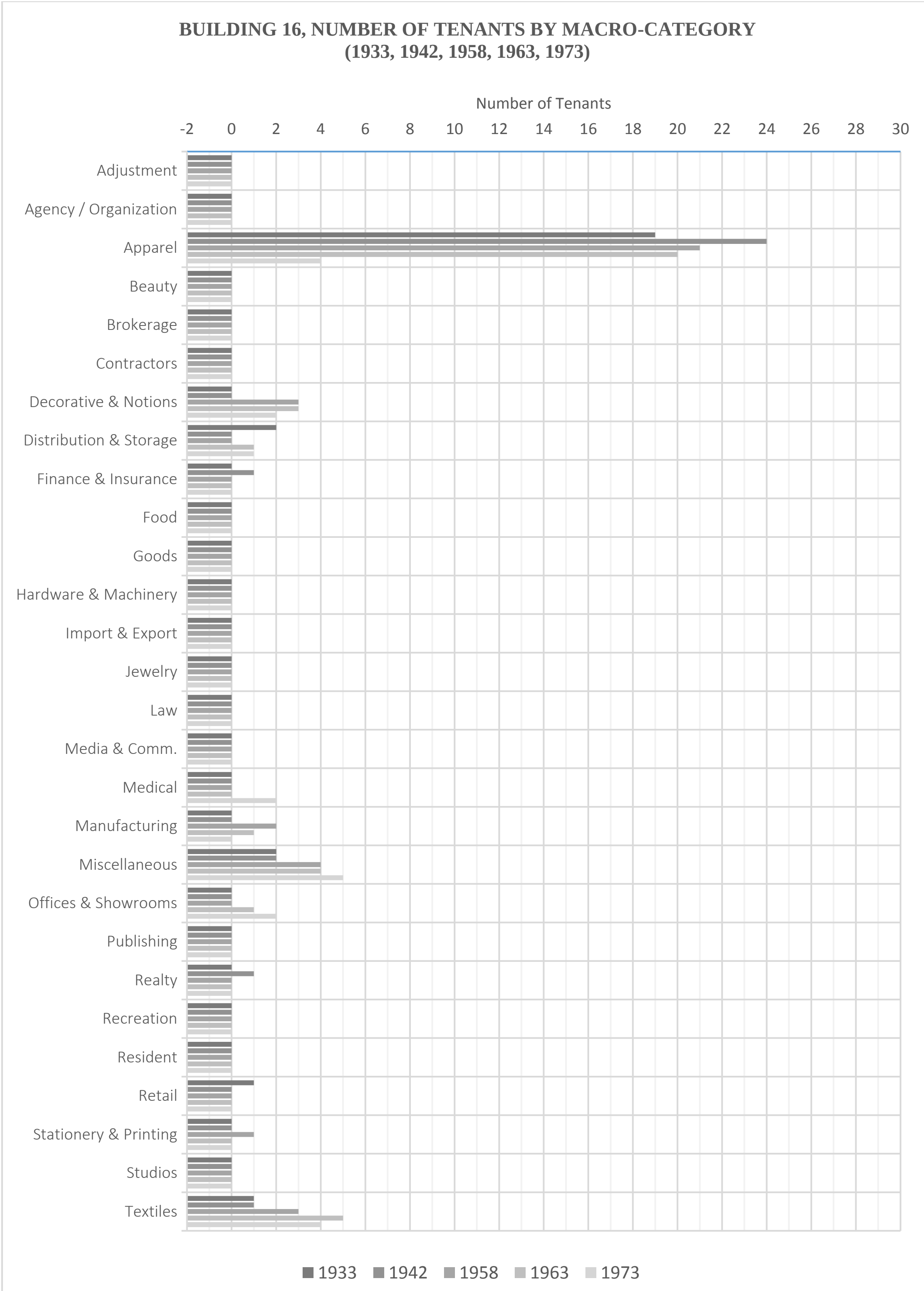


Figure 502: Building 16, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

Some narratives to note, in looking at the figures relating to socioeconomic composition, above:

- Throughout the five year sets observed, *Apparel* is clearly the most-dominant area of business for Building 16, representing 19–24 firms (out of the 25–35 total tenants) between 1933 and 1963 respectively, prior to dropping to 4 apparel-focused businesses in 1973. *Miscellaneous* and *Textiles* also appear in all five year sets, though only reaching a peak of 5 firms, in 1973 and 1963 respectively.
- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 16 in 1933 versus 1973, one finds that 3 macro-categories are shared by these early and late year sets. These macro-categories are *Apparel, Miscellaneous,* and *Textiles.* As mentioned above, *Apparel* remains the dominant category for the first four year sets, prior to its significant decline to 4 firms in 1973 (matching the count of textile-specific firms, and falling behind the number of miscellaneous firms of which 5 are documented in this year set).
- *Decorative & Notions, Distribution & Storage,* represented by 1–3 firms within the times they are observed, are present in 3 out of the 5 documented year sets.

4.2. BUILDING 17

4.2.1. ARCHITECTURE AND URBAN CONTEXT

Building 17 is a fourteen-story structure built in 1915. It is 67’-0” wide and 98’-9” deep on the first (ground) floor, and 89’-0” on the remaining thirteen floors. It is classified as a Fireproof Structure—one of three among the five building being studied in this research phase (the others being Building 16 and 18). Its outer envelope is brick, while its primary structure is composed of steel with robust concrete reinforcement. It has four elevators, and two set of stairs.

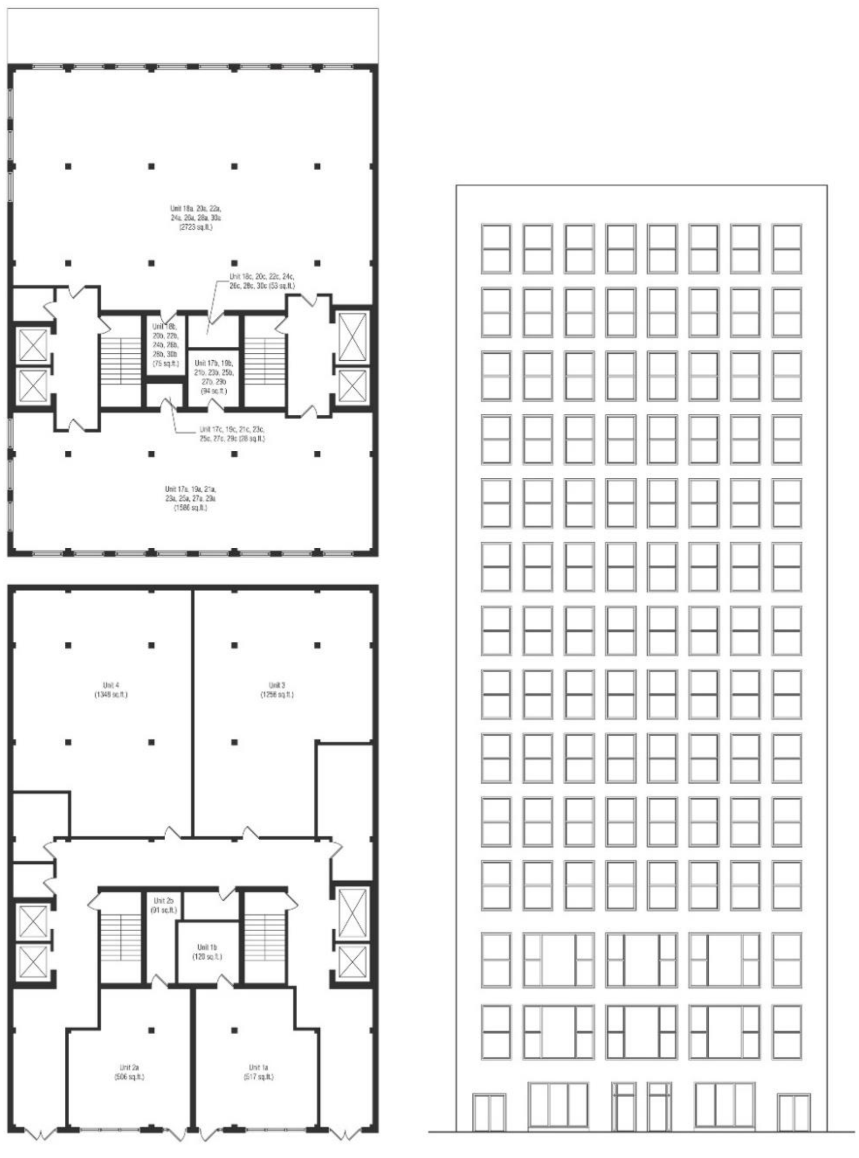


Figure 503, 504, 505: (top left) Building 17, first (ground) floor (1915); (bottom left) floors 2–7 (1915); (right) street-front elevation (1984). 1” = 32’. For plans, north is down.

The street-front façade of Building 17 faces north. In the rear (southern portion of site), Building 17 receives roughly the minimum amount of access to light and air as is required by the minimum setbacks established by code, as is documented in the rightmost graphic below. To the east though, due to the presence of a shorter (seven-story) structure, Building 17 has the potential to get greater than the minimum access to light and air.

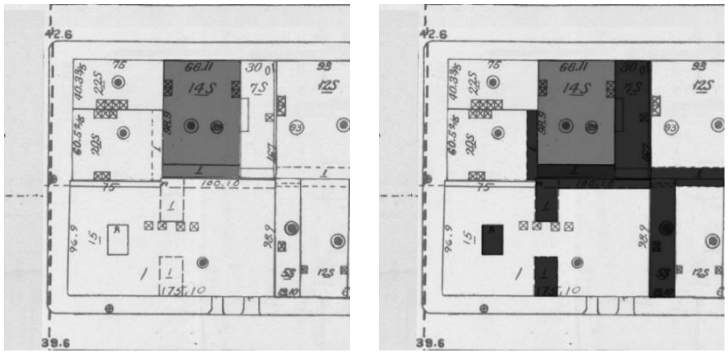


Figure 506, 507: Excerpt from Sanborn Map from 1976, with Building 17 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 17 highlighted in further darker tone. No set scale. North is up.

4.2.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 1 obtained for 1915 and 1984, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

Figure 508, 509 (left to right): Building 17, first (ground) floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 510, 511 (left to right): Building 17, second floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 512, 513 (left to right): Building 17, third floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 514, 515 (left to right): Building 17, fourth floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 516, 517 (left to right): Building 17, fifth floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 518, 519 (left to right): Building 17, sixth floor (1915); same floor (1984); 1" = 32'. North is down.

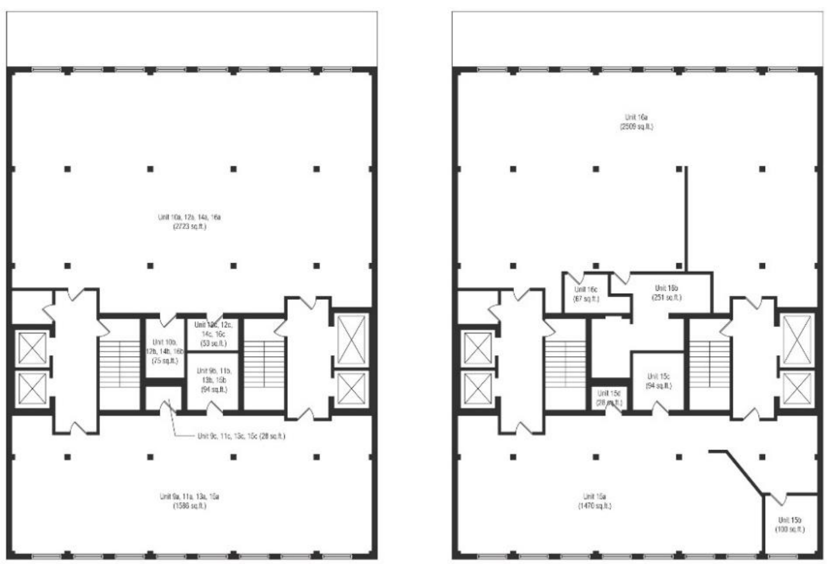
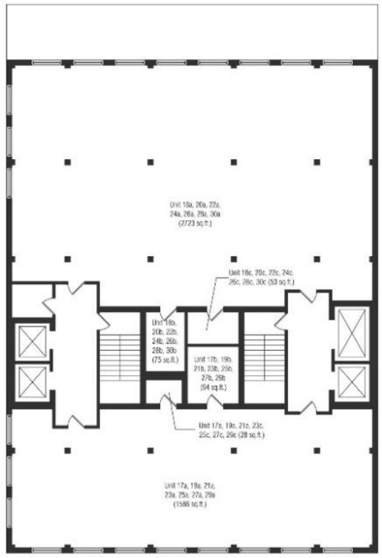


Figure 520, 521 (left to right): Building 17, seventh floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 522, 523 (left to right): Building 17, eighth floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 524, 525 (left to right): Building 17, ninth floor (1915); same floor (1984); 1" = 32'. North is down.



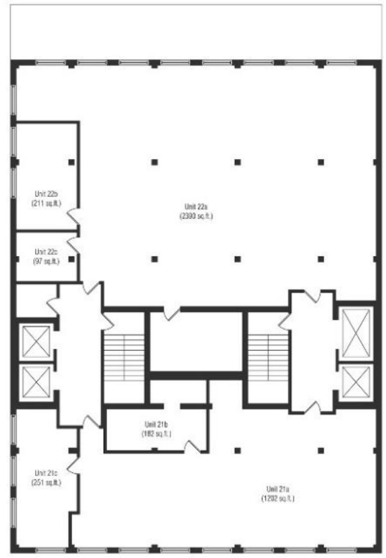
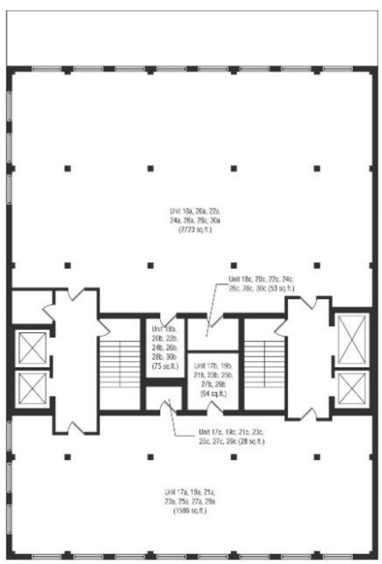


Figure 526, 527 (left to right): Building 17, tenth floor (1915); same floor (1984); 1'' = 32'. North is down.



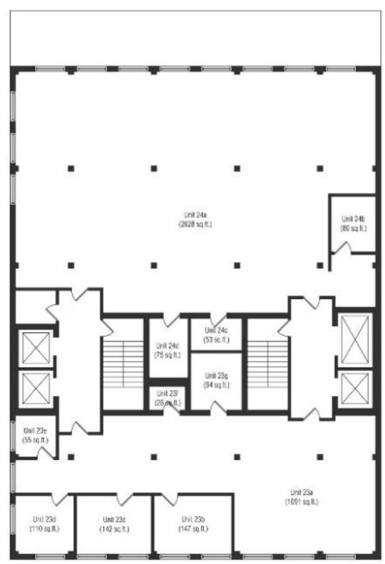
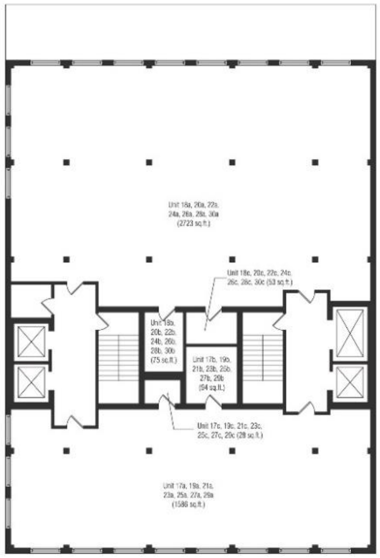


Figure 528, 529 (left to right): Building 17, eleventh floor (1915); same floor (1984); 1'' = 32'. North is down.

Figure 530, 531 (left to right): Building 17, twelfth floor (1915); same floor (1984); 1" = 32'. North is down.

Figure 532, 533 (left to right): Building 17, thirteenth floor (1915); same floor (1984); 1" = 32'. North is down.



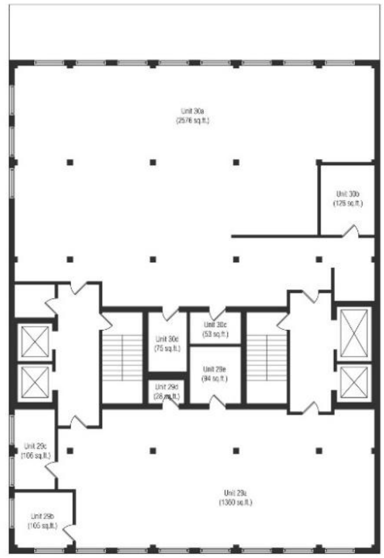
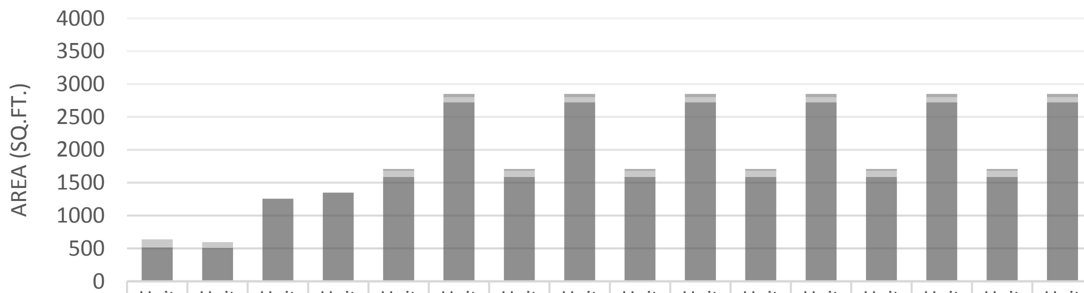


Figure 534, 535 (left to right): Building 17, fourteenth floor (1915); same floor (1984); 1" = 32'. North is down.

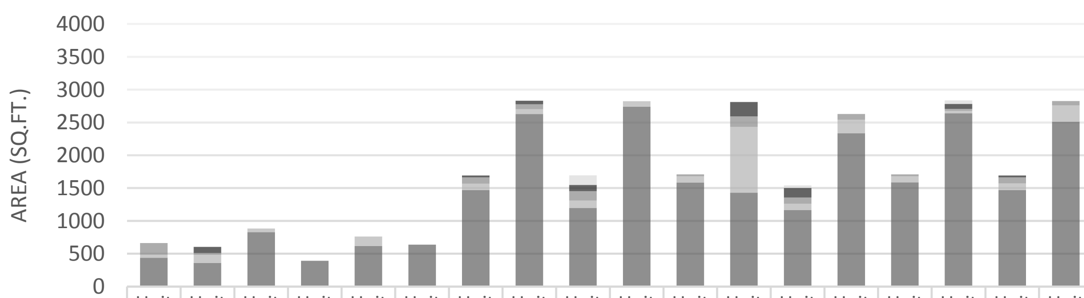
In 1915, Building 17 had 30 units, with 4 units on the first (ground) floor, and 26 units on the thirteen floors above. In 1984 by comparison, the total unit count increased to 32, with 6 units on the first floor (2 more than in 1915) and 26 units on the thirteen floors above (same as in 1915). As can be observed in the graphics below, the 1984 state of Building 17 exhibits rather similar internal spatial diversity (especially from Unit 5 onwards), when compared to its 1915 state.

BUILDING 17, UNIT AREAS, FLOORS 1-7 (1915)



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15	Unit 16
Portion e																
Portion d																
Portion c					28	53	28	53	28	53	28	53	28	53	28	53
Portion b	120	91			94	75	94	75	94	75	94	75	94	75	94	75
Portion a	517	506	1256	1348	1586	2723	1586	2723	1586	2723	1586	2723	1586	2723	1586	2723

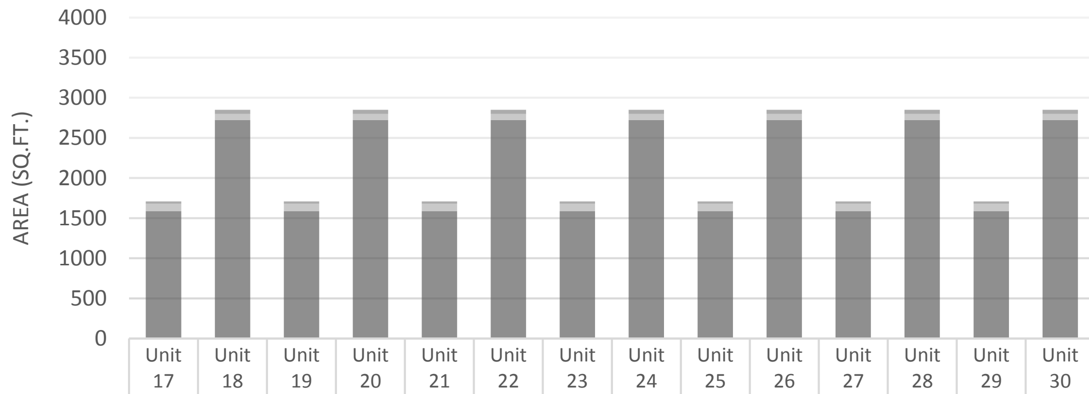
BUILDING 17, UNIT AREAS, FLOORS 1-7 (1984)



	Unit 1	Unit 2	Unit 3	Unit 3.1	Unit 4	Unit 4.1	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15	Unit 16
Portion e									145				38			53		
Portion d		91					28	53	95			219	148			75	28	
Portion c	175	28					94	75	145		28	161	93	87	28	30	94	67
Portion b	50	126	58		146		99	75	110	82	94	1001	99	207	94	40	100	251
Portion a	438	358	827	392	617	639	1470	2628	1199	2742	1586	1430	1163	2335	1587	2638	1470	2509

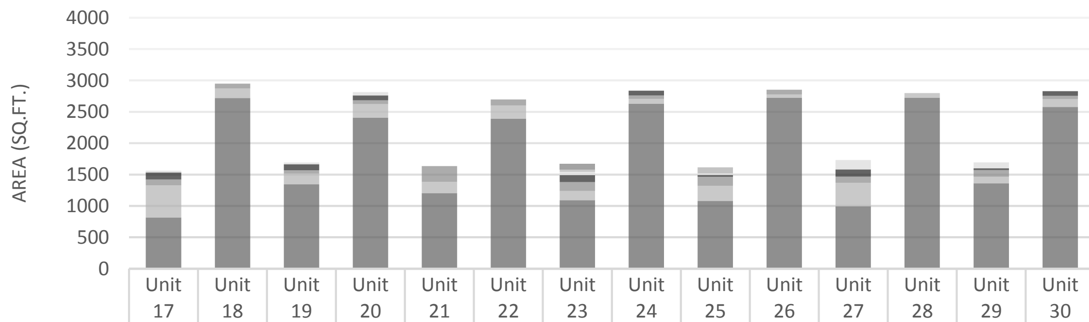
Figure 536, 537: Unit areas for Building 17, floors 1–7, for 1915 and 1984, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

BUILDING 17, UNIT AREAS, FLOORS 8-14 (1915)



	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27	Unit 28	Unit 29	Unit 30
Portion e														
Portion d														
Portion c	28	53	28	53	28	53	28	53	28	53	28	53	28	53
Portion b	94	75	94	75	94	75	94	75	94	75	94	75	94	75
Portion a	1586	2723	1586	2723	1586	2723	1586	2723	1586	2723	1586	2723	1586	2723

BUILDING 17, UNIT AREAS, FLOORS 8-14 (1984)



	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27	Unit 28	Unit 29	Unit 30
Portion g							94							
Portion f							28		94					
Portion e	28		28	53			55		28		151		94	
Portion d	112		94	75			110	75	28		114		28	75
Portion c	94	75	55	61	251	97	142	53	145	75	100		106	53
Portion b	510	152	170	218	182	211	147	80	238	53	375	75	105	126
Portoin a	816	2721	1345	2406	1202	2390	1091	2628	1081	2723	993	2723	1360	2576

Figure 538, 539: Unit areas for Building 17, floors 8–14, for 1915 and 1984, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1915, among the 26 units above the first (ground) floor, the average unit size for Building 17 was 2280 square feet, with the smallest unit being 1708 square feet and the largest being 2851 square feet. In 1984 by comparison, among the 26 units above the first floor, the average unit size had remained roughly the same at 2237 square feet, with the smallest unit falling to 1541 square feet but the largest inversely expanding to 2948 square feet.

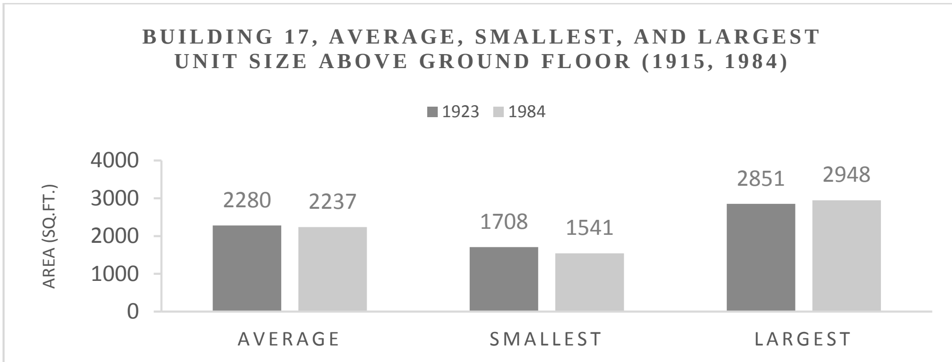
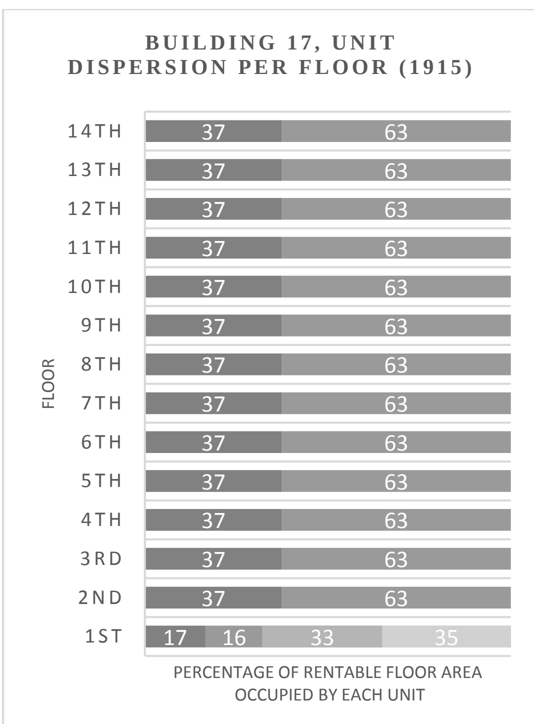


Figure 540: Building 17, average, smallest, and largest unit size above first (ground) floor for 1915 and 1984.

Below is a visualization showing the changes to the internal arrangement of Building 17, floor by floor. One observes that while there are changes between 1915 and 1984, the floor-to-floor unit dispersion remains roughly the same.



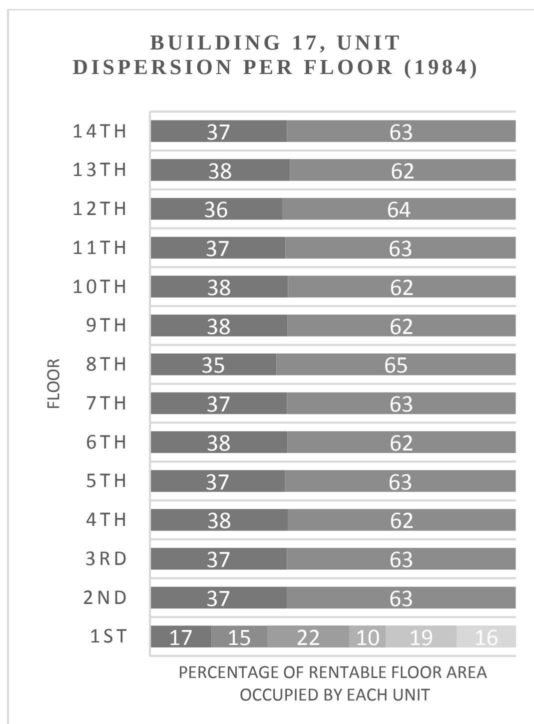


Figure 541, 542: Building 17, unit dispersion per floor, 1915 and 1984.

4.2.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 17 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Dresses	Contractor / Jobber	Dresses (1)	Dresses (2)	Dresses (3)
Dresses	Dresses	Dresses (1)	Dresses (2)	Dresses (3)
Dresses	Dresses	Dresses (1)	Dresses (2)	Apparel (2)
Dresses	Dresses	Miscellaneous (1)	Apparel (1)	Distribution (2)
Dresses	Dresses	Apparel	Apparel (1)	Dresses (2)
Dresses	Dresses	Apparel	Distribution (1)	Luncheonette (2)
Infant Apparel	Dresses	Apparel	Dresses (1)	Textiles (2)
Miscellaneous	Dresses	Apparel	Luncheonette (1)	Trucking (2)
Silks	Dresses	Apparel	Miscellaneous (1)	Apparel (1)
Tea Room	Dresses	Apparel	Textiles (1)	Distribution (1)
	Dresses	Delivery	Trucking (1)	Miscellaneous (1)
	Dresses	Distribution	Apparel	Miscellaneous (1)
	Dresses	Dresses	Apparel	Ties (1)
	Dresses	Dresses	Apparel	Dresses
	Dresses	Dresses	Apparel	Miscellaneous
	Dresses	Dresses	Blocks	Miscellaneous
	Junior Dresses	Dresses	Distribution	Sport Apparel
	Luncheonette	Junior Apparel	Dresses	
	Miscellaneous	Luncheonette	Dresses	
	Miscellaneous	Men's Neckwear	Dresses	
	Silks	Miscellaneous	Junior Apparel	
	Sport Apparel	Miscellaneous	Junior Apparel	
	Textiles	Miscellaneous	Miscellaneous	
	Textiles	Resident	Miscellaneous	
	Textiles	Textiles	Miscellaneous	
			Miscellaneous	
			Miscellaneous	
			Miscellaneous	
			Miscellaneous	
			Ties	

Table 543: Changing socioeconomic composition of Building 17 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 17 had 10 tenants, totaling 5 micro-specializations. In 1942, total tenancy rose significantly to a count of 25, with micro-specializations also rising to 8. In 1958, while total tenancy remained at 25, micro-specializations increased to a count of 10. In 1963 in turn, while micro-specializations remained at a count of 10, total tenancy increased to 30. In 1973, a significant drop in total tenancy was observed, falling to a count of 17, the number of micro-specializations dipped only slightly to a count of 9.

Below, in addition to a graphic summarizing the tenant and micro-specialization counts, there is also a graphic summarizing the number of new and repeat tenants from 1933 to 1973 for Building 17. For Building 17, the first repeat tenancy occurs in 1958, with 4 repeat tenants being documented. In 1963, an increase to 11 repeat occupants are observed, 3 of which were second-time repeat tenants. In 1973, again an increase to 13 repeat tenants are observed, 6 of which are second-time repeat tenants, and 2 of which (both apparel firms specialized in dresses) are third-time repeat tenants.

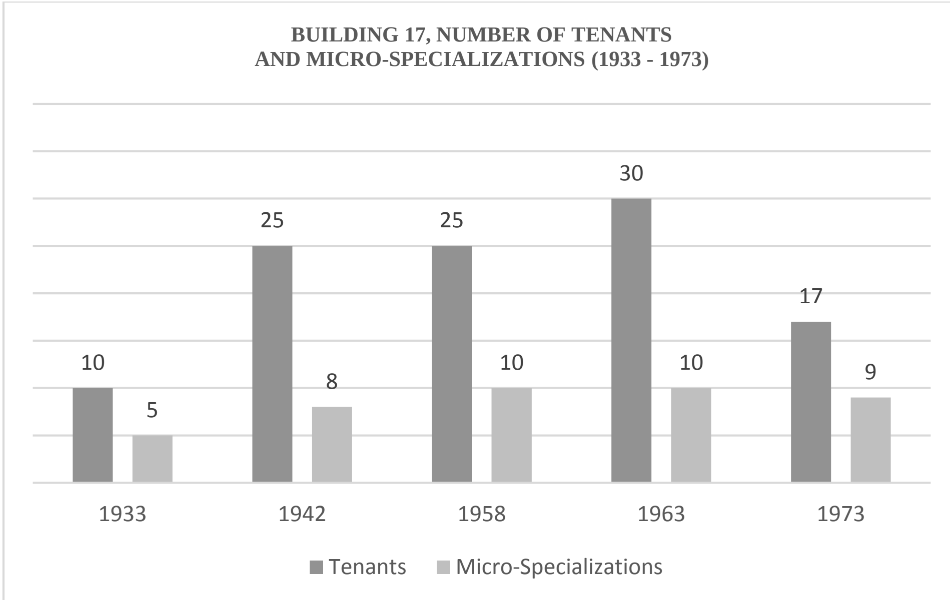
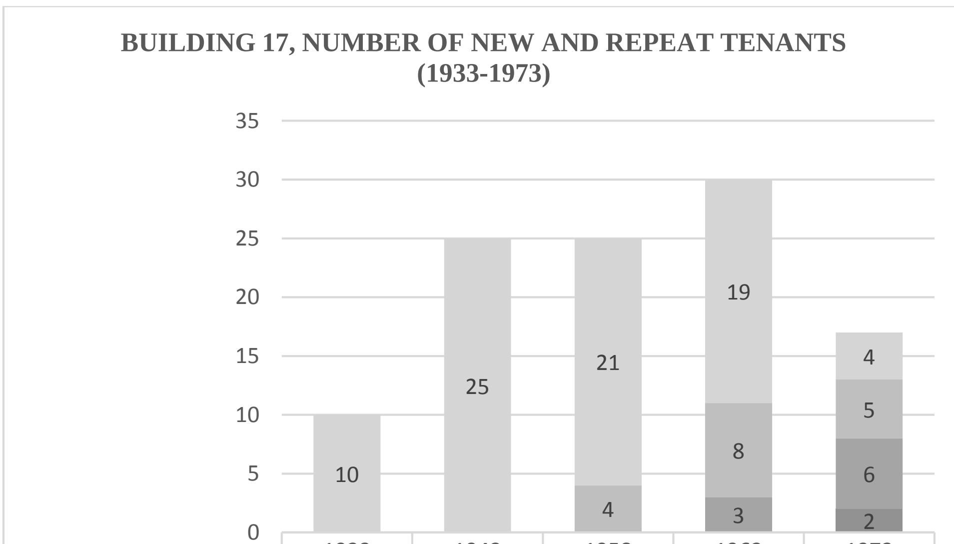


Figure 544: Building 17, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973



	1933	1942	1958	1963	1973
New Tenancy	10	25	21	19	4
1st Repeat Tenancy			4	8	5
2nd Repeat Tenancy				3	6
3rd Repeat Tenancy					2
4th Repeat Tenancy					

Figure 545: Building 17, number of new and repeat tenants from 1933–1973

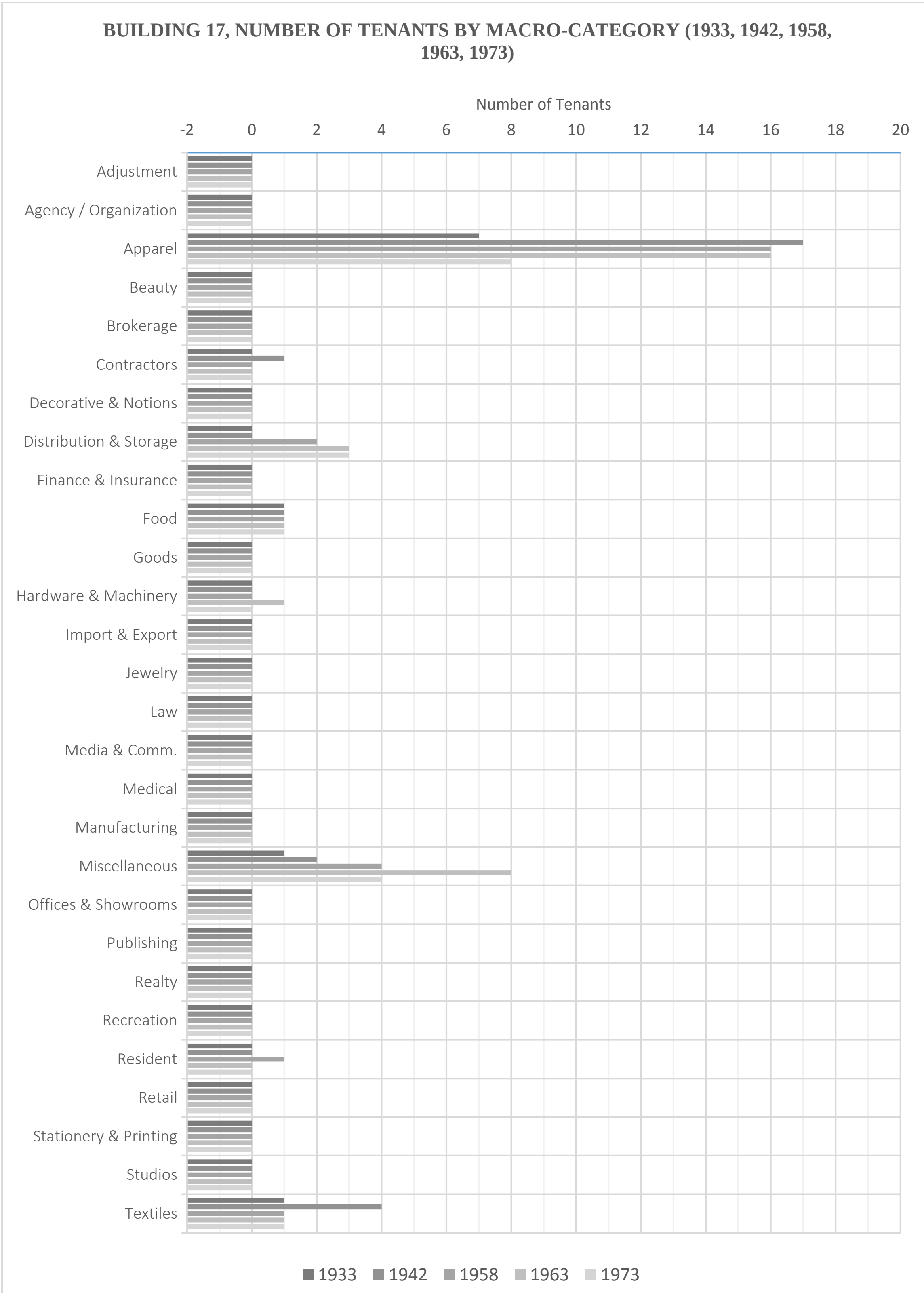


Figure 546: Building 17, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

Some narratives to note, in looking at the figures relating to socioeconomic composition, above:

- Similar to Building 16, throughout the five year sets observed, *Apparel* is clearly the most-dominant and consistent area of business for Building 17, representing 16–17 firms at its peak years of 1942, 1958, and 1963, during which time there were 25, 25, and 30 total tenants respectively. *Miscellaneous* appears to be a distant second, reaching a peak of 8 firms in 1963, and being represented by 1–4 firms for the remaining year sets.
- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 17 in 1933 versus 1973, one finds that 4 macro-categories are shared by the first and last year set. These macro-categories are *Apparel*, *Food*, *Miscellaneous,* and *Textiles.* As mentioned above, *Apparel* remains the dominant category for the five year sets, although it is in the middle three years that it achieves its peak tenant count. *Food* and *Textiles* are consistently represented by just 1 business, with the exception of *Textiles* peaking at a count of 4 firms in 1942. *Miscellaneous* as aforementioned is represented by 1–4 firms in four year sets, peaking to 8 businesses in 1963.
- *Distribution & Storage* is also present in three out of the five observed year sets (1958, 1963, and 1973), being represented by 2–3 firms during this time.

4.3. BUILDING 18

4.3.1. ARCHITECTURE AND URBAN CONTEXT

Building 18 is a twelve-story structure built in 1910. It is 45’-0” wide and 98’-9” deep on the first (ground) floor, and 89’-0” on the remaining eleven floors. It is classified as a Fireproof Structure—one of three among the five building being studied in this research phase (the others being Building 16 and 17). Its outer envelope is brick, while its primary structure is composed of steel with robust concrete reinforcement. It has three elevators, and two set of stairs.

Figure 547, 548, 549 (left to right) Building 18, first (ground) floor (1910); floors 2–12 (1910); (right) street-front elevation (1981). 1” = 32’. For plans, north is up.

The street-front façade of Building 18 faces south. In the rear (northern portion of site), Building 18 receives roughly the minimum amount of access to light and air as is required by the minimum setbacks established by code, as is documented in the rightmost graphic below.

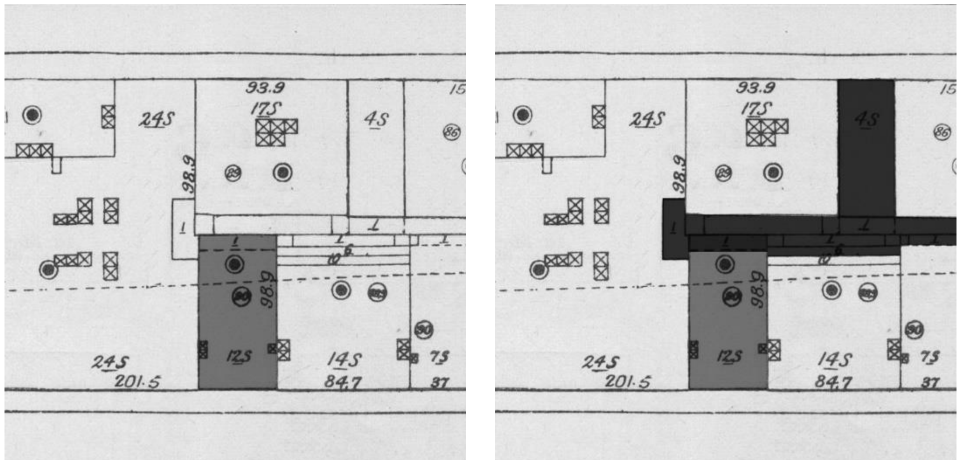


Figure 550, 551: Excerpt from Sanborn Map from 1976, with Building 18 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 17 highlighted in further darker tone. No set scale. North is up.

4.3.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 18 obtained for 1910 and 1981, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

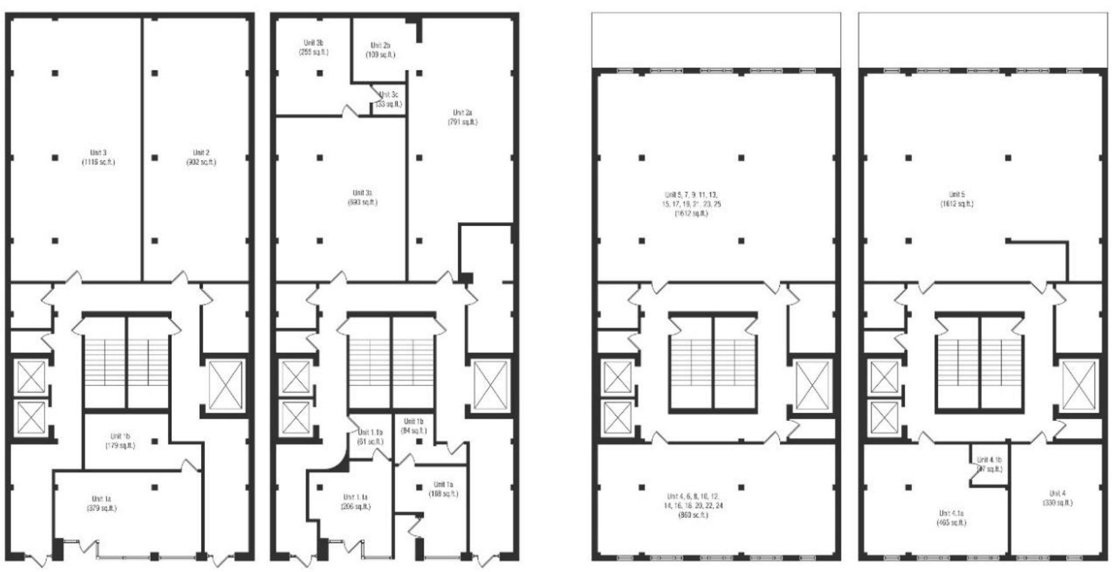


Figure 552, 553, 554, 555 (left to right): Building 18, first (ground) floor (1910); same floor (1981); second floor (1910); same floor (1981) 1" = 32'. North is up.

Figure 556, 557, 558, 559 (left to right): Building 18, third floor (1910); same floor (1981); fourth floor (1910); same floor (1981) 1" = 32'. North is up.

Figure 560, 561, 562, 563 (left to right): Building 18, fifth floor (1910); same floor (1981); sixth floor (1910); same floor (1981) 1" = 32'. North is up.

Figure 564, 565, 566, 567 (left to right): Building 18, seventh floor (1910); same floor (1981); eighth floor (1910); same floor (1981) 1" = 32'. North is up.

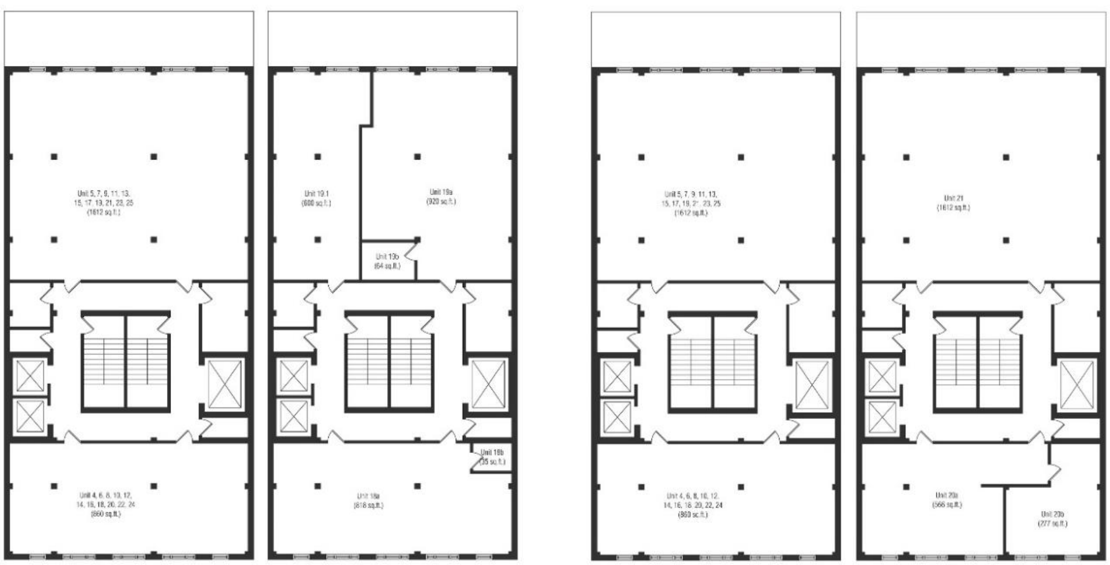


Figure 568, 569, 570, 571 (left to right): Building 18, ninth floor (1910); same floor (1981); tenth floor (1910); same floor (1981) 1" = 32'. North is up.

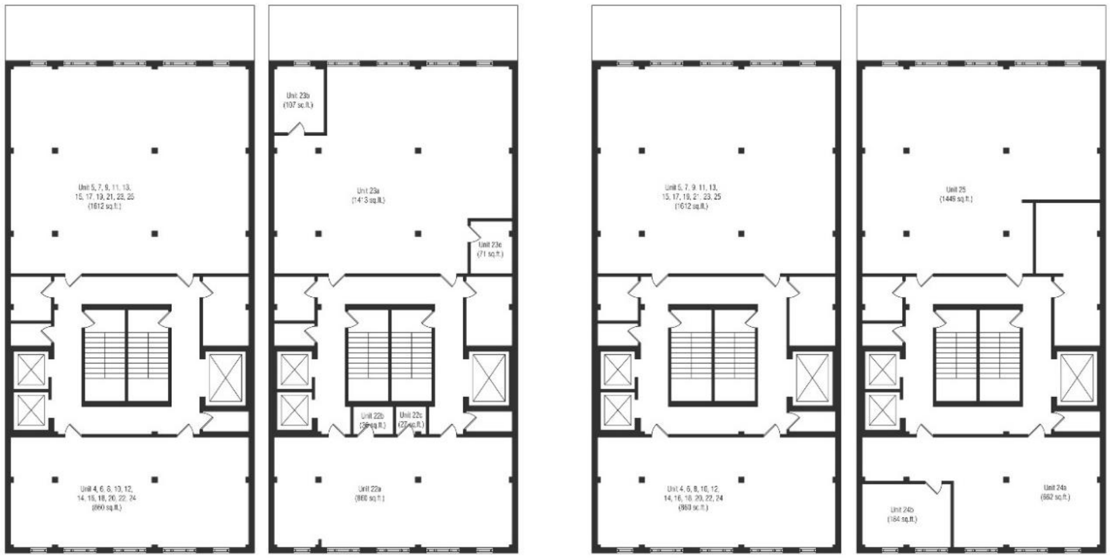
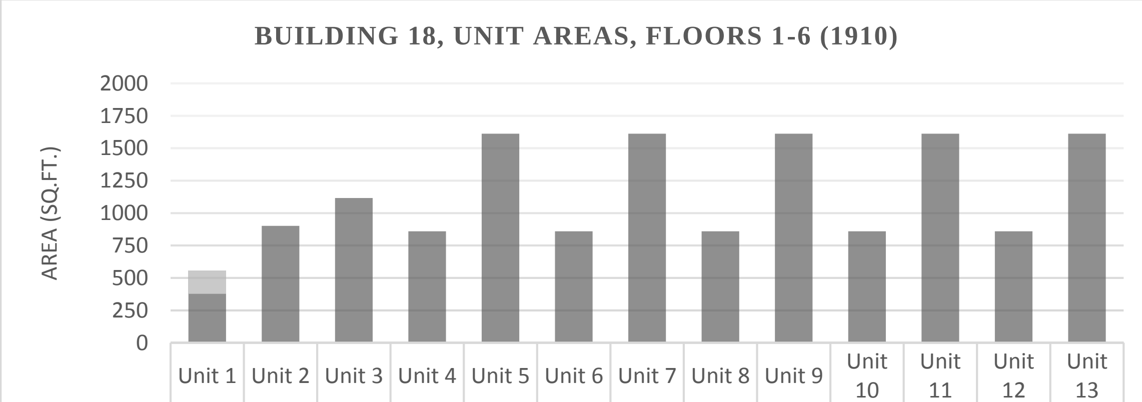
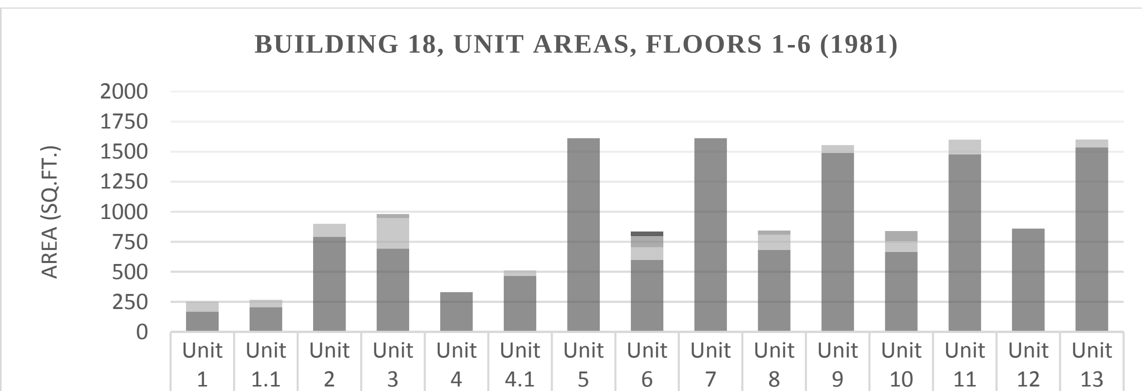


Figure 572, 573, 574, 575 (left to right): Building 18, eleventh floor (1910); same floor (1981); twelfth floor (1910); same floor (1981) 1" = 32'. North is up.

In 1910, Building 18 had 25 units, with 3 units on the first (ground) floor, and 22 units on the eleven floors above. In 1981 by comparison, the total unit count increased to 28, with 4 units on the first floor (1 more than in 1910) and 24 units on the eleven floors above (2 more than in 1910). As can be observed in the graphics below, the 1981 state of Building 18 exhibits a richer spatial diversity in Units 1–4 and Unit 19, but rather similar internal spatial diversity in the rest of the building when compared to its 1910 state.

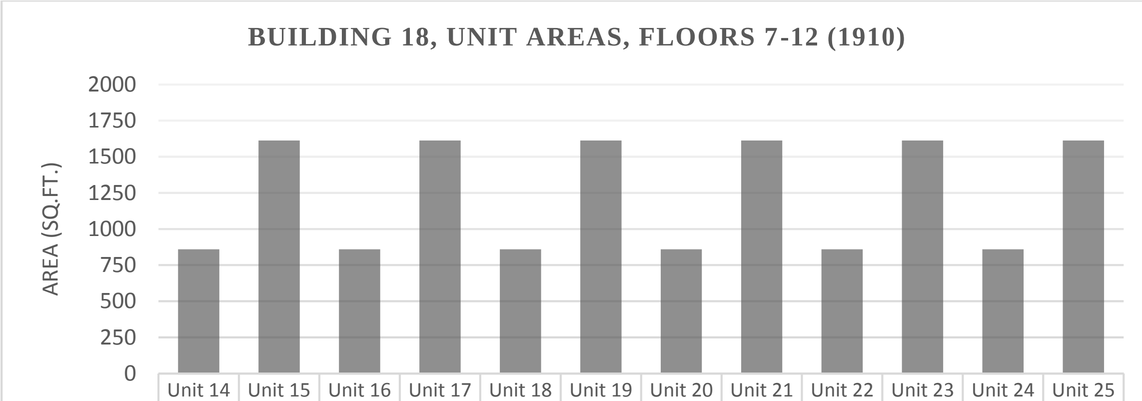


	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13
Portion e													
Portion d													
Portion c													
Portion b	179												
Portion a	379	902	1116	860	1612	860	1612	860	1612	860	1612	860	1612

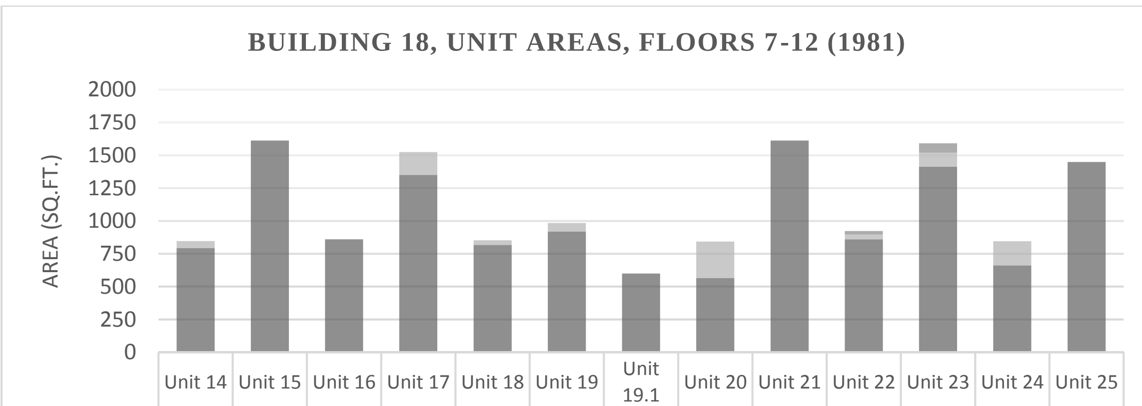


	Unit 1	Unit 1.1	Unit 2	Unit 3	Unit 4	Unit 4.1	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13
Portion e															
Portion d								34							
Portion c				33				97		36		85			
Portion b	84	61	109	255		47		105		125	65	90	123		66
Portion a	168	206	791	693	330	465	1612	599	1612	682	1490	665	1477	860	1536

Figure 576, 577: Unit areas for Building 18, floors 1–6, for 1910 and 1981, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).



	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25
Portion e												
Portion d												
Portion c												
Portion b												
Portion a	860	1612	860	1612	860	1612	860	1612	860	1612	860	1612



	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 19.1	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25
Portion e													
Portion d													
Portion c										27	71		
Portion b	54			173	35	64		277		36	107	184	
Portion a	793	1612	860	1351	818	920	600	566	1612	860	1413	662	1449

Figure 578, 579: Unit areas for Building 18, floors 7–12, for 1910 and 1981, with “portions” signifying internal subdivisions within individual units (“portion a” is the first space upon entry).

In 1910, among the 22 units above the first (ground) floor, the average unit size for Building 18 was 1236 square feet, with the smallest unit being 860 square feet and the largest being 1612 square feet. In 1981 by comparison, among the 24 units above the first floor, the average unit size shrunk to 1114 square feet, with the smallest unit falling drastically to 330 square feet but the largest remaining the same at 1612 square feet. It is important to note that among the five buildings being studied in this research phase, Building 18 is the one instance where such a drastic decrease in the smallest unit size was observed.

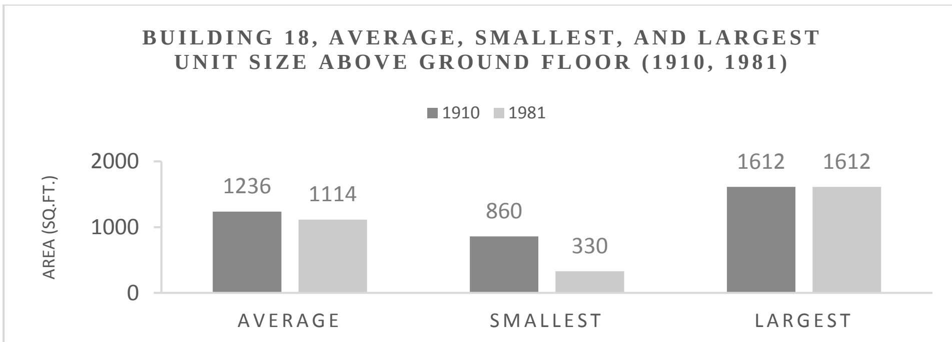
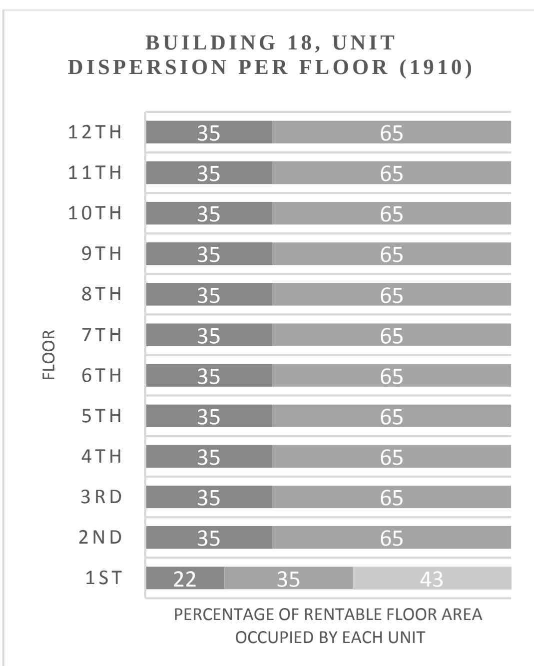


Figure 580: Building 18, average, smallest, and largest unit size above first (ground) floor for 1910 and 1981.

Below is a visualization showing the changes to the internal arrangement of Building 18, floor by floor. One observes that while there are changes between 1910 and 1981 on the 1st, 2nd, and 9th floors, the floor-to-floor unit dispersion for the rest of the building remains roughly the same.



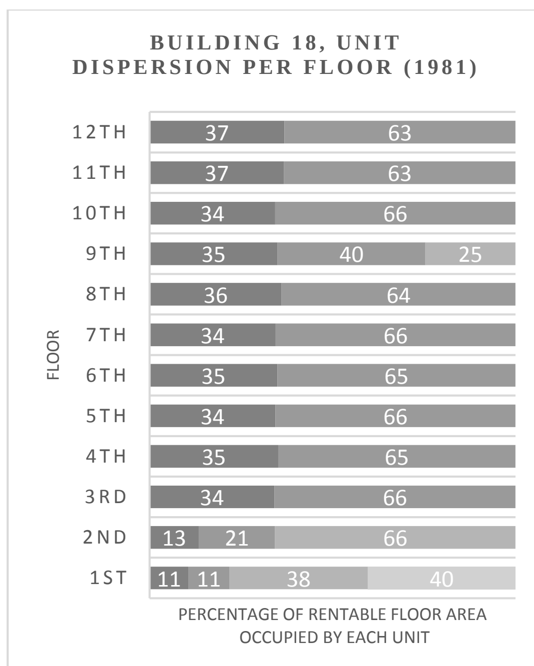


Figure 581, 582: Building 18, unit dispersion per floor, 1910 and 1981.

4.3.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 18 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Coats & Suits	Manufacturing (1)	Buttons (1)	Notions (1)	Delivery
Coats & Suits	Buttons	Notions (1)	Miscellaneous	Trucking
Displays	Coats	Buttons	Miscellaneous	
Dresses	Dresses	Buttons	Stitching	
Dresses	Dresses	Delivery		
Dresses	Importing	Miscellaneous		
Miscellaneous	Miscellaneous	Notions		
Sewing Machines	Notions	Showroom		
Smocks		Trimmings		
Smocks				

Figure 583: Changing socioeconomic composition of Building 18 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 18 had 10 tenants, totaling 6 micro-specializations. In 1942, total tenancy dropped slightly to a count of 8, while micro-specializations inversely rose slightly to a count of 7. In 1958, the opposite trajectory was witnessed, with total occupancy rising but micro-specializations falling, to a count of 9 and 6 respectively. In 1963, a significant drop in both categories was documented, with total tenancy declining to 4 and micro-specializations to 3. In 1973, another drop was observed, with both total tenancy and micro-specializations falling to 2—represented by 2 *Distribution & Storage* firms.

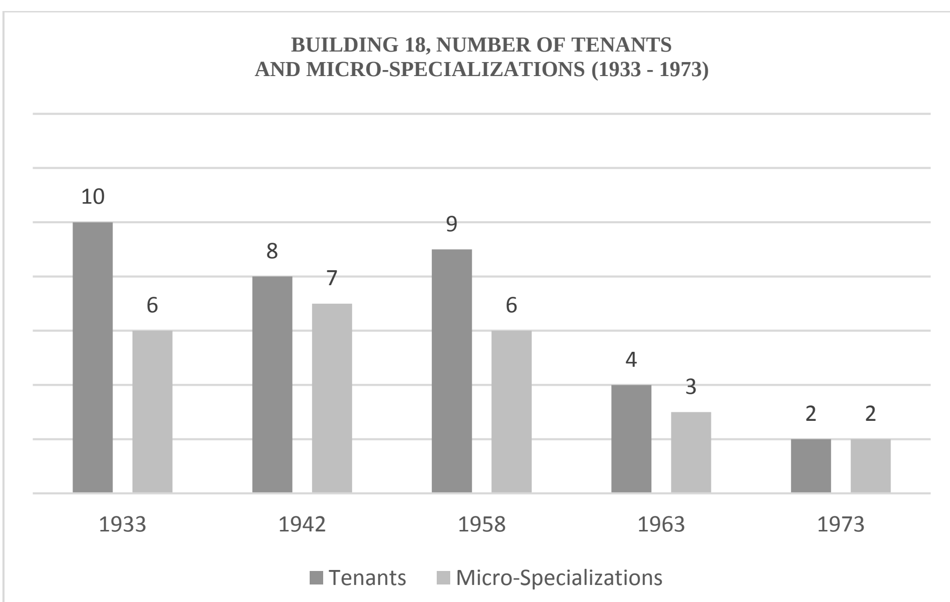


Figure 584: Building 18, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973

The graphic below summarizes the repeat tenancy pattern for Building 18. The first repeat tenancy for this structure occurs in 1942, with 1 repeat tenant being observed. In 1958, repeat tenancy rises to a count of 2. In 1963, in turn this number falls back to 1. In 1973, only new tenants are observed.

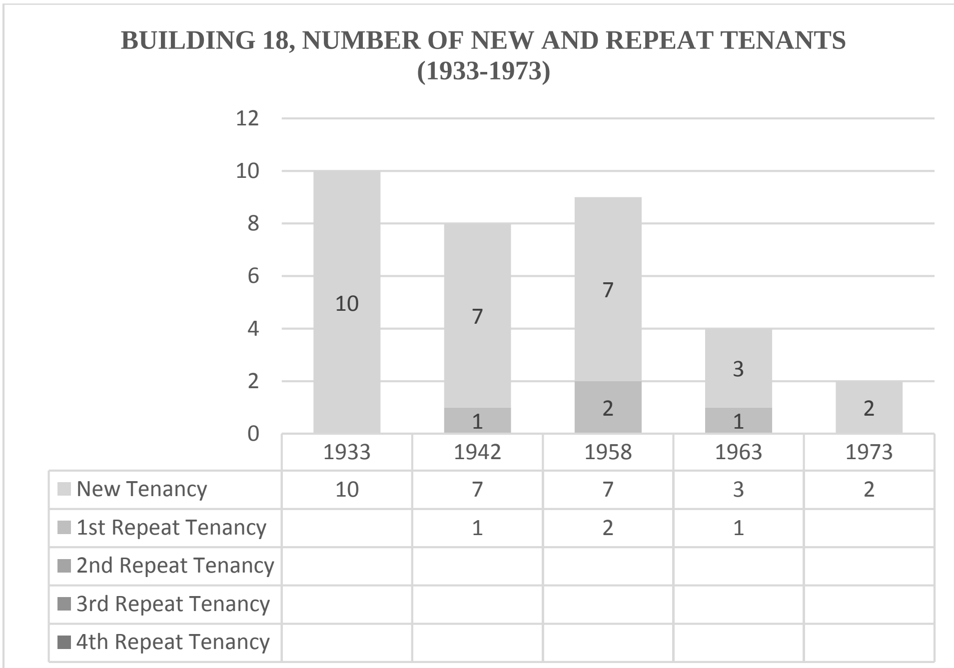


Figure 585: Building 18, number of new and repeat tenants from 1933–1973

Some narratives to note, in looking at the figures relating to socioeconomic composition, below:

- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 18 in 1933 versus 1973, one finds that no macro-categories are shared by the first and last year sets. Of the twenty total buildings studied in Phase II and Phase III of this research, it is only Building 18 and 19 that exhibits this lack of macro-categorical continuity.
- *Apparel* reaches the highest peak count among all the macro-categories supported by Building 18 throughout 1933–1973, representing 7 apparel-oriented firms in 1932, though falling to 3 in 1942 and then vanishing altogether in the remaining three year sets. *Decorative & Notions* similarly achieves a peak of 6 firms in 1958, but is only represented by 1–2 firms in 1942 and 1963, and is non-existent in the remaining two year sets.
- The remaining categories are represented by 1–2 firms throughout the five year sets observed. Among these categories, *Adjustment, Hardware & Machinery, Import & Export, Manufacturing,* and *Offices & Showrooms* appear in just one year set. *Distribution & Storage* appears in two year sets. *Miscellaneous* in turn appears in four year sets (with 1973 being the exception).

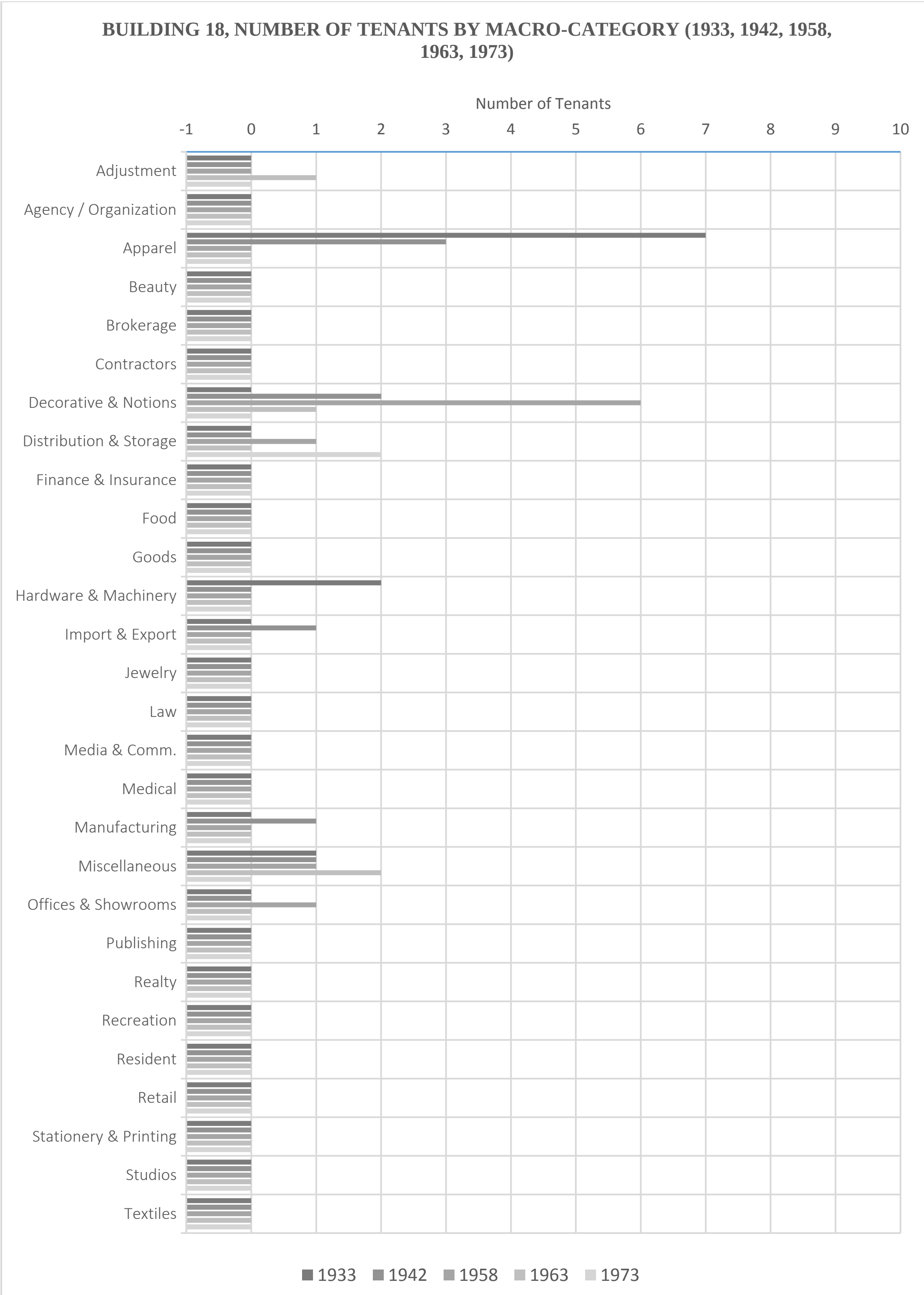


Figure 586: Building 18, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

4.4. BUILDING 19

4.4.1. ARCHITECTURE AND URBAN CONTEXT

Building 19 is a three-story structure built in 1913. It is 19’-0” wide and 98’-9” deep on all three floors. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has no elevator and one set of stairs.

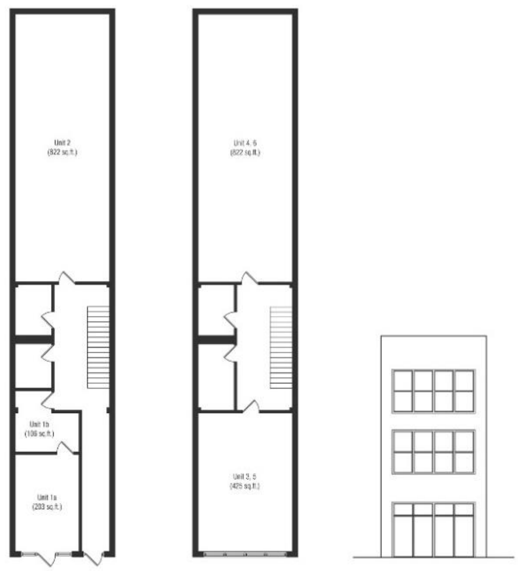


Figure 587, 588, 589 (left to right) Building 19, first (ground) floor (1913); floors 2–3 (1913); (right) street-front elevation (1981). 1” = 32’. For plans, north is up.

The street-front façade of Building 19 faces south. In the rear (northern portion of site), Building 19 receives the minimum amount of access to light and air as is required by the minimum setbacks established by code, as is documented in the rightmost graphic below.

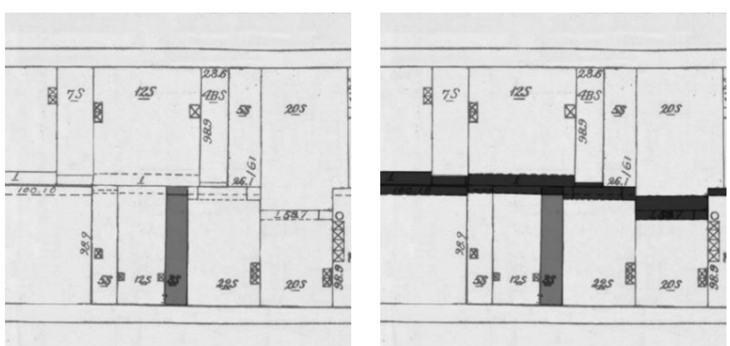


Figure 590, 591: Excerpt from Sanborn Map from 1976, with Building 18 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 17 highlighted in further darker tone. No set scale. North is up.

4.4.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 19 obtained for 1913 and 1981, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time. It is important to note that Building 19 is the only structure among the twenty buildings examined in Phase II and Phase III of this dissertation that shows a complete appropriation of the street-front access to the central core via the expansion of the street-front store space, as seen in the leftmost plans below.

Figure 592, 593, 594, 595, 596, 597: Building 19, first (ground) floor (1913); same floor (1981); second floor (1913); same floor (1981); third floor (1913); same floor (1981). 1" = 32'. North is up.

In 1913, Building 19 had 6 units, with 2 units on the first (ground) floor, and 4 units on the three floors above. In 1981 by comparison, the total unit count remained the same at 6, again with 2 units on the first floor (same as in 1913), and 4 units on the two floors above (same as in 1913). As can be observed in the graphics below, the 1981 state of Building 19 exhibits similar internal spatial diversity when compared to its 1913 state.

In 1913, among the 4 units above the first (ground) floor, the average unit size for Building 19 was 624 square feet, with the smallest unit being 425 square feet and the largest being 822 square feet. In 1981 by comparison, among the 4 units above the first floor, the average unit size remained roughly the same at 599 square feet, with the smallest unit falling remaining the same at 425 square feet and the largest shrinking slightly to 786 square feet.

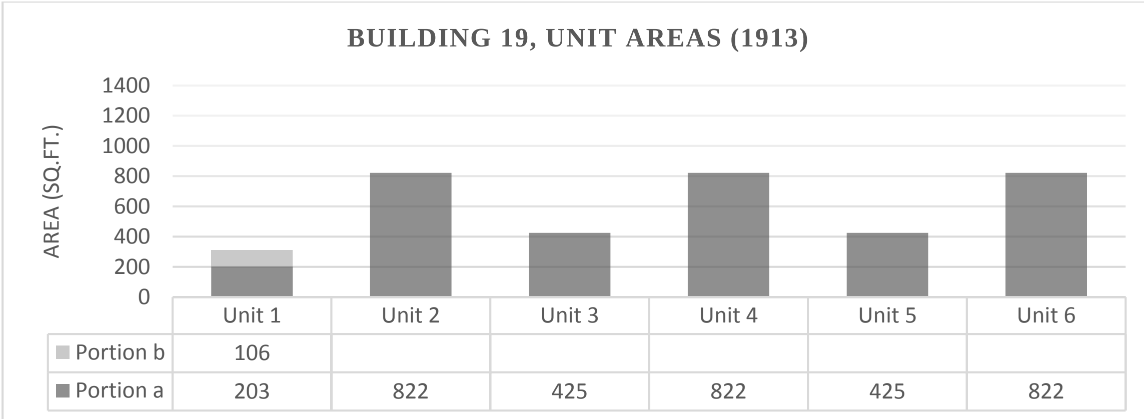


Figure 598: Unit areas for Building 19 for 1913, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

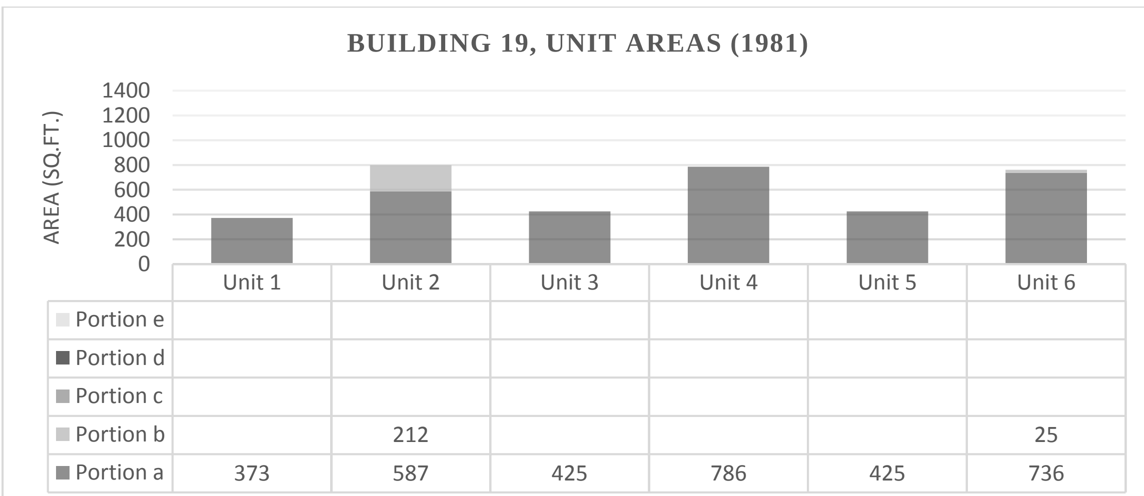


Figure 599: Unit areas for Building 19 for 1981, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

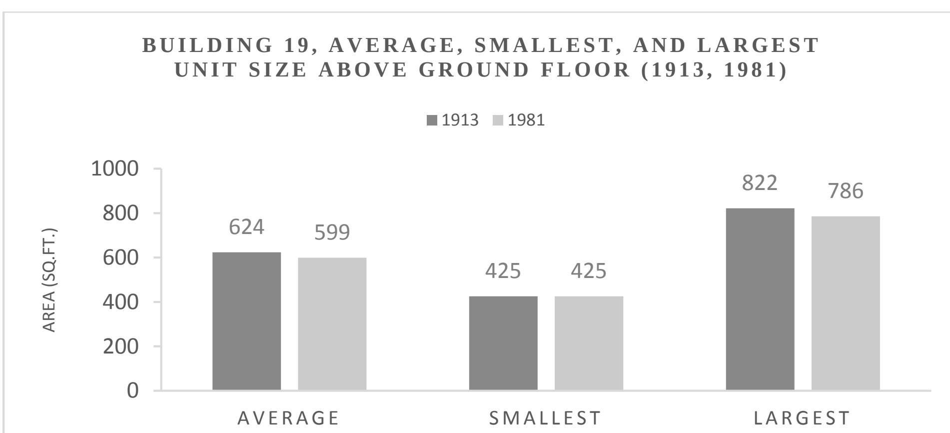


Figure 600: Building 19, average, smallest, and largest unit size above first (ground) floor for 1913 and 1981.

Below is a visualization showing the changes to the internal arrangement of Building 19, floor by floor. One observes that while there are changes between 1913 and 1981 the floor-to-floor unit dispersion remains roughly the same.

Figure 601, 602: Building 19, unit dispersion per floor, 1913 and 1981.

4.4.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 19 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Pleating	Knit Apparel	Restaurant	Restaurant (1)	Restaurant
Pleating & Stitching	Knit Goods	Restaurant	Restaurant	

Figure 603: Changing socioeconomic composition of Building 19 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

As seen in the graphic below, from 1933 to 1963, Building 19 consistently supports 2 tenants, representing 1 micro-specialization. In 1973, the variance observed is that total tenancy drops to 1, while micro-specializations remain stable at a count of 1.

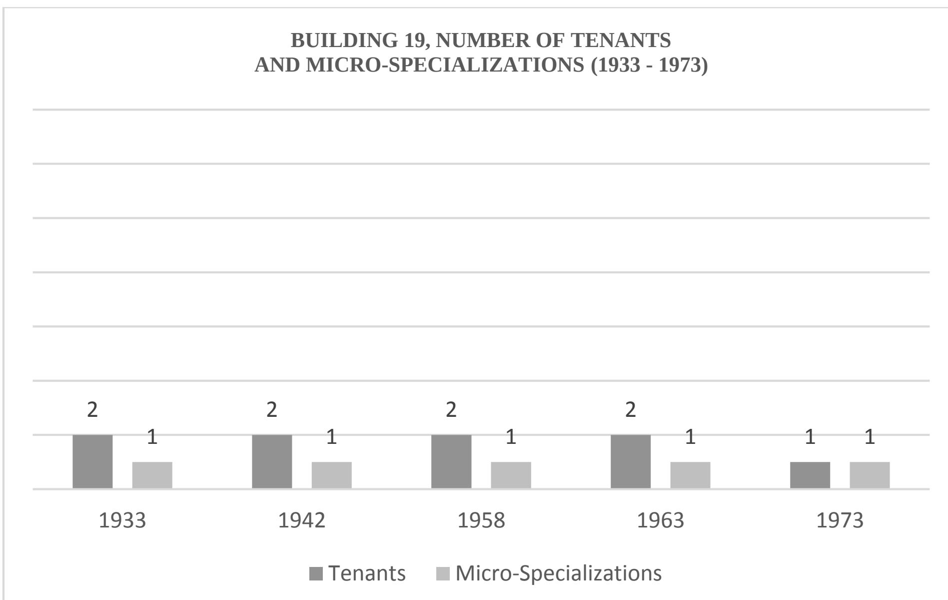


Figure 604: Building 19, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973.

The graphic below summarizes the repeat tenancy pattern for Building 19, with the first and only repeat tenancy being observed in 1963. It is important to note that of all the building studied in both Phase II and Phase III of this dissertation, Building 19 exhibits the lowest tenant count. This is partially due to the fact that Building 19 is also the smallest building among the twenty buildings studied in depth. As will be shown in Section 5 (Comparative Analysis and Conclusions) portion of this dissertation, if understood in terms of micro-specializations per square feet, Building 19 actually exhibits greater density of economic actors when compared to the remaining four poorer performing buildings studied.

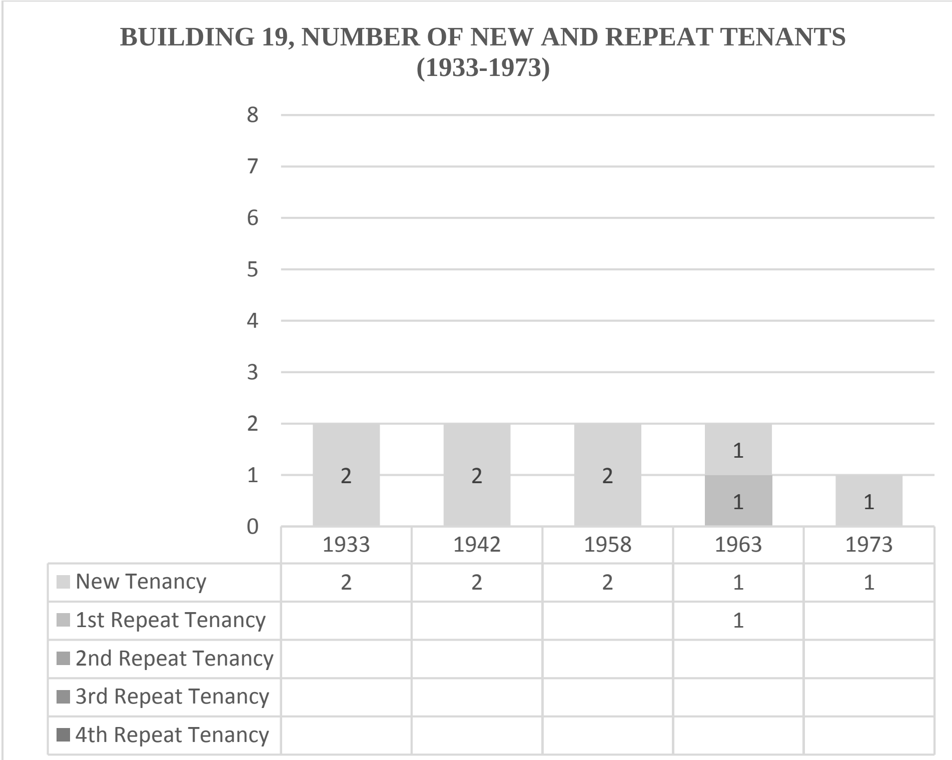


Figure 605: Building 19, number of new and repeat tenants from 1933–1973

Some narratives to note, in looking at the figures relating to socioeconomic composition, below:

- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 19 in 1933 versus 1973, one finds that no macro-categories are shared by the first and last year sets. Of the twenty total buildings studied in Phase II and Phase III of this research, it is only Building 18 and 19 that exhibits this lack of macro-categorical continuity.
- *Food* is the more consistent macro-category supported by Building 19, appearing in 1958, 1963, and 1972. It is represented by 2 food-specific firms during its peak years of 1958 and 1963.
- *Apparel* is the other macro-category that reaches a peak count of 2 firms, observed in 1942, although this is the only year set during which this category is documented for Building 19.
- The remaining two categories observed, *Adjustment* and *Decorative & Notions*, both appear in 1933, and are represented by 1 firm.

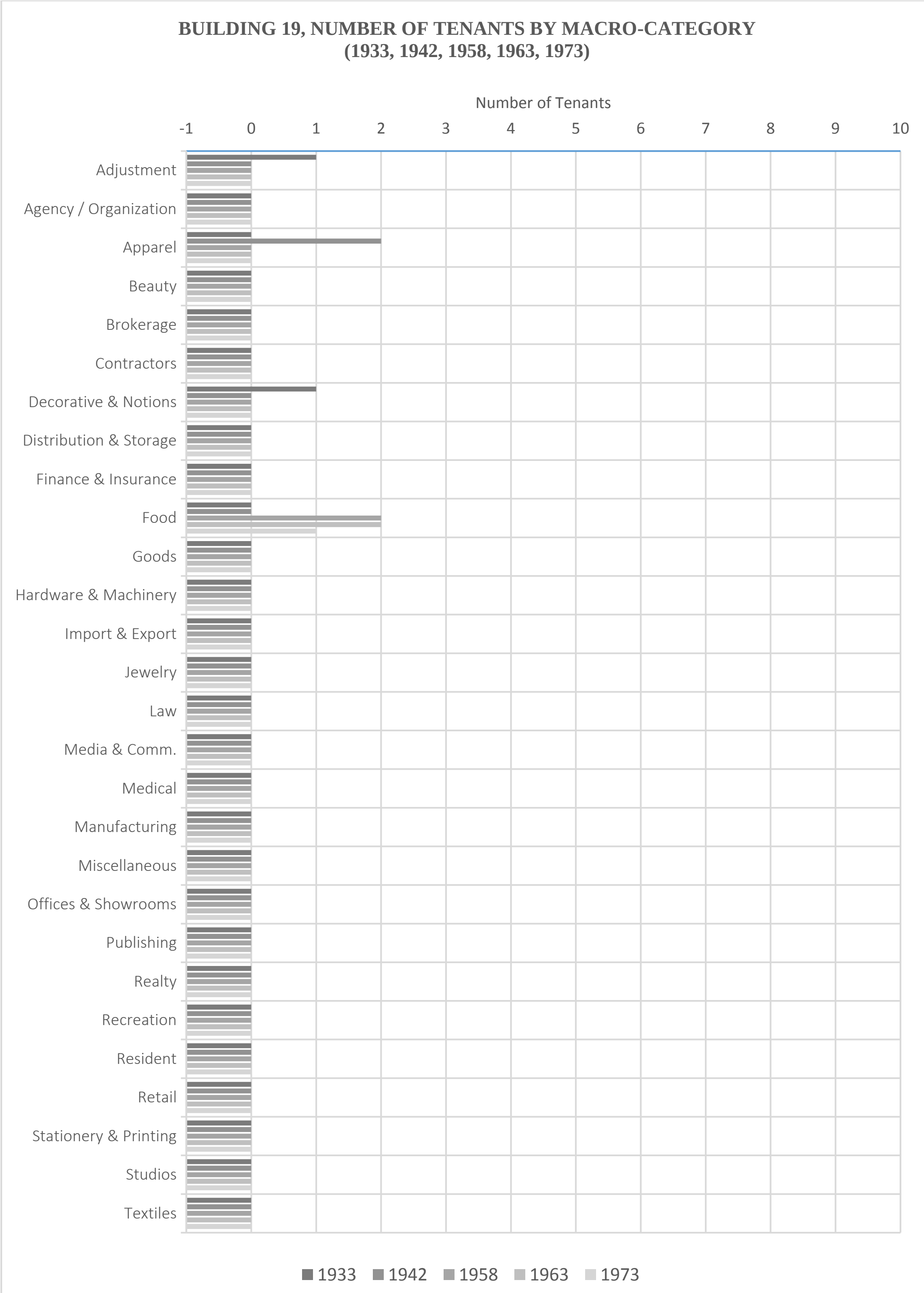


Figure 606: Building 19, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

4.5. BUILDING 20

4.5.1. ARCHITECTURE AND URBAN CONTEXT

Building 20 is a six-story structure built in 1916. It is 27’-8” wide and 120’-0” deep on the first (ground) floor, and 105’-0” on the remaining five floors. It is classified as a Non-Fireproof Structure. Its outer envelope is brick, while its primary structure is composed of steel, with some concrete reinforcement. Wooden beams are used as a secondary structure on each floor, behaving as joists. It has two elevators, one set of stairs, and one fire escape located on the rear façade.

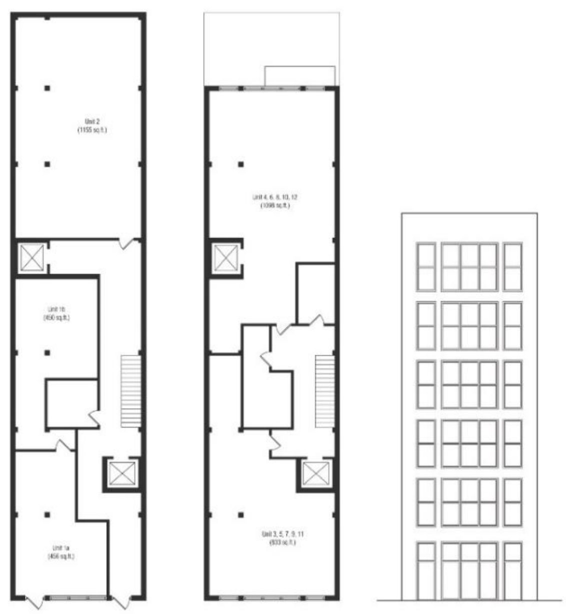


Figure 607, 608, 609 (left to right) Building 20, first (ground) floor (1916); floors 2–6 (1916); (right) street-front elevation (1978). 1” = 32’. For plans, north is right.

The street-front façade of Building 20 faces east. In the rear (western) portion of site, Building 20 receives slightly more than the minimum amount of access to light and air as is required by the minimum setbacks established by code, as is documented in the rightmost graphic below.

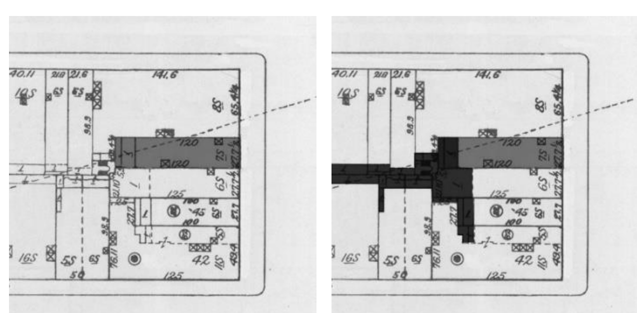


Figure 610, 611: Excerpt from Sanborn Map from 1976, with Building 20 highlighted in darker tone; same excerpt with the surrounding urban fabric that is shorter than or equal to half the height of Building 17 highlighted in further darker tone. No set scale. North is up.

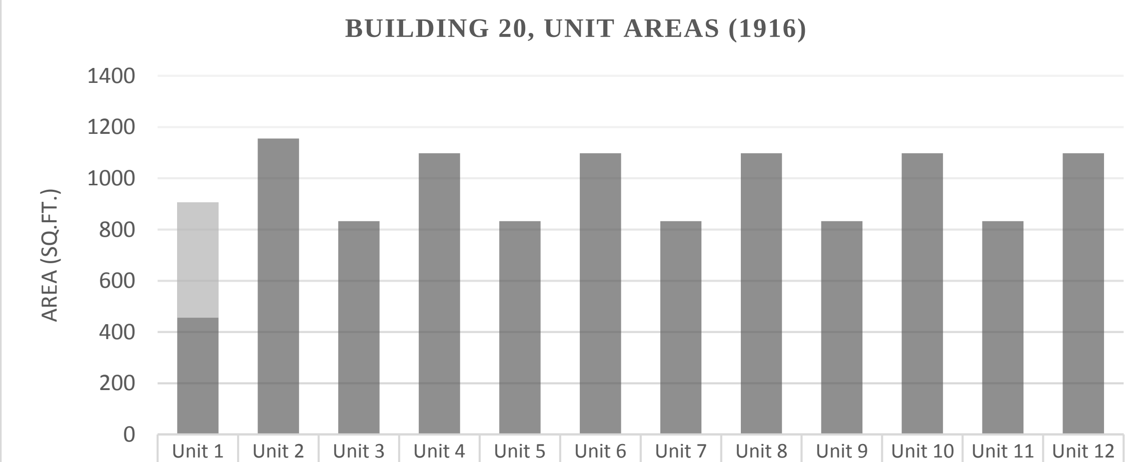
4.5.2. INTERNAL SPATIAL COMPOSITION

The entire set of plans for Building 20 obtained for 1916 and 1978, have been provided below in order to show in full detail the changes to the internal partitioning of the building over time.

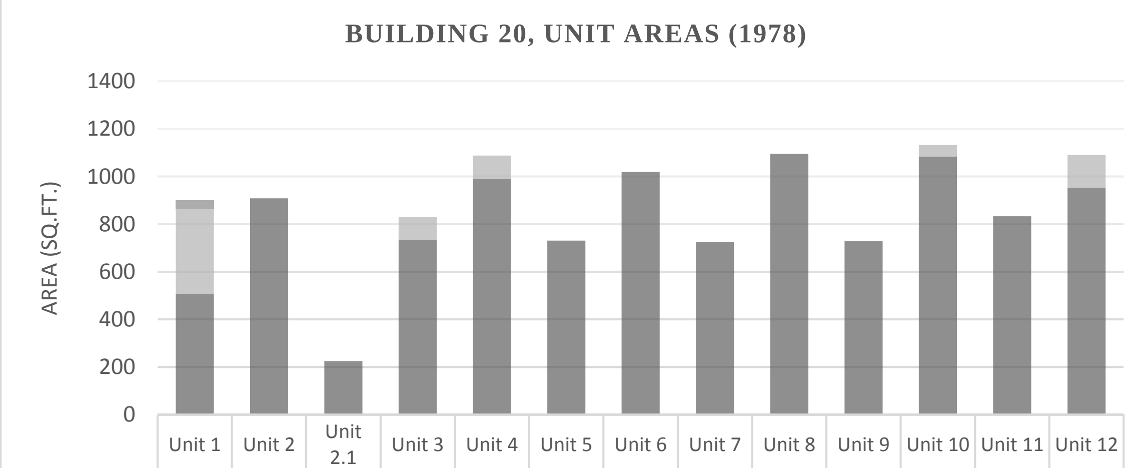
Figure 612, 613, 614, 615, 616, 617: Building 20, first (ground) floor (1916); same floor (1978); second floor (1916); same floor (1978); third floor (1916); same floor (1978) 1" = 32'. North is to the right.

Figure 618, 619, 620, 621, 622, 623: Building 20, fourth floor (1916); same floor (1978); fifth floor (1916); same floor (1978); sixth floor (1916); same floor (1978) 1" = 32'. North is to the right.

In 1916, Building 20 had 12 units, with 2 units on the first (ground) floor, and 10 units on the five floors above. In 1978 by comparison, the total unit count increased to 13, with 3 units on the first floor (1 more than in 1916) and 10 units on the five floors above (same as in 1916). As can be observed in the graphics below, the 1978 state of Building 20 exhibits a rather similar internal spatial diversity when compared to its 1916 state, specifically above the first (ground) floor—that is, from Unit 4 to Unit 12.



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12
Portion c												
Portion b	450											
Portion a	456	1155	833	1098	833	1098	833	1098	833	1098	833	1098



	Unit 1	Unit 2	Unit 2.1	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12
Portion c	37												
Portion b	355			95	98						48		138
Portion a	508	908	225	735	990	731	1019	725	1095	728	1084	833	953

Figure 624, 625: Unit areas for Building 20, floors 1–6, for 1916 and 1978, with "portions" signifying internal subdivisions within individual units ("portion a" is the first space upon entry).

In 1916, among the 10 units above the first (ground) floor, the average unit size for Building 20 was 966 square feet, with the smallest unit being 833 square feet and the largest being 1098 square feet. In 1978 by comparison, among the 10 units above the first floor, the average unit size shrunk slightly to 927 square feet, with the smallest unit falling to 725 square feet, and the largest increasing slightly to 1132 square feet.

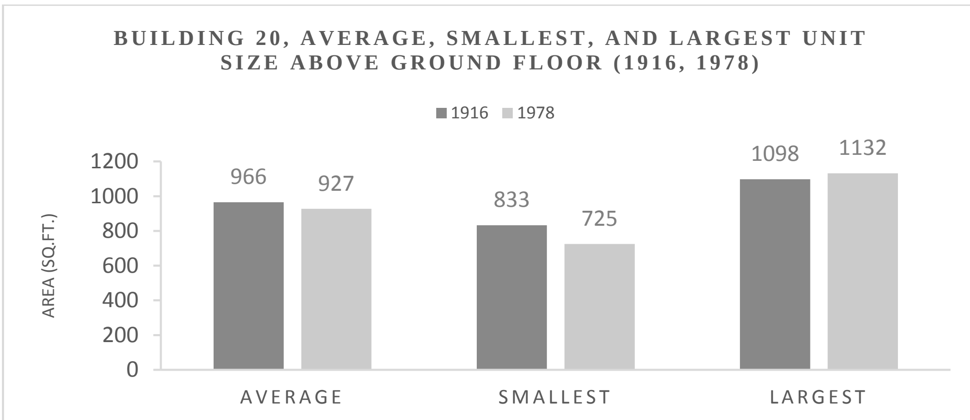
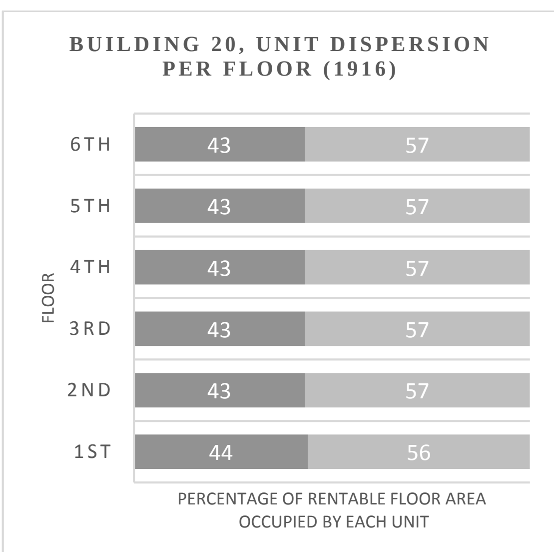


Figure 626: Building 20, average, smallest, and largest unit size above first (ground) floor for 1916 and 1978.

Below is a visualization showing the changes to the internal arrangement of Building 20, floor by floor. One observes that while there are changes between 1916 and 1978 on the first floor, the floor-to-floor unit dispersion for the rest of the building remains roughly the same.



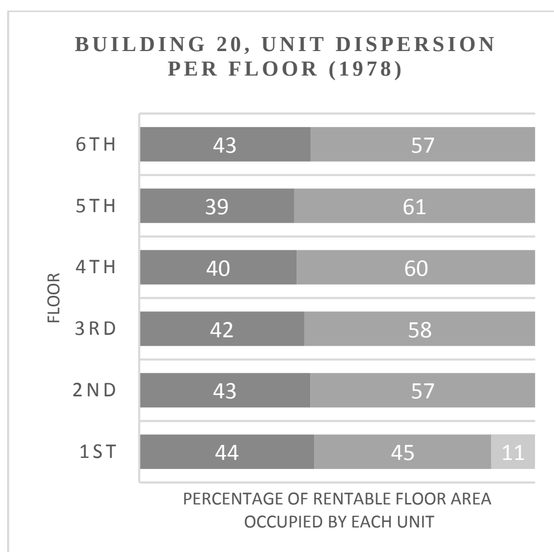


Figure 627, 628: Building 20, unit dispersion per floor, 1916 and 1978.

4.5.3. SOCIOECONOMIC COMPOSITION

Below is a chart showing the tenants listed for Building 20 for 1933, 1942, 1958, 1963, and 1973, coded from reverse business directories obtained at the New York Public Library.

1933	1942	1958	1963	1973
Furs	Furs	Furs (1)	Furs (2)	Furs (3)
Miscellaneos	Furs	Furs (1)	Furs (2)	Furs (3)
Retail	Furs	Furs (1)	Furs (2)	Furs (3)
				Furs

Figure 629: Changing socioeconomic composition of Building 20 for 1933, 1942, 1958, 1963, and 1973, with the increasing darkness of the greyscale highlighting representing the increasing number of times an occupant has renewed tenancy.

In 1933, Building 20 had 3 tenants, totaling 3 micro-specializations. In 1942, total tenancy remained the same at 3, while micro-specializations dropped to 1. In 1958 and 1963, these counts remained the same, until 1973 when an additional tenant was observed, reaching a peak count of 4 firms, while micro-specializations remained stable at 1. It is worth noting that from 1942 to 1973, the same three fur companies are observed in Building 20, as seen in the table above.

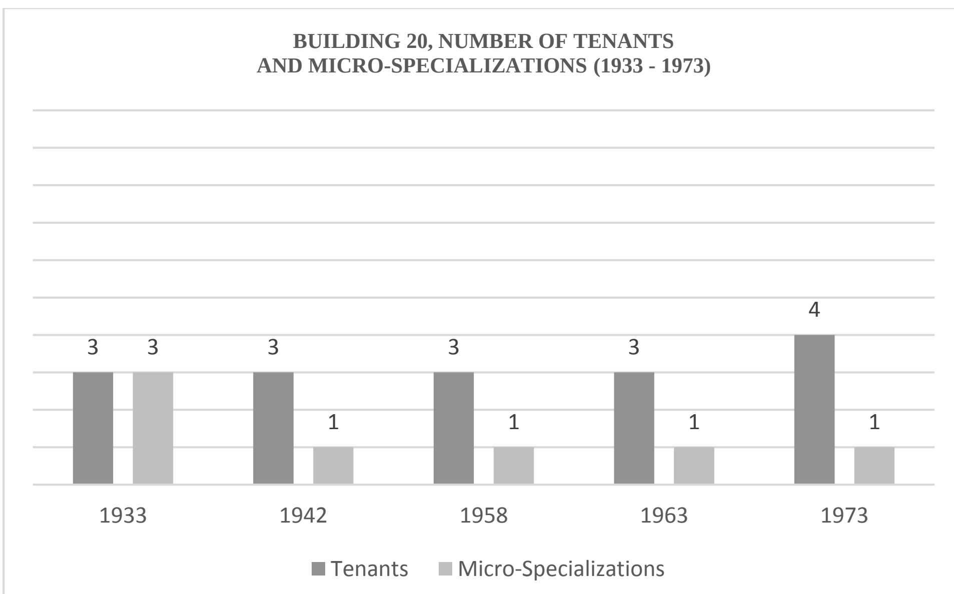


Figure 630: Building 20, number of tenants and micro-specializations for 1933, 1942, 1958, 1963, and 1973.

The graphic below summarizes the repeat tenancy pattern for Building 20. The first repeat tenancy for this structure occurs in 1958, with 3 repeat tenant being observed. Through 1973, these same tenants (firms specialized in furs), continue to maintain their tenancy of the building.

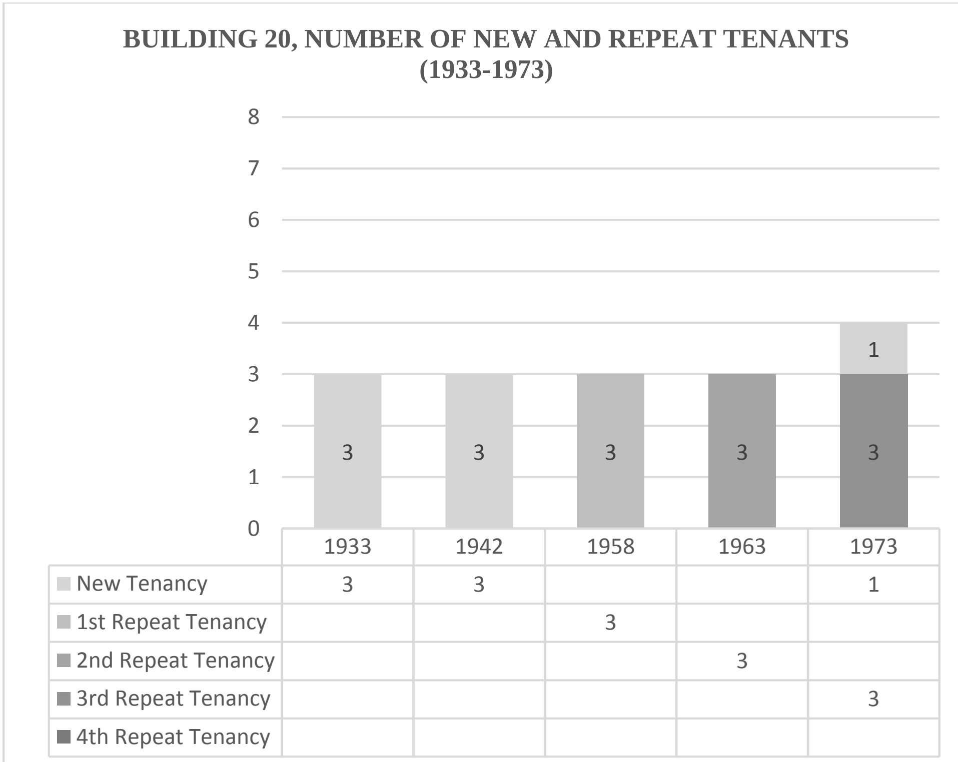


Figure 631: Building 20, number of new and repeat tenants from 1933–1973

Some narratives to note, in looking at the figures relating to socioeconomic composition, below:

- In looking for a macro-categorical commonality in comparing the economic fabric supported by Building 20 in 1933 versus 1973, one finds 1 macro-category shared by the first and last year sets—namely, *Apparel.* As aforementioned, this is due to the consistent presence of the same three fur companies in the last four year sets. In 1933 there is also a firm specialized in furs observed, however it is one that is replaced by the aforementioned 3 fur firms that are first documented in 1942.
- *Apparel* is clearly the dominant macro-category for Building 20, with *Miscellaneous* and *Retail* being the only other two categories observed, appearing only in 1933 with 1 firm each.

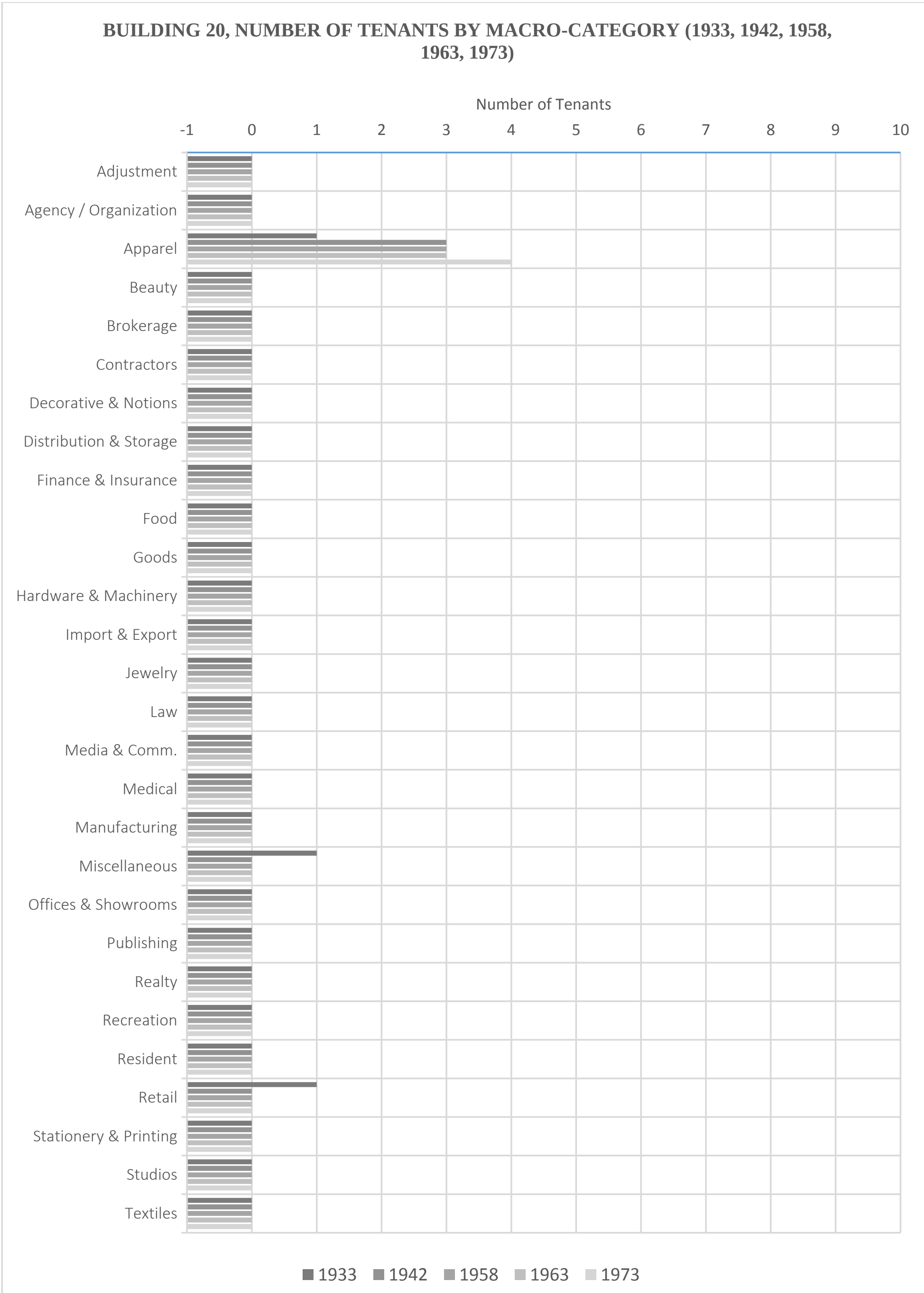


Figure 632: Building 20, number of tenants by macro-category, 1933, 1942, 1958, 1963, 1973

4.6. CONCLUSIONS AND BRIEF DISCUSSION

The points of discussion outlined in Section 3.16 are used here as a framework for further analyzing the narratives of physical and socioeconomic change within the 5 buildings presented in Sections 4.1 through 4.5 above. These points, although discussed briefly and in an isolated manner here, will be addressed in their full depth, and in a comparative manner, in Section 5 ("Comparative Analysis and Conclusions") of this dissertation.

(1) *SOUTHERN EXPOSURE:* Does increased southern exposure increase the likelihood of a building supporting higher densities of socioeconomic diversity?

Out of the 5 poorer-performing buildings studied, 2 exhibited a south-facing street front façade (Buildings 18 and 19). And 1 out of the remaining 3 (Building 16) enjoyed more than the minimum of access to southern light in the rear of site, albeit through two narrow, approximately twenty foot slits due to the urban-morphological character in Building 16's rear of site. Furthermore, compared to Buildings 1–15, out of which 9 (or 60.0%) exhibited south-facing facades, among all 22 of the lower-performing buildings (out of which Buildings 16–20 were selected), 10 (or 45.5%) exhibited south-facing facades.

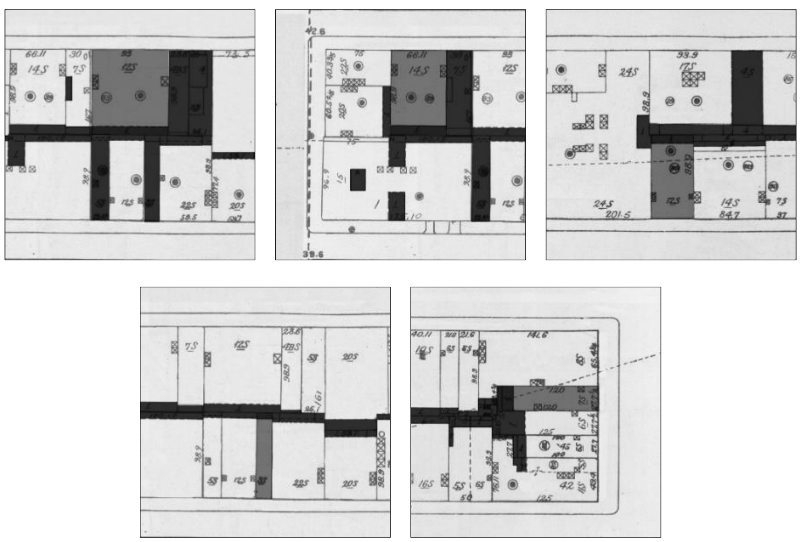


Figure 633: Excerpts from Sanborn Map from 1976, with Buildings 16-20 highlighted in dark tone, and the surrounding urban fabric that is shorter than or equal to half the height of Building 16-20 highlighted in further darker tone. No set scale. North is up.

(2) *ACCESS TO LIGHT & AIR:* Does increased access to light & air in the rear and side portions of a floorplate increase the likelihood a building supporting higher densities of socioeconomic diversity?

As observable in the Sanborn Map excerpts above, 3 out of the 5 buildings studied (Buildings 16, 17, and 20) exhibited greater access to light and air, when compared to what could have been realized if maximum densities and minimum rear-of-site setbacks had been achieved. Furthermore, compared to Buildings 1–15, out of which 10 (or 66.7%) enjoyed greater access to light and air, among all 22 of the lower-performing buildings, 9 (or 40.1%) exhibited greater access to light and air in the rear of site.

(3) *BUILDING SIZE*: Do buildings with smaller gross areas have a higher likelihood of having more-diversified (i.e., less-homogenized) tenant pools?

In Buildings 16–20, it is observed that 4 out of 5 structures have total gross building areas over 150,000 square feet, with the exception being Building 19, which had a gross building area of 56,000 square feet. Building 20, it should be noted, is still rather close to this threshold, with a gross building area of 178,000 square feet.

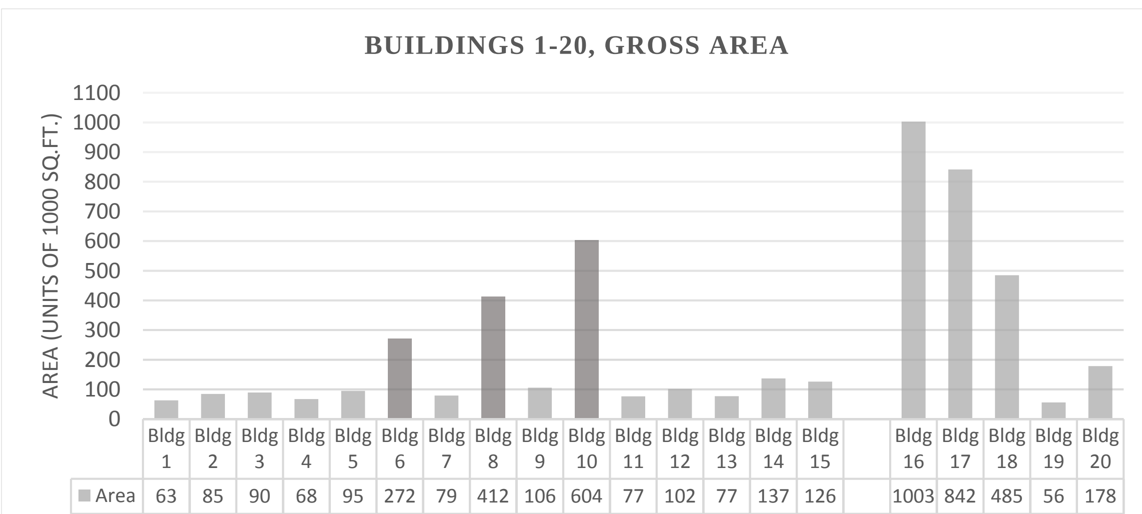


Figure 634: Chart showing gross area for Buildings 1–20, with the three larger higher-performing buildings highlighted in darker grey scale.

Two further graphics are framed below, the first showing the ratio of micro-specializations to total tenants for Buildings 1–20 during their peak occupancy years, and the second showing the number of micro-specializations and tenants per 10,000 square feet for Buildings 1–20 during their peak occupancy years.

In looking at Buildings 1–20 in terms of ratios of micro-specializations to total tenants, it is observed that Buildings 16–20 do exhibit lower ratios on average when compared to Buildings 1–15. However, it is really in the second graphic, that the notion of *densities of diversity*, not just diversity in itself, is honed in on. Within this secondary graphic, it becomes all the more clear to what degree Buildings 1–15 were outperforming Buildings 16–20.

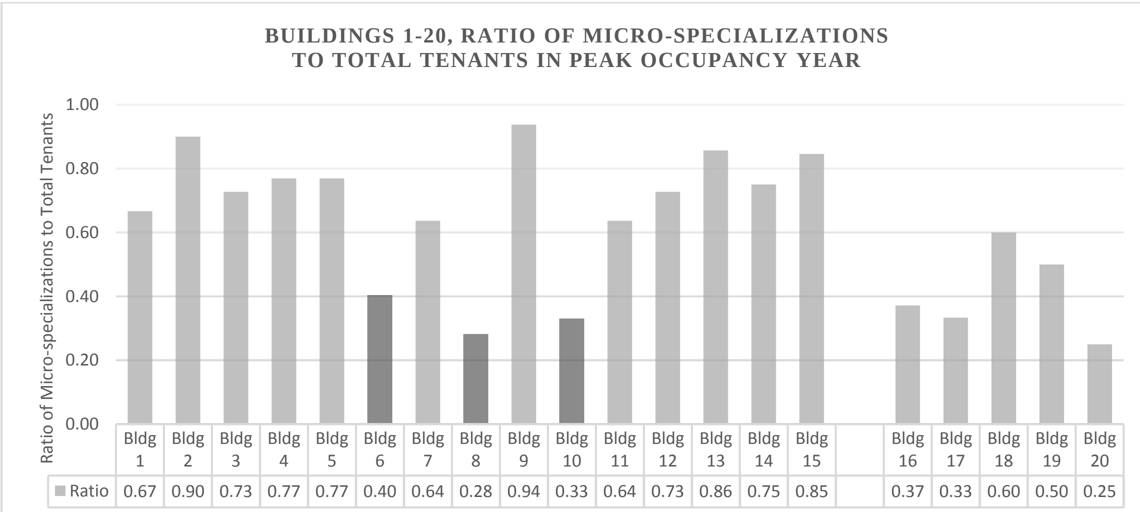


Figure 635: Chart showing the ratio of micro-specializations to total tenants observed in Buildings 1–20 during the peak occupancy year for each building, with the three larger higher-performing buildings highlighted in darker grey scale

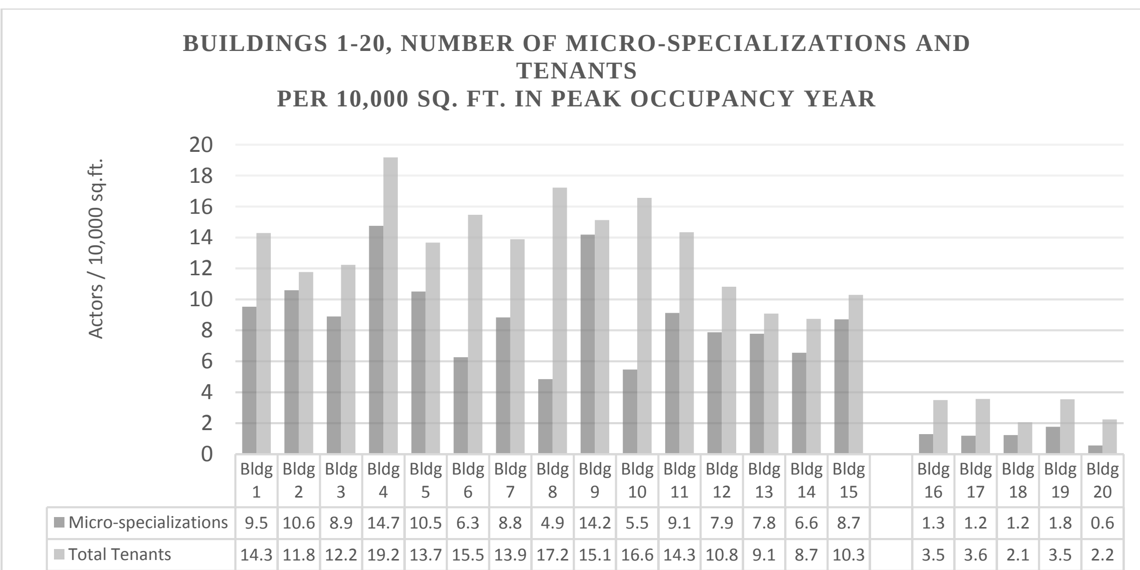


Figure 636: Chart showing the number of micro-specializations and tenants per square foot, observed in Buildings 1–20 during the peak occupancy year for each building.

Building on this distinction of diversity v. densities of diversity, Section 5 ("Comparative Analysis and Conclusions") of this dissertation will also analyze in greater detail the broader patterns observed in terms of what range of unit sizes these differing building sets were able to provide, and what this distribution of unit sizes entailed in the context of the socioeconomic fabrics they supported.

(4) *ASSYMETRIC CORE PLACEMENT*: Do buildings with asymmetrically placed cores exhibit an increased likelihood of developing a richness internal spatial diversity?

Below are a series of graphics illustrating the core placement of Buildings 16–20.

Figure 637, 638: Plan of Building 16 (left), and Building 17 (right), with core areas highlighted in dark tone. 1" = 32'. Plans oriented so that the street front would be down.

Figure 639, 640, 641: Plan of Building 18 (left), Building 19 (middle), and Building 20 (right), with core areas highlighted in dark tone. 1" = 32'. Plans oriented so that the street front would be down.

Although these points will be discussed in greater detail in Section 5 of this dissertation, there are a few key observations to take away here. First, the manner in which the cores of Building 16 and 17 were designed and placed seem to actively suppress the further subdivision of their floorplates. The isolation of the two egress cores to opposite sides of the floorplate, and the lack of a connecting communal corridor between these cores, seems to make it significantly difficult to further subdivide the floorplate while also maintaining two means of egress per unit. In essence, Buildings 16 and 17 seem to have been pre-structured due to their designs so as to be most likely to support two large units per floor, and no more. This point seems to be further reinforced by the fact that Building 18, the only building of the three big buildings being studied in this phase that maintains a communal corridor connecting the two egress cores, is also the only one of the three big buildings to have developed an internal spatial intricacy of more than two units per floor above the ground floor (although only on the 2nd and 9th floors, as shown in Section 4.3.2).

Second, building on this previous point, the more-centralized arrangement of the cores of Buildings 16, 17, and 18, when compared to the more-asymmetric placement of the cores of the larger buildings studied in Phase II (Buildings 6, 8, and 10) seem to reinforce the hypothesis (framed in Section 3.16) that there may be two differing big-building typologies being observed here—namely big-big buildings (big buildings with big-building logic), and small-big buildings (big buildings with small-building logic), with the latter, in turn, presenting a higher likelihood of being able to develop a greater richness of internal spatial diversity over time

And third, the presence of fire escapes, and subsequently the existence of communal corridors that connect fire escapes to central cores, seem to be critical factors in increasing the flexibility of a building in regard to its capacity to be subdivided into a range of internal arrangements. Put simply, these corridors seem to operate not only as communal arteries that allow for greater flexibility in the subdivision of floorplans, but also as communal thresholds (that is thresholds of communal domain) that inherently limit how much of the floor plate a single unit is able to appropriate.

(5) *FAÇADE RHYTHM:* Do facades that exhibit more regularized increments of solid walls or thick mullions allow for greater flexibility in internal partitioning?

In Section 3.16 it was observed that 12 out of the 15 higher-performing building studied exhibited facades with rather steady increments of solid walls or thick mullions (with Buildings 3, 5, and 14 being the exceptions). It was hypothesized that the existence of such regularized increments in the façade would seem to support the capacity of a plan to be partitioned to accommodate a range of unit widths (and therefore sizes). Although this will be discussed in greater detail in Section 5.0 of this dissertation, there are some key observations to take away.

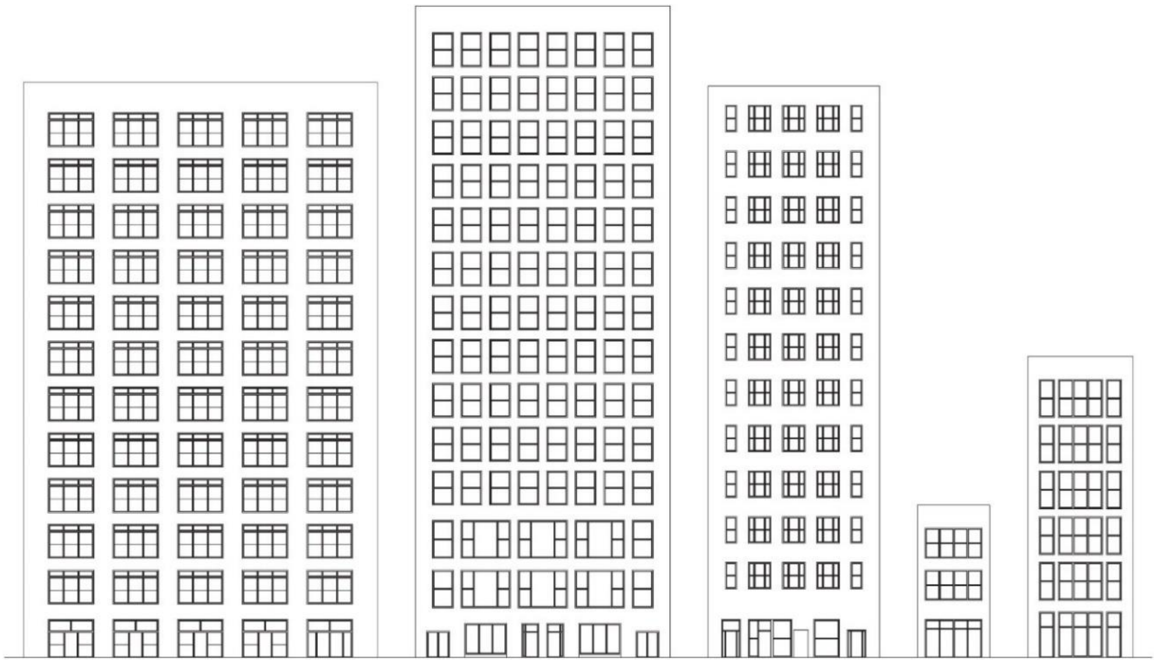


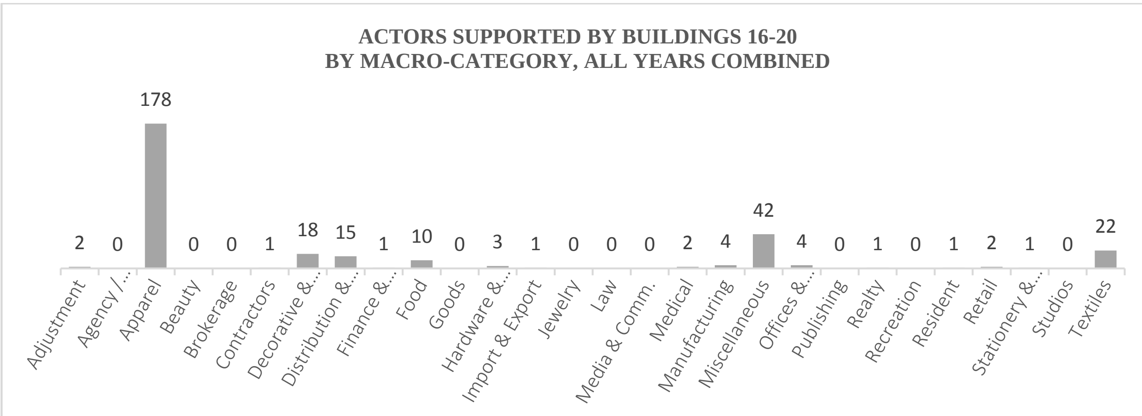
Figure 642: Street-front elevations of Buildings 16–20. 1'' = 32'.

First, while Buildings 16–18 do indeed exhibit this regularized façade rhythm, the capacity of subdivision for Buildings 16 and 17 seem to have already been actively suppressed by the design of their cores, as discussed in the page prior.

Second, the two small buildings studied in this section (Buildings 19 and 20) have facades that would seem to hinder the ability of dividing the floor plate down the central axis, due to the presence of a cluster of windows occupying the middle portion of the façade. In buildings of such limited widths, it would appear that without a capacity to work off of, or near to, this central axis, that little subdivision can be expected in the building as a whole. This appears to be corroborated by the lack of subdivision observed in Sections 4.4.2 and 4.5.2.

(6) WHAT WAS THE GARMENT DISTRICT? Is the narrative accurate, robust, complete?

In Section 3.16, it was observed that the socioeconomic fabrics supported by Buildings 1–15 seemed to be more diverse than what is often described in regard to the Garment District's socioeconomic composition in the 20th century. A critical question thus emerges: *Is the Garment District that is supported by big buildings different than the Garment District supported by smaller buildings?* This question becomes all the more intriguing, when comparing the graphics above, which show the socioeconomic fabric supported by the five poorer-performing buildings studied in this research phase, to the socioeconomic fabric supported by Buildings 1–15, shown in the phase prior. The broader question still remains: *What was the Garment District?* As can be seen by these various analyses of the composition of the socioeconomic fabric of the Garment District, to begin to grasp this complex narrative with some degree of clarity, the discourse must begin to approach the question not solely from a socioeconomic perspective, but from a physico-socioeconomic perspective, as asserted previously in Section 2.5 (Phase I) of this dissertation.



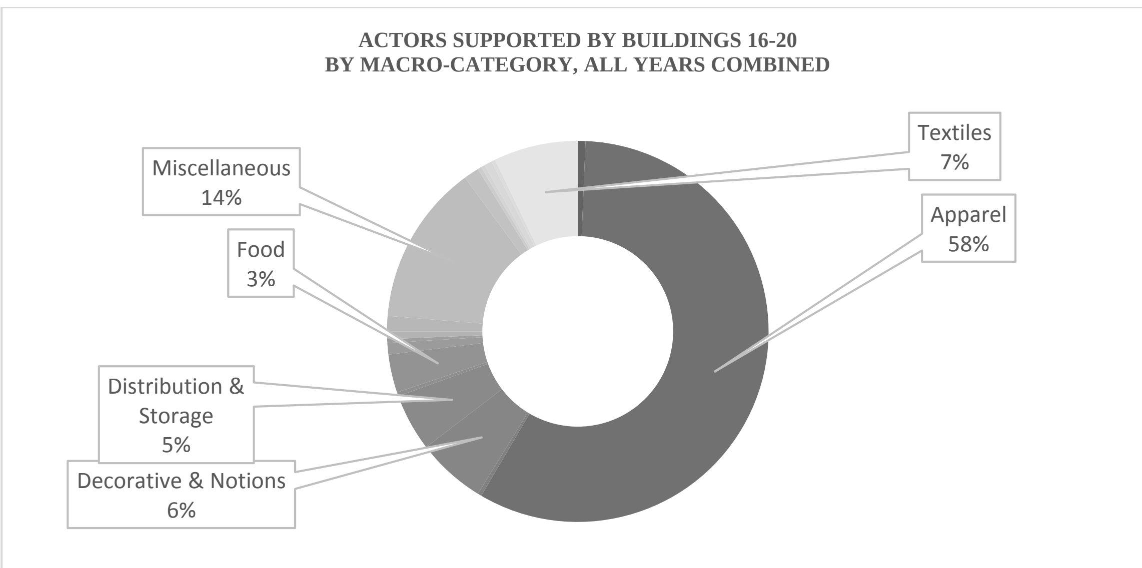


Figure 643, 644: (top) Graphic showing number of actors by macro-category for all year sets combined, for Buildings 16–20; (bottom) pie chart showing same data, with only macro-categories representing 2% or more of the total actor pool, labeled.

CHAPTER V

COMPARATIVE ANALYSIS AND CONCLUSIONS

Throughout Sections 2.5, 3.16, and 4.6, a range of critical conclusions and points of discussion have been briefly framed. These topics, when assessed in aggregate, seem to gravitate around three specific findings of particular significance that have been unveiled throughout the course of this research: (1) there is a predominantly overlooked narrative, namely the scale-specific dwindling of the Midtown Garment District building stock, that is in need of further examination in the context of the broader discussion of the decline of urban garment manufacturing in the twentieth century; (2) the detailed diachronic and physico-socioeconomic lens of inquiry and analysis framed within this research, when used in examining the narrative of the urban fabric of the Garment District in the twentieth century, begins to cast some doubt on the commonly-assumed identity of the area as a solely garment-centric urban locale; and (3) there seems to be a causal mechanism at play within the relationship between certain physical parameters of the built world, and the built world's capacity to consistently support, or its likelihood of consistently supporting, high densities of socioeconomic diversity. This section serves to discuss these points in further depth, within a comparative-analytical framework, taking into consideration the findings of all three research phases.

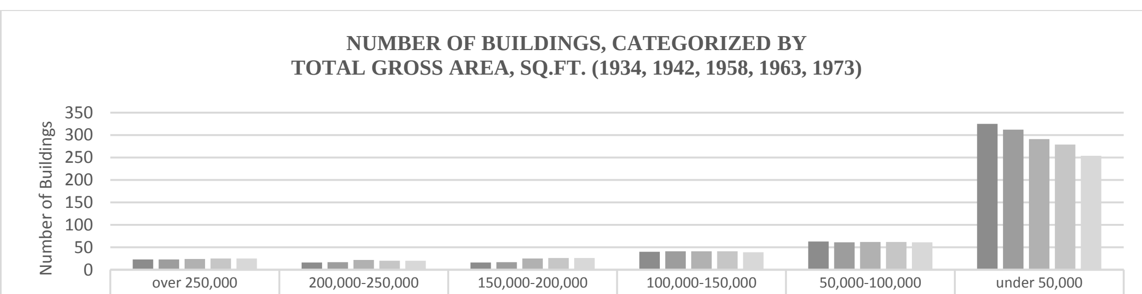
(1) *THE STORY OF THE BUILDING STOCK OF THE GARMENT DISTRICT:* The often omitted relationship between urban manufacturing and the built world, and the potential significance of the untold narrative.

In delving into the breadth of the discourse concerning twentieth-century garment manufacturing within New York City, it is rather readily observable that the relevant literature tends to systematically overlook the intricacies of the built world—or more specifically, the intricacies of the relationships between the built world and the socioeconomic fabric. While, for example, the availability of a range of rentable manufacturing space within the urban fabric is recognized as being one of the various positive externalities that the Midtown Garment District readily supplies to garment entrepreneurs (e.g., Waldinger 1986, 140; Chin 2005, 68), analyses such as this are often made briefly and in passing—that is, without the accompaniment of a suitably rigorous investigation into the depth of the physicality of the city.

Similarly, in works such as that of Dolkart (2011), which focuses heavily on the physicality of the urban fabric of the Midtown Garment District, there is a comparably-truncated investigation into the complexities of the socioeconomic fabric supported by the built world being observed. And on both the strictly-socioeconomic and -architectural ends of the discourse, it needs to be noted, there is an even broader act of discursive erasure or neglect being visibly enacted upon the small scale—that is, the small scale of industry (e.g., garment factories under twenty-five persons) and the small scale of the built world (e.g., buildings under 50,000 gross square feet).

These various acts of discursive erasure or omission are particularly significant, when one considers the historic narrative concerning the decline of garment manufacturing in New York City for the period of 1930–1980. This narrative of decline is discussed within the literature in various contexts—e.g., the impacts of globalization and neoliberalism, the effects of restrictive immigration policies and inherently anti-urban-manufacturing economic policies, the consequences of unbridled urban speculation and gentrification, the reformulation of manufacturing processes, and so on. What seems to be effectively missing from the discourse of contemporary garment manufacturing in Manhattan, however, is a detailed understanding of how changes within the architectural composition of the urban fabric might have also played a role in the changing composition of the socioeconomic fabric of Midtown, or vice versa.

This gap in the discourse is of particular significance when one notes, as seen in the following graphic, that within the period of 1934–1973, the number of buildings under 150,000 square feet in total gross area dwindled from an initial building stock of 428 down to a count of 354 in just under four decades. This represents a 17.2% loss in building stock at this scale. If one looks at the numbers solely for buildings under 50,000 square feet in total gross area in turn, one finds that the initial building stock of 325 structures had dropped by a count of 71 buildings in this time period, representing a 21.8% loss in building stock.



	over 250,000	200,000-250,000	150,000-200,000	100,000-150,000	50,000-100,000	under 50,000
1934	23	16	16	40	63	325
1942	23	17	17	41	61	312
1958	24	22	25	41	62	291
1963	25	20	26	41	62	279
1973	25	20	26	39	61	254

Figure 645: Number of buildings in the Garment District by total gross area (1934, 1942, 1958, 1963, 1973).

This reduction in small-scale architectural species is noteworthy when further contextualized by the fact that between 1934 and 1973, a comparable dwindling in the number of micro-specializations within the socioeconomic fabric of the Garment District, from an initial count of 704 down to a final count of 593, representing a 15.8% loss in overall diversity, was documented. The question that naturally arises, is whether: (1) the decline in the small-scale physical fabric was partially influencing the decline of diversity within the socioeconomic fabric; (2) the decline of diversity within the socioeconomic fabric was partially influencing the decline of the small-scale building stock; (3) a reciprocal and hybridized form of these two relationships was at play; or (4) these were relationships underpinned by a deeper series of societal forces, physico-socioeconomic or otherwise. While it is quite clear that the significant reduction in the smaller-scale building stock—i.e., the very buildings that, through their physical qualities, seem to have possessed an increased likelihood of being able to support higher densities of diversity—could have had a causal influence, among a multiplicity of other causal influences, upon the overall loss of diversity observed within the Garment District, this is a critical avenue for future research that needs to be investigated before the subject can be discussed with clarity.

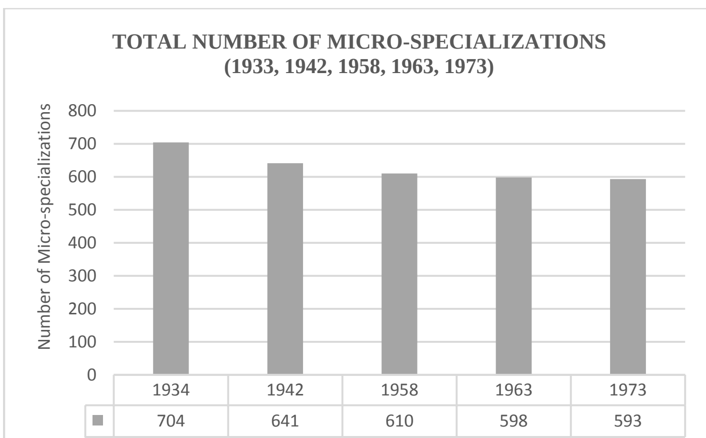


Figure 646: Number of micro-specializations within the socioeconomic fabric of the Garment District (1933, 1942, 1958, 1963, 1973)

One possible explanation for the omission of this narrative of architectural species loss from the broader discourse, may be attributed to the overall lack of interdisciplinary connectivity within the various intellectual fields attempting to analyze the robust twentieth-century narrative of the Midtown Garment District. If one were solely engaged in an architecture-historic perspective, for instance, the loss of these smaller-scale buildings could potentially be overlooked as merely a commonplace phenomenon perceived within many contemporary cities. And the fact that such structures would often be labeled as mere *background buildings*, would likely only reinforce this proclivity of oversight. Similarly, if one were solely engaged in a strictly socioeconomic perspective of investigation, this loss of building stock could fall even more readily into omission, due to the fact that their loss wasn't accompanied by a large-scale shift in the sheer numbers of actors supported within the socioeconomic fabric (as opposed to the very clear dwindling of micro-specializations).

A potentially-deeper reason for this discursive erasure, however, may be attributed to the aforementioned intellectual ostracizing of the small scale. For this numeric dwindling of building stock, or comparable reduction of densities of diversity within the socioeconomic fabric, invariably took place at the scale of the small—the small-scale actor and the small-scale building. The overlooking of this historic narrative of loss therefore, may be due to simple discursive neglect, set in motion with the de-legitimization of the small scale via its categorization under the informal, or more broadly, the insignificant. A secondary possibility, however, may be that the parameters and methodologies being commonly utilized for investigating and analyzing urban physical and socioeconomic phenomena, are by their very structures designed to overlook the small scale—that is, designed, potentially due to the distortive weight of ideological presuppositions, to be unable to account for the existence, let alone the functionality, of the small within the urban fabric.

	under 150,000	over 150,000
1934	5412	4975
1942	5226	5360
1958	5922	5507
1963	4947	5594
1973	4647	5903

Figure 647: Number of actors within the socioeconomic fabric, sorted by total gross area (sq.ft.) of buildings (1933, 1942, 1958, 1963, 1973)

To be able to grasp this omitted narrative, therefore, one must potentially first undistort the parameters of analysis being utilized for investigating urban phenomena—specifically, towards ones that have the capacity to, at the bare minimum concede the existence of the scale of the small within the contemporary city. This re-examination of the established modes of urban analysis is not a point of frivolity, for as seen in the following graphic, smaller-scale architectural species historically did undeniably support a significant portion of the socioeconomic urban fabric of the Garment District for the year sets that were studied, even when compared to their larger architectural counterparts.

(2) *THE QUESTION OF THE NATURE OF THE GARMENT DISTRICT, AND THE POTENTIALS OF PHYSICO-SOCIOECONOMIC ANALYSIS:* How do the socioeconomic narratives underpinning the Garment District begin to shift, when detailed diachronic and phsyico-socioeconomic analyses are put in motion?

The Midtown Garment District has often been characterized as a dominantly garment-centric socioeconomic fabric. The analysis of this fabric produced within the scope of this research however, which seems to be the most detailed diachronic effort of its kind within the existing discourse, seems to cast doubt on this assumed identity. Observe for instance in Figure 648, the changes in the socioeconomic actors represented by the macro-categories of *Apparel* versus *Miscellaneous* over the five year sets being examined.

At its peak year of 1942, *Apparel* represented 5,175 socioeconomic actors, or 48.9% of the total actor pool. In the same year, *Miscellaneous* represented only 1,236 socioeconomic actors, or 11.7% of the total actor pool. While this lopsided distribution in the 1940s seems to support the garment-centric narrative aforementioned, if one looks at the year of 1973, a different narrative begins to unfold—namely, with *Apparel* having diminished drastically in numbers, down to a representation of 3,274 actors or 31.0% of the total actor pool, and *Miscellaneous* having inversely increased dramatically in numbers, up to a representation of 2,824 actors, or 26.8% of the total actor pool. By the 1970s, in other words, *Apparel* and *Miscellaneous* have come remarkably close to being on equal footing, in terms of the numbers of actors they represented within the socioeconomic fabric.

There are two questions to consider here: (1) Why is the socioeconomic richness evident in the Garment District seemingly omitted by the discourse, as the area is often placed solely under the blanket category of "apparel manufacturing?" And (2) are there overlooked synergies between the garment industry and other socioeconomic realms which historically supported the maintenance and development of such socioeconomic richness within the Midtown urban fabric? These questions are of particular importance within the context of contemporary efforts to reestablish and reinvigorate the garment-centric identity and production capacity of the Midtown fabric. For, in the urge to incentivize a specific type of socioeconomic growth—one potentially pinned, furthermore, by a nostalgic conception of what this locale *ought* to be—what may in fact be put into motion is either: (1) an attempt to achieve a certain localized socioeconomic behavior, without addressing the broader socioeconomic metabolism of the city that may have played a critical role in the locality's socioeconomic identity in the past; or (2) an effort to propel a portion of the urban fabric towards a specific type of socioeconomic functionality, when it may have been historically moving towards a more diversified, and potentially non-garment-centric, socioeconomic fabric. Again however, further research into the socioeconomic intricacies of the Garment District is required in order to investigate these questions at the required depth, specifically looking at how individual firms changed over time; how other garment-industry nodes in the surrounding urban fabric developed over time; the nature of the relationships between the garment industry and other socioeconomic realms, and so on.

The fundamental question that is asked by this finding, is one that has been echoed in the previous chapters of this research—namely, *what was the Garment District?* This question of identity, rooted firstly in this detailed and rigorous diachronic analysis of the socioeconomic fabric of this Midtown locale, becomes further refined when the physico-socioeconomic framework of inquiry and analysis outlined through the scope of this research, is put into motion. For instance, in looking at the distribution of socioeconomic actors supported in the larger building stock versus the smaller building stock (Figure 649 and 650), one begins to notice similar, but by no means equivalent socioeconomic fabrics being depicted.

While the socioeconomic fabric supported by the smaller building stock (Figure 650) is still dominantly occupied by the macro-category of *Apparel*, what is also clear is that it is a socioeconomic fabric that is far less lopsided, and far more diverse, in terms of its overall composition, when compared to that supported by the larger building stock (Figure 649). This simple finding points to the potential that the utilization of a physico-socioeconomic lens of inquiry and analysis seems to allow for the unveiling of a much more robust and refined narrative, when compared to that produced via a strictly physical or strictly socioeconomic reading of the urban fabric. The prior question regarding the identity of the Garment District, in turn, is also revisited—namely, whether the socioeconomic nature and identity of the Garment District that is broadly accepted, is an accurate representation of historic reality, or rather a somewhat distorted conception underpinned by a lack of rigorous analysis, by the haze of nostalgia, and by the intellectual deformations triggered via the weight of certain underlying ideological presuppositions regarding this specific urban locale, and more broadly, the broader urban fabric.

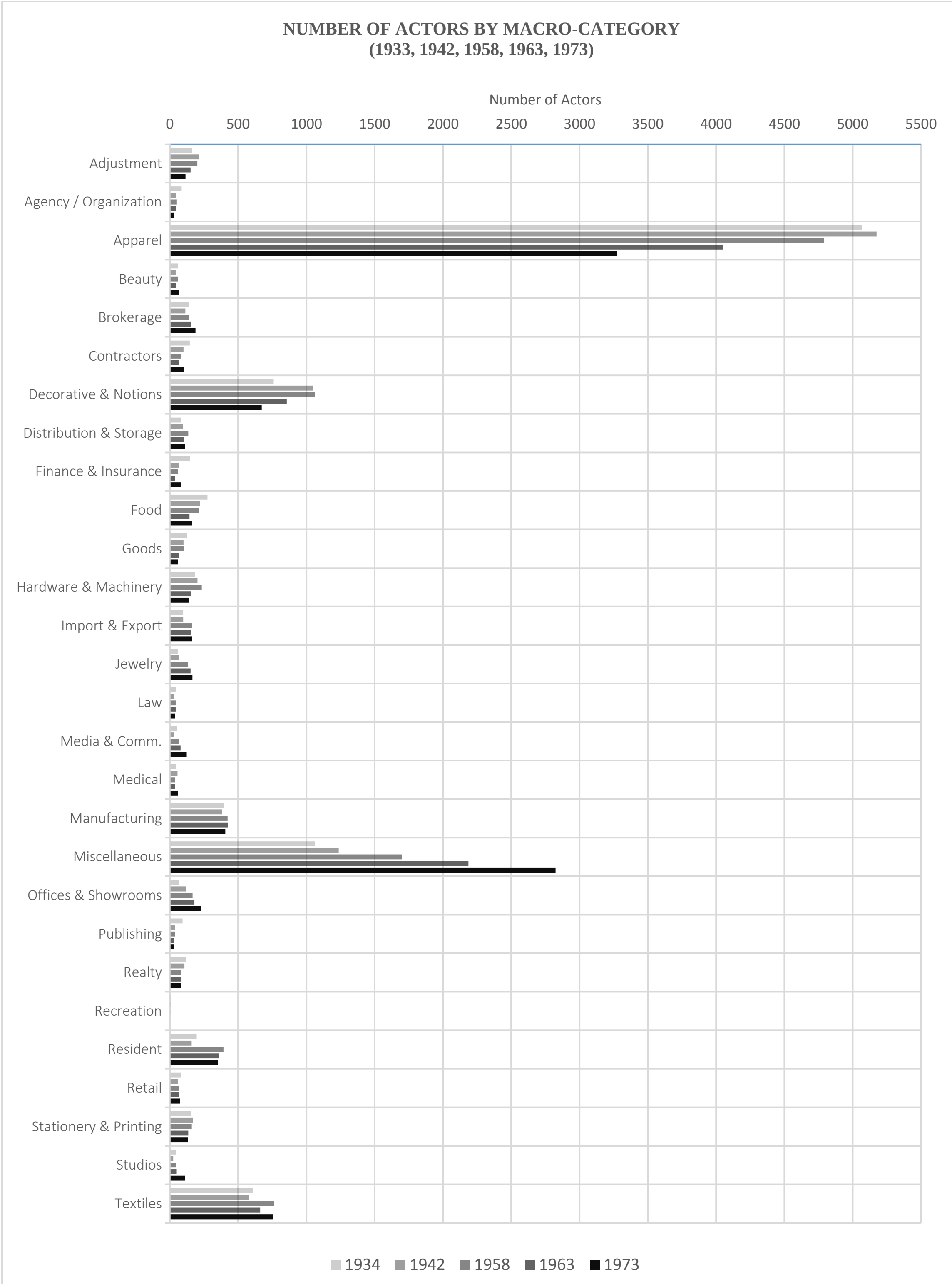


Figure 648: Number of actors according to macro-category within the socioeconomic fabric of the Garment District (1933, 1942, 1958, 1963, 1973)

In operationalizing this phyisco-socioeconomic mode of inquiry and analysis, a similar set of questions begin to arise in regard to the assumed nature of the building stock. In the seminal work of Dolkart (2011) for instance, which focuses heavily on the physical / architectural qualities inherent to the Midtown Garment District building stock of the twentieth century, there is an underlying emphasis on larger-scale architectural species—i.e., "skyscraper industrial lofts and office and showroom buildings" (Dolkart 2011, 14). What seems to underpin the work of Dolkart (2011), among other similar architecture-historic analyses, is the presupposition that these larger scale buildings were the portions of the building stock inherently supporting the critical socioeconomic functions of the Garment District. One of the discursive anchors for this presupposition in turn, seems to be rooted within an inherently biased conception of socioeconomic density. If defined in terms number of actors per building, or as number of actors per square foot of lot area, as is frequently done, it is of course the larger-scale architectural species that come to the discursive forefront, as seen in Figure 651.

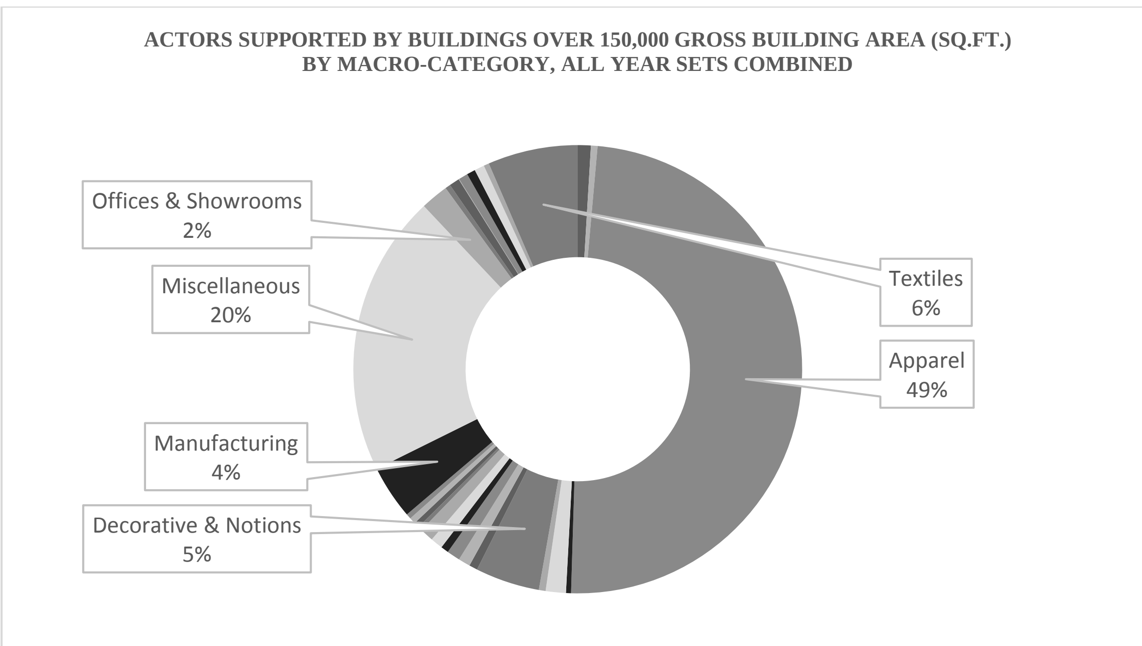


Figure 649: Actors supported by all buildings under 150,000 square feet of gross building area, for all year sets combined, with only macro-categories representing 2% or more of the total actor pool, labeled.

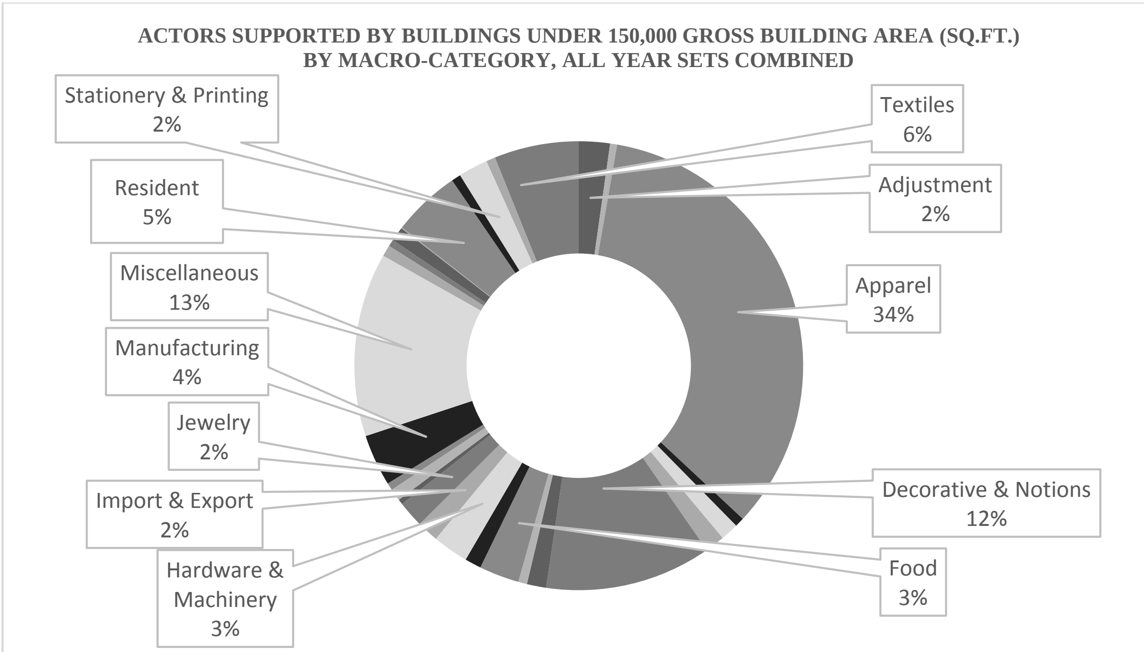


Figure 650: Actors supported by all buildings over 150,000 square feet of gross building area, for all year sets combined, with only macro-categories representing 2% or more of the total actor pool, labeled.

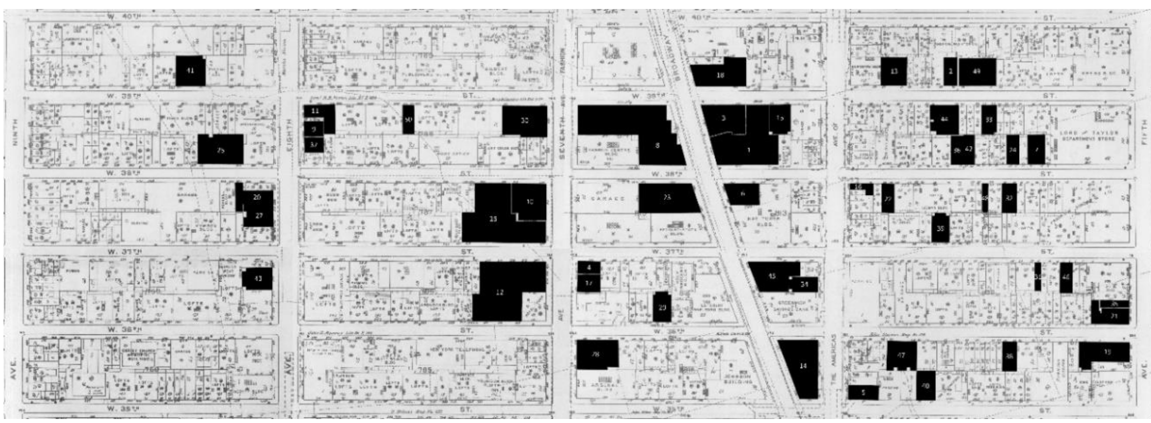


Figure 651: 1973 map of the Garment District, showing the highest performing fifty buildings in terms of number of actors supported per square foot of lot area. North is up.

If however, rather than density of actors by lot area, one were to look at density of actors by gross building area, a rather different portion of the building stock starts to comes to the limelight (Figure 652). If one were to go further, and analyze density according to the number of micro-specializations supported by gross building area—e.g., according to densities of diversity—an even more fundamental shift of the established narrative is witnessed, as seen below (Figure 653).

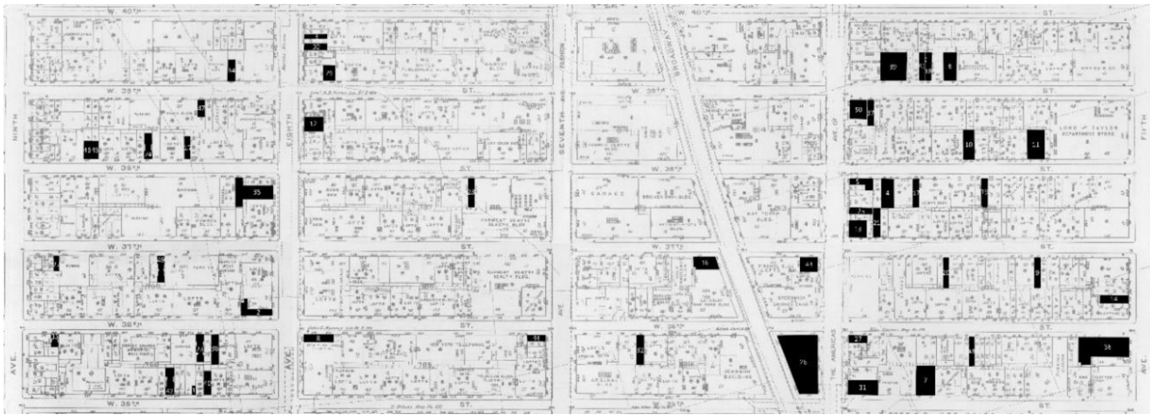


Figure 652: 1973 map of the Garment District, showing the highest performing fifty buildings in terms of number of actors supported per square foot of gross building area. North is up.

The question was, *what was the Garment District?* The secondary question unveiled via these subsequent mapping exercises in turn becomes, *what portion of the building stock seems to have played a more-critical role within the socioeconomic resilience of the Garment District?* Given the emphasis on species diversity presented within the initial literature review of this dissertation, in regard to the topic of complex adaptive systems, it appears that it is not the larger-scale, but rather the smaller-scale architectural species of the building stock that need to be further recognized. This is not to say, by any means, that the larger-scale did not play a significant role within the broader socioeconomic metabolism of Midtown; however, what this research invariably shows is that the smaller-scale did support much higher numbers of micro-specializations when compared to their larger counterparts—and this is, invariably, a critical narrative that has been universally overlooked.

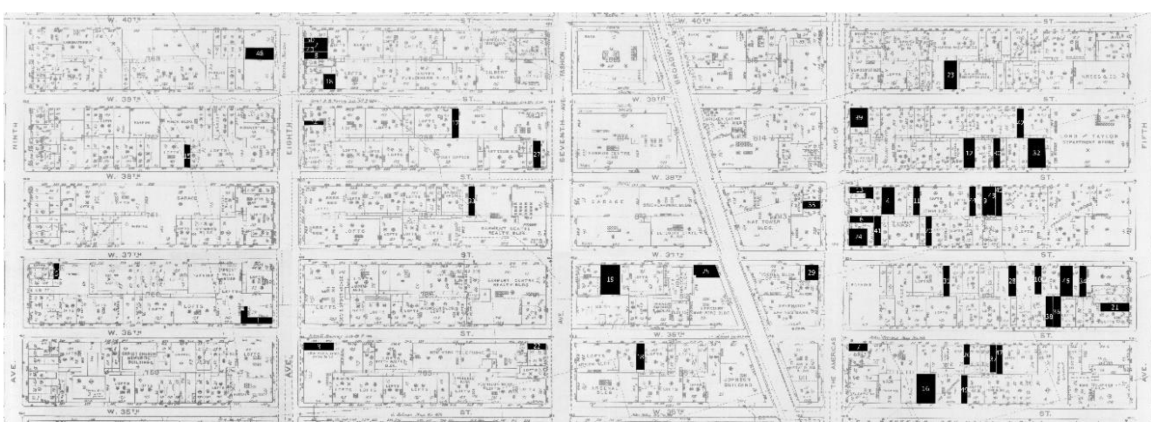
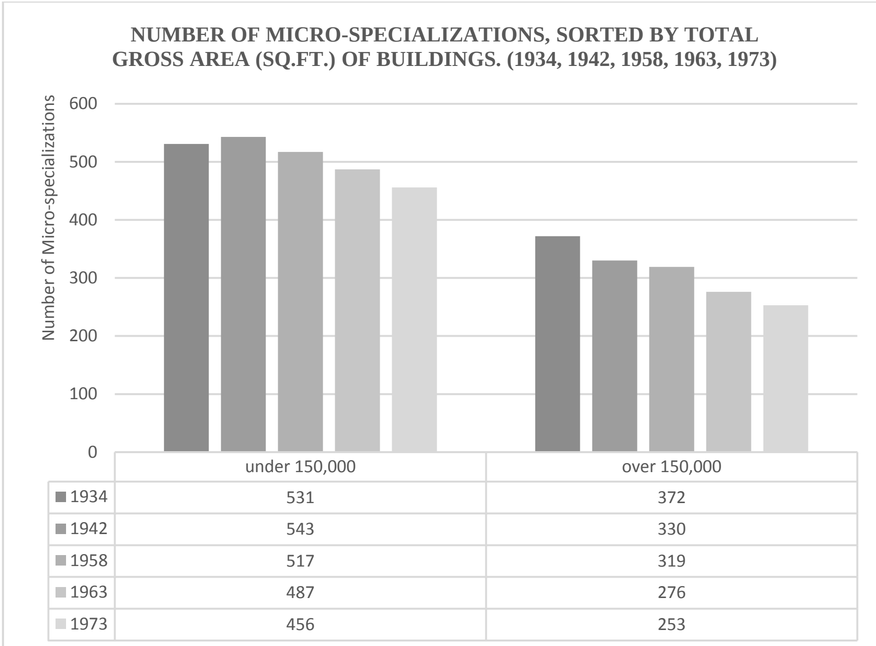


Figure 653: 1973 map of the Garment District, showing the highest performing fifty buildings in terms of number of micro-specializations supported per square foot of gross building area. North is up.



	under 150,000	over 150,000
1934	531	372
1942	543	330
1958	517	319
1963	487	276
1973	456	253

Figure 654: Number of micro-specializations within the socioeconomic fabric, sorted by total gross area (sq.ft.) of buildings (1933, 1942, 1958, 1963, 1973)

(3) *THE BUILT WORLD AND DENSITIES OF DIVERSITY:* The question of a causal mechanism between certain parameters of the built world, and the heightened capacity of the built world to support densities of socioeconomic diversity.

At the terminus of the first phase of this research, it was observed that within the Garment District for the period of 1934–1973, smaller buildings tended to support higher densities of socioeconomic diversity, when compared to their larger architectural counterparts. This relationship of negative correlation, or contrary correlation, is depicted in the graphic below.

Building upon this finding, during Phase II and Phase III of this research, a series of higher- and lower-performing buildings, in terms of the densities of socioeconomic diversity they historically supported, were examined in further detail—fifteen of the former and five of the latter. The question was, whether certain physical parameters, if any, consistently impacted the socioeconomic performance of the buildings in aggregate. Five such factors eventually emerged, including the consideration of scale mentioned above. These included: (1) having an asymmetrically placed core; (2) being relatively small in terms of gross building area, as aforementioned (i.e., under 150,000 square feet); (3) exhibiting a façade with regularized increments of solid walls or thick mullions; (4) enjoying more than the minimum requirements of access to light and air in the rear of site; and (5) having a south-facing street front façade.

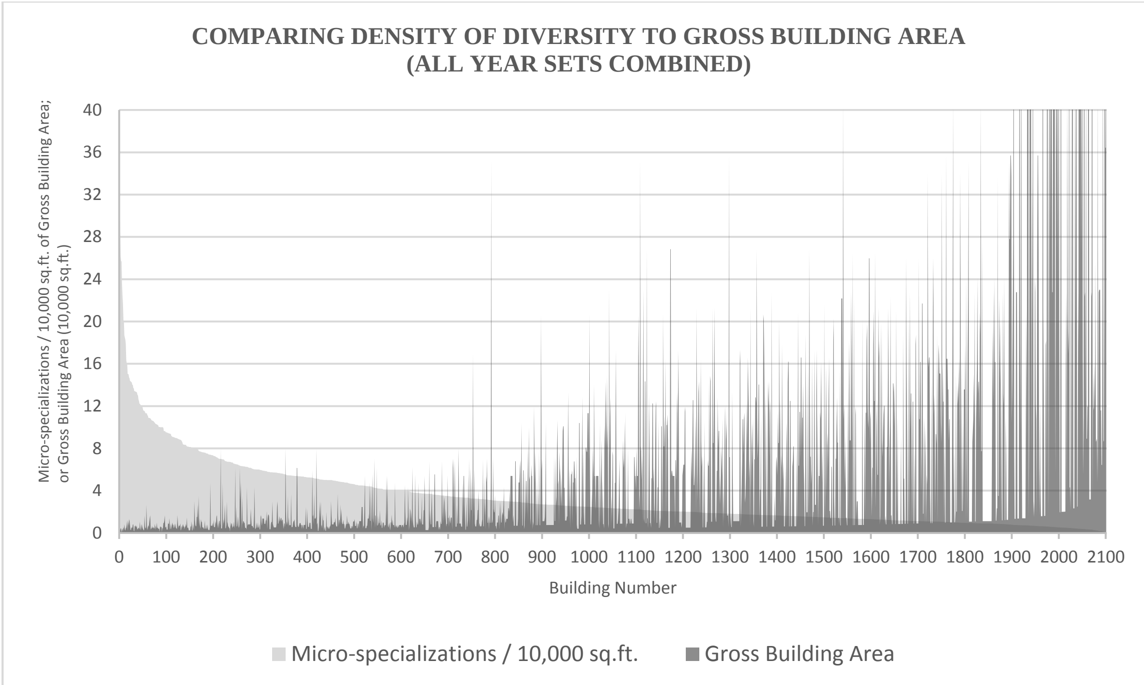


Figure 655: Area chart comparing densities of diversity to gross building areas, for all year sets.

In regard to (1) having an asymmetrically placed core: As seen in Figure 651 on the page that follows, this manner of asymmetric core placement was observed in all fifteen of the higher-performing buildings studied. The shortest distance from the core to the front façade of the building varied from a low of around fifteen feet (Building 2, 3, 4, and 13), to a high of around thirty to thirty-four feet (Building 6 and 11), and with seven of the remaining eight buildings exhibiting distances within the range of eighteen to twenty-two feet (Building 1, 5, 7, 8, 10, 12, 14, and 15). Building 9, in turn, exhibited a distance of approximately twenty-five feet from the edge of its core to its front façade.

This method of core-offsetting seems a bit counterintuitive at first, since one would assume that the better strategy would be to set the core much further back into the building, in order to maximize the rentable area on the street front. However, if one delves into the work of Willis (1995), which points to the fiscal reasoning behind having “shallow, better-lit space” rather than “deep and therefore dark interiors” in the higher-demand street front, and the diminishing rental returns historically observed after around twenty-five feet of well-lit space (Willis 1995, 26), this consistently observed method of core placement begins to make sense.

The asymmetrically-placed core appears to be, therefore, a rather-straightforward space-saving physico-economic maneuver, particularly within smaller-scale architectural species—namely, one that provides the necessary public egress and movement requirements, while maximizing the rentable floor space. In most of the higher-performing buildings examined, this was done in a manner wherein the units to the rear were allowed greater depth than those in the front (as in Buildings 1, 3, 4, 5, 6, 7, 9, 10, 12, 13, 14, and 15). Buildings 2 and 8 in turn, offered comparable unit depths in the front and rear of the building, although in the case of the latter the front units had slightly greater depth (twenty feet) when compared to its rear units (fifteen feet). Building 11, with the core placed at the very rear of the building, was the only example where the front units had substantial more depth than the rear units, namely because the only rear unit that existed for that structure was a small 113 square foot unit on the second floor.

What becomes apparent in studying the plans of these higher-performing buildings, is that the placement of the core in such an asymmetric manner seems to establish an increased probability that the initial subdivision of the floorplate will produce a diversity, rather than a homogeneity, of unit sizes. This means, in other words, that the buildings become anchored, in their early lives, with a richness of spatial niches (with a comparable richness of rental rates) that can then theoretically be occupied by a diverse range of socioeconomic actors, with a diverse range of spatial needs, functioning within a diverse range of budgets.

What can further be extrapolated is that as soon as these diverse range of units are occupied, in turn, something quite intriguing can begin to take place. Just as Willis (1995, 28) suggests, having a multiplicity of smaller tenants can decrease the likelihood of large parts of a building becoming vacated in a single moment, since such vacancy would require the departure of several tenants at once. If portions of a floor plan remain continually occupied, as such, there is potentially less opportunity for a floor's smaller spaces to be amassed into larger spaces in order to accommodate, for instance, an expanding firm in search of real estate. The building core, as well as the communal corridor leading to a fire escape seem to offer similar buffers against the amassing of smaller spaces into larger ones. Effectively, floor by floor, what may be being exhibited here in these fifteen higher-performing buildings is a very fine-grained mechanism of physico-socioeconomic resistance that supports the maintenance of a diversity of floor space within a building—a diversity of space which in turn has the capacity to consistently accommodate a diversity of socioeconomic actors over time.

The fact that this phenomenon of asymmetric core placement (and subsequent initial diversification of the floorplate), is observed within the three higher-performing, yet larger, buildings remains of further intrigue. For typically, larger-scale multi-story office or loft buildings, tend to cluster their cores in a centralized manner in order to maintain a relatively-homogenous ring of rentable space around the occupiable perimeter of the envelope, as observed for instance in the three poorer-performing larger buildings shown below (Buildings 16, 17, and 18).

Figure 656 (left to right): Initial plans of buildings 1-7, 15 (top row) and 8-14 (bottom row) with core areas highlighted in dark tone. 1" = 32'. Plans oriented so that the street front would be down.

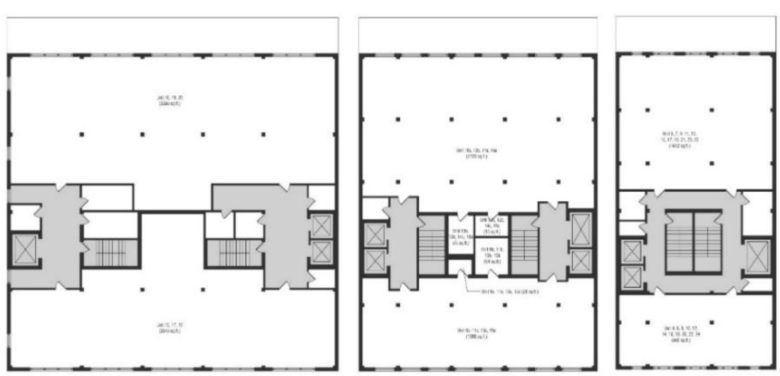


Figure 657: Plan of Building 16 (left), Building 17 (middle), and Building 18 (right), with core areas highlighted in dark tone. Plans oriented so that the street front would be down.

For Buildings 6, 8, and 10, seen below (Figure 653), what is observed rather is seemingly the application of small-scale building logic to the large architectural scale—i.e., the establishment of an asymmetrically placed core which in turn seems to support a mode of internal partitioning that establishes a more-diverse range of rentable space throughout the building.

Figure 658: Plan of Building 6 (left), Building 8 (middle), and Building 10 (right), with core areas highlighted in dark tone. Plans oriented so that the street front would be down.

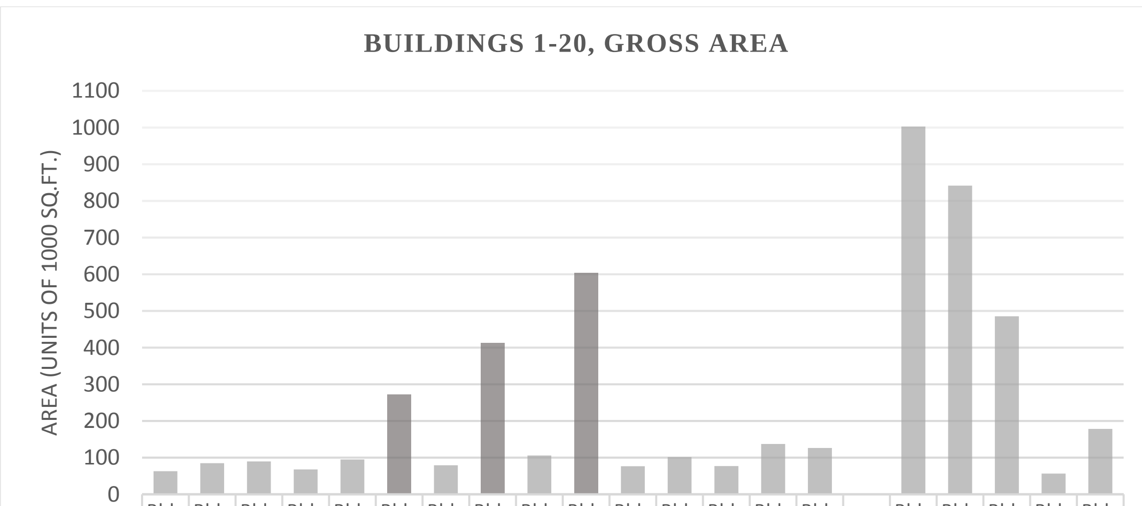
This contrast between the different physico-economic frameworks being applied to larger-scale buildings in Figures 652 and 653 is rather a significant addition to the architectural and urban discourse concerned with emerging building typologies, in that the blunt distinction often made between the big and the small, with this new knowledge, invariably becomes fractured. What arises rather are two new building typological categorizations—namely, big buildings with big-building physico-economic logic (i.e., a big-big typology), versus big buildings with a small-building physico-economic logic (i.e., small-big typology).

In regard to (2) being relatively small in terms of gross building area: Within the entirety of the five socioeconomic datasets (1934, 1942, 1958, 1963, 1973) coded and analyzed in Phase I of this research, a total of 119 unique building management firms and building support offices were observed. Of these 119 socioeconomic actors, 73 were specifically listed as property managers for the buildings in which they themselves were housed—buildings which, incidentally, were all greater than 150,000 square feet in gross building area.

This finding begins to point to another rather readily grasped, but frequently overlooked, narrative concerning architecture—namely, that a building's size may naturally impact the structure, the architecture, of its management. That the entirety of the observed stock of property-management actors was located and in charge of only larger-scale architectural species—it is quite unlikely that this occurrence is mere coincidence. What is more plausible rather, is that larger-scale architectural species may in fact by their very nature be predisposed to require the formation, or attraction, of a formalized internal management arm, simply in order to function, both as a building that needs repairs and maintenance, and as one that seeks to consistently acquire tenants and leaseholders.

This is in many ways, an uncomplicated notion. The larger a building is, the more formalized and bureaucratized its management structure may be inclined to become. With such formalization and bureaucratization in turn, there is also a higher likelihood that a decrease in managerial flexibility, for instance with regard to tenant selection or variability of rental-contract structure, would be observed.

This increased possibility of management rigidity is quite significant, when one considers that a building's capacity to support high densities of diversity, must partially be anchored around a property manager being able to coordinate with a range of tenants, with a range of needs, who are in turn using the building in a range of ways—that is, a property manager being able to act with a certain degree of discretionary flexibility. In regard to how building size impacts socioeconomic performance, as such, this relationship between building size and building management structure, is one that cannot be dismissed—particularly if one remembers, as observed below, that of the fifteen higher-performing buildings studied, twelve exhibited total gross building areas under 150,000 square feet, whereas of the five lower-performing buildings studied, only one fell under this threshold.



	Bldg 1	Bldg 2	Bldg 3	Bldg 4	Bldg 5	Bldg 6	Bldg 7	Bldg 8	Bldg 9	Bldg 10	Bldg 11	Bldg 12	Bldg 13	Bldg 14	Bldg 15		Bldg 16	Bldg 17	Bldg 18	Bldg 19	Bldg 20
Area	63	85	90	68	95	272	79	412	106	604	77	102	77	137	126		1003	842	485	56	178

Figure 659: Chart showing gross area for Buildings 1–20, with the three larger higher-performing buildings highlighted in darker grey scale.

In the case of the three small-big buildings, that is the larger higher-performing buildings studied in Phase II (Buildings 6, 8, 10), it is quite plausible that the spatial diversity observed in the initial plans of these buildings taken from the early 1920s, might have similarly required the presence of a flexible property manager simply due to the fact that the building's spatial heterogeneity would not have fit so readily into the spatial needs of an isolated socioeconomic niche (e.g., apparel production alone). Rather, it might have been apparent from the early inception of these three buildings that in order to keep the structures significantly occupied, their respective property managers would have likely been required to accommodate and potentially advertise to a more-diverse spectrum of the socioeconomic fabric. This requirement may in turn have attracted property management structures that were more inclined to flexibility rather than rigidity. Put in simpler terms, just as spatially-homogeneous big-big buildings by their very nature, may increase the likelihood of attracting, or internally establishing, more-formalized, bureaucratized, and rigid management structures, so to might spatially-heterogeneous small-big buildings by their very nature, increase the likelihood of attracting, or internally establishing, less-formalized, less-bureaucratized, and more-flexible management structures.

In regard to (3) exhibiting a façade with regularized increments of solid walls or thick mullions: In the fifteen higher-performing and five lower-performing buildings studied in Phase II and Phase III of this research, it was observed that the facades which exhibited regular increments of solid surfaces, as opposed to those which had broad swathes of windows, seemed to grant a greater flexibility to the process of internal partitioning. This is depicted quite succinctly, in comparing the behavior of Building 20 to Building 9 below, with the former having a stretch of windows occupying the middle portion of the façade and subsequently exhibiting no internal partitioning above the ground floor between 1916–1978 (as seen further in Section 4.5.2), and the latter having a much more steady rhythm of walls and windows, and subsequently exhibiting a relatively-wider range of internal partitioning between 1930–1974 (as seen further in Section 3.9.2)

Figure 660 (left to right): Elevation of Building 20 (1978); third floor plan of Building 20 (1916); same floor (1978); elevation of Building 9 (1974); second floor plan of Building 9 (1930); same floor (1974);1" = 32'.

What can be extrapolated from observations such as this, is that the façade that supports the freer plan (free in terms of its ability to support a range of internal partitioning schemes) may in fact be one with regularized intervals that grant the process of internal partitioning some wiggle room. Also important to note here is materiality, given that the facades of the buildings studied were composed ubiquitously of brick. The point to focus on though, isn't the ideal nature of brick, but rather the use of a low-tech material palette readily digestible by a range of building cultures for the purposes of internal partitioning and subdivision.

In looking at the comparison of Building 8 and Building 17, on the page that follows, a further refinement of this narrative concerning façade rhythm starts to develop. Both the buildings in question exhibit regularized increments of solid walls composing their facades, however within Building 17 no new units were documented above the ground floor between 1915–1984, whereas Building 8, by 1981, was found to contain one additional unit on the third, fourth, seventh, eighth, and tenth floors and two additional units on the ninth, eleventh, and twelfth floors (eleven units in total)

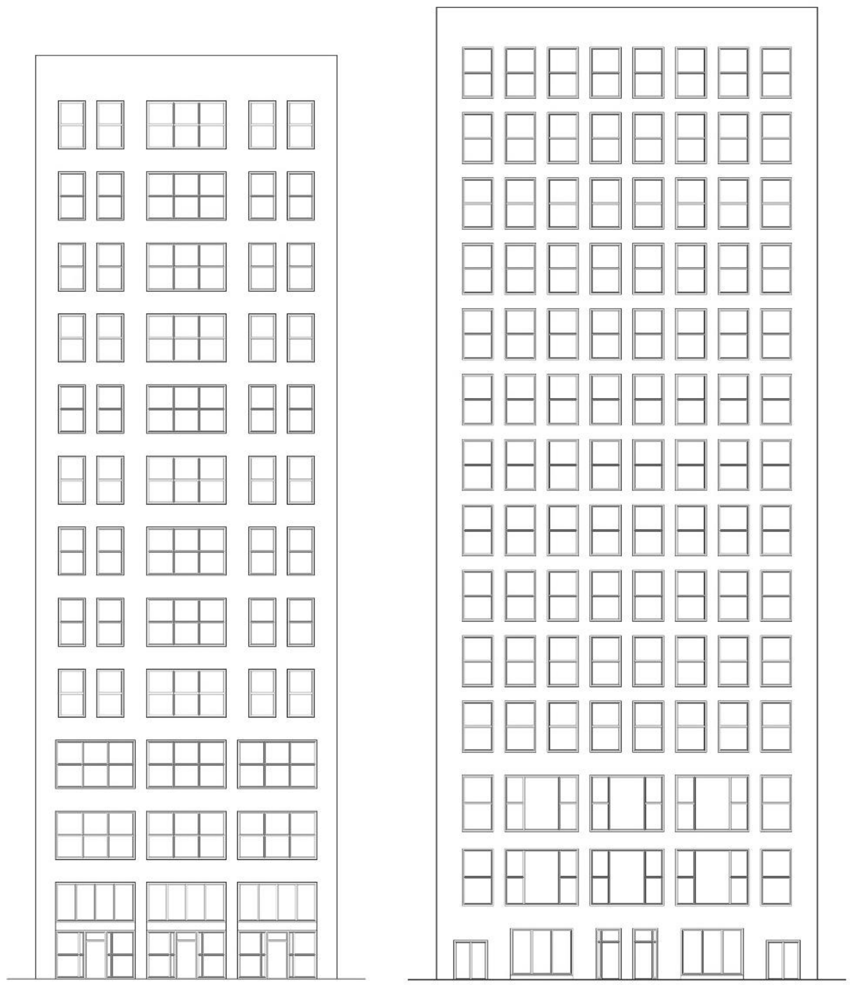


Figure 661: Building 8 elevation (1981); Building 17 elevation (1984); 1" = 32'.

Figure 662, 663 (left to right): Building 17, twelfth floor (1915); same floor (1984). North is down.

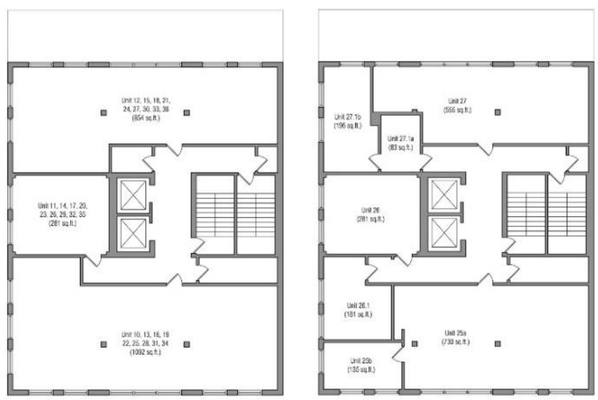


Figure 664, 665 (left to right): Building 8, ninth floor (1926); same floor (1981). North is to the left.

As observed in the plans above, what becomes apparent is that a façade with regularized increments can only be put to use if the building's core is designed and arranged in a supportive manner as well. In Building 8 (Figure 664, 665) for instance, one notes that a communal corridor granting access to the fire stairs and elevators allows for new units to be added to the floorplate without suppressing the ability of existing units to access the required minimum of two means of egress (i.e., the two fire stairs). In Building 17 however (Figure 662, 663), one observes that the two vertical cores which house the fire stairs, are not connected by a similar communal corridor. Without this artery, it becomes clear that there can be no further internal partitioning of the floorplate, since any added unit would naturally block the existing units' ability to access the required minimum of two means of egress. What this begins to point to, and which will be extrapolated upon at the end of this section, is that these various physical parameters, far from sitting in casual isolation, are in fact in a relationship of deep interconnectivity with one another.

In regard to (4) enjoying more than the minimum requirements of access to light and air in the rear of site, and (5) having a south-facing street front façade: Below are several images depicting the garment production process from the early 1900s through the 1960s. It is important to note the clustering of production occurring in close proximity to windows, even when lighting fixtures are visible.

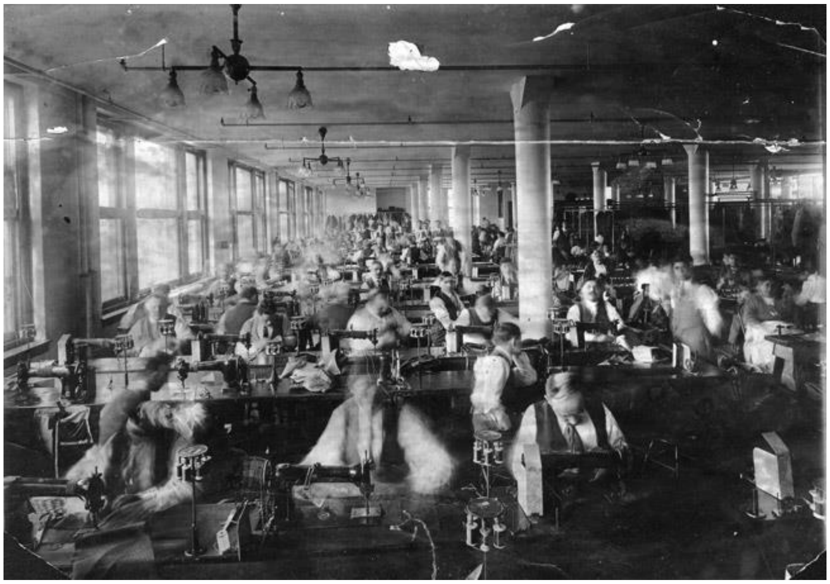


Figure 666: "Tables of men operating sewing machines are well lit by daylight in unusually-large windows. Overhead lights, necessary in the center of the room and in all areas during early morning and evening hours, were typically inadequate for the task and workers often suffered significant eyestrain" ca. 1900.[27]

Figure 667: "Women sewing at long tables next to tall windows in a garment factory" ca. 1940s.[28]

[27] Kheel Center, Cornell University
[28] Kheel Center, Cornell University

Figure 668: "Straining backs, hands and eyes, those responsible for special stitching and fine work might sit close to the windows in order to have better light while the sun shone. Others were forced to work under relatively-inefficient gas lights," ca. 1910.[29]

Figure 669: "Operators in the Katz and Maringa Shop, 231 East 32nd Street, work at tables of four with pressers standing in the back of the room. Long workdays at piece rates were often insufficient to pay high rents, sustain families, and save for a better life," ca. 1911.[30]

[29] Kheel Center, Cornell University

[30] Kheel Center, Cornell University

Figure 670: "Workers in a large shop with many windows," date unknown. Note the similar clustering of sewing around the windows, as seen in Figure 9 in a smaller scale set up.[31]

Figure 671: "Women sewing in a garment shop," ca. 1962.[32]

[31] Kheel Center, Cornell University.
[32] Kheel Center, Cornell University

At least in the time period being studied, it becomes a possibility that a small (relative to its immediate context), north-facing building, might have had a distinct disadvantage in terms of what kinds of economies it could support at low running costs. If its other facades were blocked off, only a small portion of the floor plan would remain naturally lit, and that part only with indirect, diffuse, northern light. A comparable building with southern exposure, on the other hand, would have at least had the potential to open up a significant portion of the floorplan with direct light, and then still maintain space in the rear portion of the building, with access to very diffuse light, rentable at a cheaper rate. As noted in Section 4.6., while 9 out of the 15 higher performing buildings (or 60.0%) had south-facing front facades, 10 out of the 22 lower performing buildings (or 45.5%) were observed with this trait.

The parameter of enjoying more than the minimum of access to light and air in the rear of site, in turn, is an additional layer to this narrative regarding southern exposure, in that a south-exposed building which also had such additional access to light and ventilation in the back of site, could open up the rear portion of a building to other economies at low running cost—particularly those dealing with less-detailed but heaty processes, e.g., pressing, molding, pleating, creasing, curing, casting, etc., that could work with diffuse light but needed ventilation. As noted in Section 4.6., while 10 out of the 15 higher-performing buildings (or 66.7%) enjoyed more than the minimum of access to light and air in the rear of site, only 9 out of the 22 lower performing buildings (or 40.1%) were observed with this trait.

Overall, in looking at these five parameters being discussed, what seems important to focus on is the notion of interconnectivity—namely, that the physical characteristics being described here need to be conceptualized as being part of an aggregate physico-socioeconomic causal mechanism impacting the socioeconomic performance of a building.

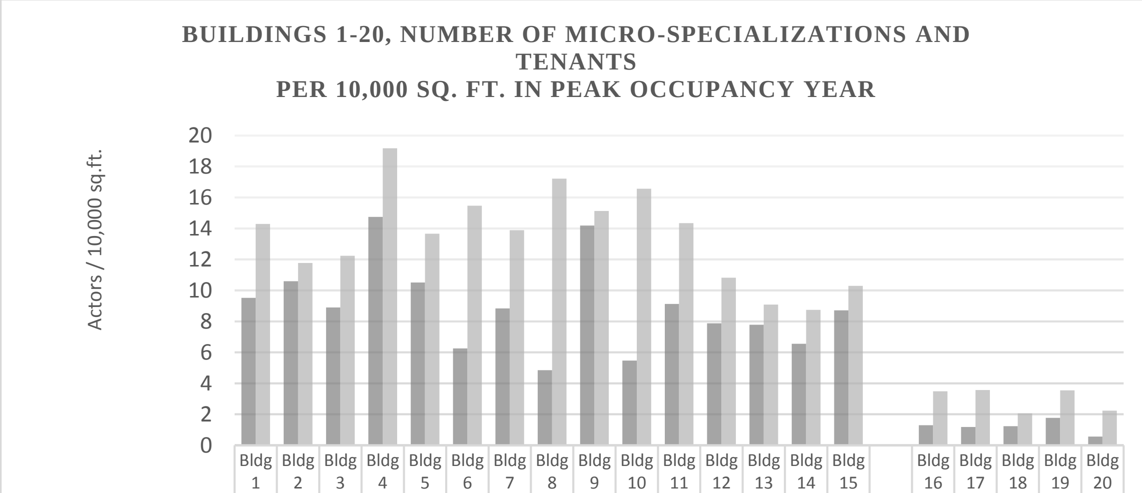
This method of assessing the described parameters in aggregate appears, potentially, to be a far more constructive framework in analyzing a building's potential for supporting densities of socioeconomic diversity, than looking at the parameters in a segregated manner. For while these last few pages have attempted to show how these physical facets taken individually can impact a building's socioeconomic performance, the reality remains that buildings and urban conditions are quite complex and layered by their very nature. And if the graphic above is examined further, what it also clearly depicts is that none of the twenty buildings studied exhibit any of the parameters in isolation.

Building	Asymmetric Core Placement	Under 150,000 Gross Sq.Ft.	Incremental Façade Rhythm	More than Min. Access to Light & Air	Southern Exposure on Street Front
1	yes	yes	yes	yes	yes
2	yes	yes	yes	yes	yes
3	yes	yes	no	yes	no
4	yes	yes	yes	no	yes
5	yes	yes	no	no	no
6	yes	no	yes	yes	no
7	yes	yes	yes	yes	yes
8	yes	no	yes	no	no
9	yes	yes	yes	no	yes
10	yes	no	yes	yes	yes
11	yes	yes	yes	yes	yes
12	yes	yes	yes	yes	yes
13	yes	yes	yes	yes	yes
14	yes	yes	no	no	no
15	yes	yes	yes	yes	no
16	no	no	yes	yes	no
17	no	no	yes	yes	no
18	no	no	yes	no	yes
19	yes	yes	no	no	yes
20	yes	no	no	yes	no

Figure 672: Chart comparing Buildings 1–15, and 16–20, in the context of the parameters established in Phase II and III.

That being said however, it does appear that an asymmetrically-placed core and an incremental façade rhythm, are two traits that are slightly more influential over the socioeconomic capacities of a building, when compared to the traits of having southern exposure and access to light and air in the rear of site. Specifically, without the former, the latter seem to be quite limited in their potential to open up the building to a range of socioeconomic actors. The parameter of being a small building, furthermore, can perhaps be better understood as a characteristic that is likely to support the formation of asymmetric core placement, and that it is this latter quality, rather than the former, that this research has shown to be of greater importance. This point becomes clearer, when one considers that small and small-big building typologies, due to their inherent small-building logics, effectively behave as small buildings in terms of the flexibility of management and contract structures they support—that is to say, their management and contractual behavior is tied to the asymmetric core placement, that is the building logic, rather than to the building size that tends to incline said building logic to appear.

Ultimately, the physico-socioeconomic world can only in the rarest of occasions be discussed in mono-causal terms, and this is not one of them. This reality does not change the fact though, that the higher-performing and lower-performing buildings did operate, in terms of supporting densities of socioeconomic diversities, in the drastically differing manners depicted in the graphic below. Similarly undeniable is that in comparing Buildings 1–15 to Buildings 16–20, fundamentally differing physico-socioeconomic qualities are consistently observed.



	Bldg 1	Bldg 2	Bldg 3	Bldg 4	Bldg 5	Bldg 6	Bldg 7	Bldg 8	Bldg 9	Bldg 10	Bldg 11	Bldg 12	Bldg 13	Bldg 14	Bldg 15		Bldg 16	Bldg 17	Bldg 18	Bldg 19	Bldg 20
Micro-specializations	9.5	10.6	8.9	14.7	10.5	6.3	8.8	4.9	14.2	5.5	9.1	7.9	7.8	6.6	8.7		1.3	1.2	1.2	1.8	0.6
Total Tenants	14.3	11.8	12.2	19.2	13.7	15.5	13.9	17.2	15.1	16.6	14.3	10.8	9.1	8.7	10.3		3.5	3.6	2.1	3.5	2.2

Figure 673: Chart showing the number of micro-specializations and tenants per square foot, observed in Buildings 1–20 during the peak occupancy year for each building

While there have been a range of further conclusions and topics of discussion that have been framed in the sections of this research, it is around these three more-fundamental discursive findings that this dissertation has come to be anchored—namely: (1) that the dwindling of small-scale architectural species within the Garment District during the period of 1930–1980 appears to be a predominantly overlooked narrative in need of further investigation within the broader discourse concerning the decline of densities of diversity within the Midtown socioeconomic fabric; (2) the assumed identity of the twentieth-century Garment District as a dominantly garment-centric socioeconomic fabric, principally supported by large-scale architectural species, begins to flutter when scrutinized under the rigors of the diachronic and physico-socioeconomic methods of inquiry and analysis framed within this research; and (3) there is seemingly a rather complex and interconnected series of relationships at work between certain physical parameters of the urban fabric, and its capacity to consistently support critical densities of socioeconomic diversity. These three points have been framed herein not only as challenges to and critiques of the existing presumptions and boundaries of the relevant discourse, but also as inroads into potentially new physico-socioeconomic frameworks through with the investigation of the various phenomena found in the contemporary urban fabric, may achieve a greater depth of rigor, robustness, and accuracy.

5.1. DISCUSSION

In the culminating paragraphs of Section 1.2.5 of this text, three macro-scale hypotheses were framed. What is stated is that: (1) The interaction between the physical environment and socioeconomic agency is of a complex and reciprocal nature; (2) these reciprocal relationships form critical parts of a layered process that inclines the built world to become more responsive to the physical needs of a wider range of socioeconomic actors, and inclines socioeconomic structures to become more responsive to the advantages and disadvantages inherent to the physical limitations of the urban fabric; and (3) informing future architectural and urban projects with the physical / spatial commonalities, patterns, and configurations discerned via the testing of these aforementioned hypotheses, will positively influence the capacity of the built world to attract, maintain, and be acted upon by, a localized diversity of socioeconomic actors. The following pages, in turn, return to these hypotheses in the context of the findings of this dissertation.

(1) THE RELATIONSHIP BETWEEN THE PHYSICAL AND THE SOCIOECONOMIC FABRIC.

This research had hypothesized, and to a degree presupposed in Section 1.2.5, that the nature of the relationship between the physical and socioeconomic fabric of the city was of a reciprocal and continuously-interactive character. The findings of this dissertation emerged not only in support of this hypothesis, but also served to unveil that the nature of this reciprocity and continuity of interactivity in fact operates at such a fine-grained scale, that to attempt to disentangle the physical and the socioeconomic into independent or dependent variable status becomes rather impossible, unless this endeavor is undertaken at a micro-scale and at a synchronic moment of analysis simultaneously.

Building on the formal and informal observations accrued through this research, as well as the narratives found within the richly-documented discourse concerning the garment industry, one may for instance posit the following hypothetical scenario:

An apparel firm specialized in dresses receives five manufacturing commissions for the next six weeks via a network of local and regional jobbers, which necessitates a slight expansion of its business. The owner of the apparel firm decides to move locations, signing an informally-arranged two-month lease in the third-story unit of a five-story building, constructed in the early 1900s, typologically in the style of a dumbbell tenement building, in one of the western blocks of the Midtown Garment District. The owner chooses this space, among other reasons, because there is enough room for twenty to twenty-five employees, their sewing machines, a small cutting station, as well as a small pressing station; and the price range for the unit fits within his expected profit margins for the upcoming weeks, while in terms of urban location, the building is also close to one of the busy hiring corners of the Midtown Garment District, frequented every morning by hourly workers looking for short-term employment. This latter urban-morphological factor is important to the owner, because he expects to have an active workforce turnover while completing these contracts. There are many other spaces within the district that would satisfy this criteria, but this is the first space that the owner stumbles on through word-of-mouth contacts, and decides to quickly take on the informal lease.

After occupying the space, the owner finds he needs to make some small adjustments to the unit, in order to satisfy some of the firm's emergent socioeconomic functions. For instance, after a week in the space, he realizes he may need to bring a client or two to the unit during production, and so in order to have some degree of privacy during mid-manufacturing negotiations, decides to carve out a small space within the unit for an office. The creation of this office space though, unexpectedly infringes on the pressing station area, which now begins to operate in a somewhat hindered manner.

A bit frustrated and a bit overwhelmed by the deadline to complete one of his commissions, late at night the tenant decides to use one of the empty storage rooms near the communal stairwell for this function, unbeknownst to the landlord. The landlord though eventually catches sight of this activity, and has a talk with the tenant. The landlord feigns a bit of displeasure, but since such informal appropriations of space are rather frequent within the garment industry, he simply informs the tenant that he can continue to use the stairwell storage room for pressing garments, of course discreetly and during late-night hours, for a small additional under-the-table fee, and provided that the tenant himself puts in some small upgrades to the space, for instance upgrading the wiring and such properly, rather than running extension cords from the primary unit. Since the stairwell storage space and the main unit share a wall, this upgrading proves to be quite straightforward, and is done the morning following this conversation.

The apparel firm ends up staying in the unit for ten weeks total. Three days after their departure, a potential tenant, this time a firm engaged in textile imports and exports, approaches the landlord. The landlord offers both the stairwell storage space and the main unit as part of the formal rental contract. The tenant agrees to this, provided that one of the partition walls forming the office space in the main unit can be taken down, to open up some more space for textile storage, and that the storage space near the stairwell can be made a bit tidier, with the bricked-in window in the room being reopened, so that some daylight can come in through the small adjacent light well (a feature common in dumbbell-tenement typologies). The tenant plans to use the storage room by the stairwell as a small office, so that business transactions can be concluded at a distance from the space allocated for storage in the main unit, which can tend to be a bit more busy and messy. The tenant also requests a small doorway to be built, internally connecting the stairwell storage space and the main unit. The landlord agrees, making the necessary revisions prior to the tenant's lease.

Four months into the use of the space though, the tenant's business shifts to a slightly-more specialized textile economy, focused specifically on the import of higher-end silks from the Philippines. The tenant needs less storage space for this new socioeconomic direction, but would like to keep his existing stairwell office space as is, since his buying and selling networks already know he is there. He thus keeps this office space, but rents another smaller unit in the rear of the building on the second floor for storage—a unit which in turn was a small space carved out by a local attorney when he was just starting out his legal career, coinciding with the early days of the building's life. The textile tenant subsequently sublets the main unit on the third floor to a small company specialized in refurbished sewing machines, which uses the space for a mixture of office and display functions, with their broader stock room being located in the rear of the first floor of a building two blocks away.

This narrative of course can be indefinitely continued or walked back, through a number of avenues, and through a number of scales. Imagine, therefore, this hypothetical scenario taking place for a multiplicity of tenants, from a multiplicity of socioeconomic realms, with a multiplicity of spatial / physical needs, over a multiplicity of timelines—ranging from the not uncommon one-to-two-day occupation (and alteration) of a space for an extremely rapid production run, to repeat-tenancies that last several decades. Then, expand this scenario beyond the scope of a handful of units, to a building, to a cluster of buildings, and eventually to a much broader urban fabric, with the scale of the appropriation and alteration of the physical and socioeconomic fabric similarly expanding.

When one considers the layering involved in urban activity at this scale, and the convoluted layers of physical and socioeconomic parameters underpinning such activity at all levels, two points become apparent: (1) What may be deemed an independent physical or socioeconomic variable at one point in time was most likely a dependent physical or socioeconomic variable in the not-so-distant, if not immediate, past, and will most likely similarly be a dependent physical or socioeconomic variable in the not-so-distant, if not immediate, future (and this continuously-repeating inversion of independency and dependency, or dependency and independency, can most likely be traced back and forth indefinitely); and (2) one part of a building (or even a unit) may be acting as an independent variable influencing socioeconomic activity, while another part of that building (or unit) may simultaneously, and inversely be acting as a dependent variable, being influenced by socioeconomic activity. In simplest terms, what this means is that to disentangle the physical and the socioeconomic to the point that one may be deemed an independent variable and another a dependent variable, the city must be observed at not only the scale of the micro, but also in an extremely limited timeframe. What this dissertation exposes is that as soon as one expands beyond this temporal and physical micro-scale, the city's physical and socioeconomic parameters immediately overlap, and the urban fabric starts to behave as a physico-socioeconomic entity.

The question that is often asked therefore, of how the physical impacts the socioeconomic or how the socioeconomic impacts the physical in the context of a city, may potentially be better rephrased as, how does the physico-socioeconomic urban fabric operate? And subsequently, how can the city, as a significantly physico-socioeconomically-entangled entity, be understood?

(2) THE ACCRUED PHYSICO-SOCIOECONOMIC INTELLIGENCE OF THE URBAN FABRIC

The second macro-scale hypothesis of this dissertation, as outlined in the final paragraphs of Section 1.2.5, was that the city, by being continuously appropriated, revised, digested, reformulated, etc., via the catabolic and anabolic processes involved in this convoluted relationship between the physical and the socioeconomic, would gradually accrue an increasing degree of socioeconomic and physical intelligence. Here, intelligence was defined as the capacity, on the one hand of the built world to become more responsive to the physical needs of a wider range of socioeconomic actors, and on the other, of the socioeconomic fabric to become more fine-tuned to the advantages / disadvantages inherent to the built world. While due to unforeseen methodological limitations, this research was unable to investigate this topic with the rigor required to frame it in full, these limits have pointed to avenues for future inquiry and research that can potentially delve into the testing of this subject at the depth required.

In terms of the potential physical intelligence of a city as accrued over time, methodologically, the issue seems to be primarily one of a limited timeline and potentially of a limited geography. Put simply, fifty years and twenty-five blocks may not be a broad enough spectrum to attempt to examine this topic. What has been investigated within this text is how a significant but limited portion of the urban fabric has changed on a physico-socioeconomic level, over the significant but limited timeline of a singular economy, namely, the trajectory of the garment industry of Midtown Manhattan.

However, a city is neither a single district, nor a single economy. In order to test this hypothesis at the proper depth, it seems that what is required is to expand the temporal and geographic boundaries of the physico-socioeconomic fabric being investigated—or more specifically, to extend the scope of research in order to include a much broader timespan that coincides with the rise and fall of a variety of urban economies; and potentially, to also include a much broader portion of the built world; or ideally of course, both. Taking only the temporal expansion into consideration for instance, one of the many avenues of research that unfold, is to see how the Midtown Garment District changed from the period of 1980 to the modern day, and to investigate whether similar typologies of buildings and similar intra-building spatial configurations organically emerged in support of high densities of socioeconomic diversity, after the garment industry had shifted from this district.

In terms of robustly understanding how the socioeconomic structure of the Midtown Garment District matured and changed over time in turn, this is one area within which the methodology formulated for this research became noticeably limiting. As the dissertation organically honed in on the notion of densities of socioeconomic diversity, what became excluded from the research were larger firms that may have supported an internal diversity of functions that could not be detected by the methodological limits herein. Although this will be explained in a bit more detail in the discussion of the subsequent hypothesis, the examination of such larger scale firms is clearly needed to begin to understand how the socioeconomic structure of the Midtown Garment District changed and developed over time, with a similar degree of detail as that with which the physical fabric of the area was examined. To do so, of course, requires the high-volume use of FOIA (freedom of information act) requests, for a substantial number of firms located within the twenty-five blocks that were examined. And while this would have been impossible to pursue within the scope of this dissertation, with the data gathered over these past years, it is now a potential, and very manageable avenue for future research.

(3) INFORMING THE PHYSICAL FABRIC WITH THE FINDINGS OF THIS RESEARCH

The final macro-scale hypothesis of this dissertation, as outlined in Section 1.2.5 of this text, was that informing the built world with the physical patterns and configurations uncovered via this research would positively influence the physical fabric's capacity to attract, support, and be acted upon by, a localized diversity of socioeconomic actors.

What this dissertation has shown is that buildings in the Midtown Garment District that consistently supported higher densities of diversity for the period of 1930–1980, did indeed tend to exhibit certain recurring physical traits. The two most dominant of these traits were having an asymmetrically-placed core, and having an incremental façade rhythm. While having increased access to light and air in the rear of site, and having direct southern exposure on the street front were also recurring characteristics examined, and seemed to have certainly aided in the activation of the floorplate to a wider range of socioeconomic functions, these two traits do not appear to have been as dominant of parameters as the core and façade structures.

While it seems reasonable to assume that the inclusion of these physical characteristics in future architectural / urban projects would similarly increase the likelihood of a building's capacity to support, and be acted upon by, higher densities of socioeconomic diversity over time, two questions must be kept in mind: (1) Are there other forms of socioeconomic diversity that have been overlooked by this research? And, (2) is there a different way in which clusters of buildings, rather than singular ones, can support such densities of diversity?

The supporting of densities of socioeconomic diversity through an architectural scale appears to be one of potentially many avenues of supporting socioeconomic species richness within the broader urban fabric. Such species richness is, in turn, a critical component to consider in the context of a city's socioeconomic functional redundancies and its socioeconomic response diversity—or more simply, its capacity for socioeconomic resilience. Due to the methodological limitations in investigating the intricacies of the socioeconomic fabric however, this research has focused on how such species richness can be achieved at the smaller-scale of socioeconomics. One must keep in mind therefore, not only that larger-scale socioeconomic actors form a critical part of the cross-scalar diversity that is necessary in the context of urban resilience, but also that larger-scale socioeconomic actors might possess a level of internal diversity that is likely to have been overlooked by the methodology that has been employed in this research. For instance, a large-scale apparel firm might internally possess a range of operators (sewing machine operators), cutters, pressers, buyers, sellers, textile importers and exporters, jobbers, etc., all under one roof, but may simply be classified as an "apparel firm" in a reverse business directory. It is not that this firm isn't functionally diverse therefore, but simply that its diversity is in a format that the employed methodology cannot detect.

That being said however, there is a difference between a single firm housing a diversity of functions, and a functionally diverse series of firms. While in terms of functional composition alone, these two polarities may appear similar, the reality is that an operator, a cutter, and a presser, for instance, all under one firm, will be more likely to establish a socioeconomic trajectory, engage in socioeconomic decision-making, and embed within socioeconomic networks that are in line with the broader firm's trajectory, decision-making, and established networks. In comparison, an operator, a cutter, and a presser, all working individually as separate firms, will be more likely to establish a multiplicity of socioeconomic trajectories, engage with a multiplicity of socioeconomic decision-making strategies, and embed themselves within a multiplicity of socioeconomic networks.

In terms of socioeconomic activity therefore, the diverse firm versus the diverse series of firms, are likely to behave in radically different ways, and in turn, flood a radically different range of behavioral signals, intentional and unintentional, back into the socioeconomic fabric for other socioeconomic actors to react to. In the context of systemic resilience, it would seem that both socioeconomic structures would offer different modes of behavior that in turn would form different layers of critical systemic activity. It would be a rather intriguing avenue for future research as such, to reinvestigate this relationship between the physical and the socioeconomic within the Garment District or otherwise, with a methodology geared towards larger-scale firms and the internalized socioeconomic diversity that they may possess.

In regard to the question of a singular building versus a cluster of buildings, a similar discussion begins to emerge—a discussion however, while comparably pointing to the need for future research, also begins to suggest that diverse clusters of internally-homogeneous buildings may behave in a slightly more stagnant manner when compared to singular buildings that are internally diverse. Consider for instance, a single building with an internal diversity of units, versus a diverse series of buildings each with an internal homogeneity of units. When these polarities are examined, if both the singular building and the aggregate of the cluster of buildings are found to offer a comparable diversity of unit sizes, it would seem that they would both be equally poised to support, and be acted upon by, a comparable diversity of socioeconomic actors.

The potentially overlooked factor here though is the nature of property management. As discussed in the sections prior and based on the data and information collected through this dissertation, an internally-diverse building would seem to be more inclined to require a certain flexibility of management and contract structures in order to adequately keep the building filled and running. This flexibility of management and contract structures in turn, would seem to have the capacity to support the formation and maintenance of pockets of informality within the building—pockets which in turn could support less-formalized socioeconomic actors, or at the very least, the informal activity of socioeconomic actors who, for instance, require hyper-truncated lease periods among other such conditions, as is frequently observed in the smaller-scale echelons of the garment industry. A diverse series of internally-homogeneous buildings on the other hand, would be more likely to support a diverse, yet ultimately consistently inflexible, series of management and contract structures—structures which in turn, would be less likely to open up the built world's capacity to support the informality and fluidity of certain sectors of the socioeconomic fabric.

These points though, are mere extrapolations at this juncture—ones based on presuppositions that may in fact be contrary to the reality of building clusters. What is needed, once more, is future research. And while it may indeed be uncovered that these presuppositions prove true, what this dissertation has shown at the very least, is that the physico-socioeconomic fabric tends to exhibit unexpected qualities with unexpected implications, and needs to be examined with rigor in order to be understood with any clarity.

Within the wider discussion of urban resilience, the question often returns to one of urban policy. While more research is certainly needed before delving into this question in full, it does at the very least appear that small and small-big buildings can play a critical role within the context of urban resilience, specifically in their capacity to support, and be acted upon by, densities of socioeconomic diversity. And given, furthermore, that it may often be perceived as a rather counter-intuitive architectural / urban decision to maintain smaller scale buildings and to apply the building logic of the small to the big, there may indeed be an argument that cities can incentivize the maintenance and propagation of small and small-big building typologies within the urban fabric, at least to some degree—in order to, to appropriate the words of Tisdell (1996), override a local optimum in the potential pursuit of a superior systemic optimum (Tisdell 1996, 164). To reiterate however, before this avenue of discussion can be examined, a great deal more research is necessary.

Put simply, what can be distilled from this dissertation, is that small and small-big buildings seem to open up the urban fabric to the metabolic activity of a range of socioeconomic actors in a rather unexpected manner. And it is this opening up, as investigated via a hybridized physico-socioeconomic framework that urban research needs to delve into at greater depth. The question to be focused on isn't, *what are the physico-socioeconomic characteristics of the city that need to be incentivized,* but rather, *how can the digestibility of the city be expanded so as to include the anabolic and catabolic facets of an increasingly wider range of physico-socioeconomic activities?* For, it is through embracing the city's inherent capacity to generate multiplicities of unexpected physico-socioeconomic behaviors and structures, that the discourse of urbanism can expand beyond the realm of attempting to design urban resilience, which invariably dilutes a complex adaptive system down to solely a complex one, and rather, begin to support the inherent potentials of cities as complex adaptive systems to internally generate unexpected and complex resolutions to the increasingly complex physico-socioeconomic disturbances by which they are faced.

APPENDIX: DEFINITION OF TERMS

Cross-scalar diversity	The state of having a range of components across a range of magnitudes. For instance, a socioeconomic system with extra-small, small, medium, large, and extra-large socioeconomic actors would be considered cross-scalarly diverse.
Complex adaptive system	A network or set of connected parts, composed of a wide range of components, with some stochastic behavior embedded within the performance of the organization, that allows for the continued alteration and reformulation of the networked parts, as well as the generation of responses in reaction to disturbances, both potentially in unexpected manners.
Disturbance Regime	A pressure, or set of pressures, applied to a system that challenges said system's status quo.
Macro-category	A term developed for the purposes of this dissertation, used to refer to the broader socioeconomic fields within which socioeconomic actors operated (e.g., apparel, import & export, retail, etc.) within the Garment District. Overall, there were 28 macro-categories observed.
Micro-specialization	A term developed for the purposes of this dissertation, a subset of Macro-Categories, used to refer to the more-specific niches that socioeconomic actors classified themselves as occupying (e.g., dresses, silk imports, millinery retail, etc.), as was obtained from historic reverse-business directories and archived newspaper advertisements. Overall, there were 1,345 micro-specializations observed.
Resilience	The ability of a complex adaptive system to react to a disturbance regime in a manner that enables it to maintain or reestablish an internal cross-scalar diversity of actors, which supports the system's ability to react to a subsequent disturbance regime in a

	manner that enables it to maintain or re-establish an internal cross-scalar diversity of actors, and so on, in a continuous manner.
Response Diversity	The state of having a wide range of potential reactions to a disturbance or disturbance regime.
Socioeconomic Actor	For the purposes of this dissertation, this term refers to businesses, firms, companies, leaseholders, etc., not to be confused with singular employees of such firms. That is to say, a firm with a singular owner and no employees, and a firm with a series of owners and a series of employees, would both be considered singular socioeconomic actors.

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