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# The Logic of Luxury 2.0



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### Abstract

This paper recaps the "what and why" of the super-slender type and gives an abbreviated illustration of the mechanics of the "logic of luxury." The second part of the paper considers the impact of the towers on the New York skyline, on streets and parks, and on the broader market for housing. These issues are hot topics in current critical discourse and public debate. Among architectural critics, the towers have few defenders, and civic groups and community boards have called meetings to rally against them. While there are serious considerations of how to address such issues as significant shadows on treasured public spaces such as Central Park and questions of fairness in tax policy that should be raised, in general, the rhetoric of critics needs a reality check. The histrionics that surround the frequent trope of "towers of inequality" and "towers of secrecy" require more dispassionate analysis.

#### Keywords: Air Rights; Slenderness; Supertall; Typology; Zoning

Over the past decade, New York has created an entirely new form in skyscraper history: the superslender, ultra-luxury residential tower. I say "New York has created," rather than architects and engineers have invented it, because the type is shaped by the island of Manhattan's particular conditions of place, like the specialized species of the Galapagos.

These celebrity spires are headline grabbers, in part for their "starchitect" designers, but even more for their stratospheric condo prices. In early 2015, two penthouses in One57 sold for \$91 million and \$100 million, and another at 432 Park Avenue was in contract for \$95 million. Indeed, the \$100-million number has become a benchmark, and new projects have even ventured \$110-\$175 million. While some condo owners will enjoy their aeries as a primary residence, many apartments are being purchased as investment properties by wealthy individuals, LLPs, and by international buyers, who will be part-time residents at most. The intense demand for New York real estate and its relative security in world markets has led one expert to dub the sky-high condos "strong-boxes in the sky." For this reason, they have also been targets of criticism by those who view the buyers, as "the rootless superrich: Russian metals barons, Latin American tycoons, Arab sheiks and Asian billionaires."

In a paper presented at the 2014 CTBUH Shanghai conference, and before that in the exhibition "SKY HIGH & the Logic of Luxury," which opened at The Skyscraper Museum in October 2013, I laid out the characteristics of this new type, of which at the time there were about a dozen examples in development. All are now in some stage of construction, save for two that will still be built, but have changed slightly in shape or height<sup>2</sup> (see Figure 1).

This paper recaps the "what and why" of the super-slender type and gives an abbreviated illustration of the mechanics of the "logic of luxury" detailed in my exhibition and Shanghai talk. I update additions to the list and note the next fertile fields for beanpole buildings in mid-Midtown, especially in the area of the 20s and 30s near Fifth Avenue. The second part of the paper considers the impact of the towers on the New York skyline, on streets and parks, and on the broader market for housing. These issues are hot topics in current critical discourse and public debate. Among architectural critics, the towers have few defenders, and civic groups and community boards have called meetings to rally against them. While there are serious considerations of how to address such issues as significant shadows on treasured public spaces such as Central Park and questions of fairness in tax policy that should be raised, in general, the rhetoric of critics needs a reality check.

1: An industry website that tracks highest real estate sale prices weekly and annually is The Real Deal: http://therealdeal.com/blog/2014/07/02/ top-manhattan-apartment-sales-june-29/. The "ruthless rich" quote appeared in Charles V. Bagli, "sky High and Going Up Fast: Luxury Towers Take New York," The New York Times, May 18, 2013. http://www.nytimes.com/2013/05/19/nyregion/boom-in-luxury-towers-is-warpingnew-york-real-estate-market.html?\_r=1. A version of this article appeared in print on May 19, 2013, on page A1 of the New York edition. 2: The exhibition "SKY HIGH & the Logic of Luxury" at The Skyscraper Museum (10/13-5/11.14) examined a dozen super-slim, ultra-luxury residential towers on the rise in Manhattan. A virtual version of the entire exhibition can be viewed here: http://www.skyscraper.org/EXHIBITION5/ SKY\_HIGH/video\_intro.php. Carol Willis's 2014 Shanghai conference paper can be viewed at: http://global.ctbuh.org/resources/papers/ download/1952-the-logic-of-luxury-new-yorks-new-super-slender-towers.pdf. The histrionics that surround the frequent trope of "towers of inequality" and "towers of secrecy" require more dispassionate analysis.

#### A New Type

What are the characteristics of the new type, and what are the conditions unique to New York that created it? Sophisticated engineering has made these spindles possible, but it is soaring condominium sale prices, in part driven by an excited international market for real estate investment, that explains their recent proliferation. These super-slender towers are expensive to build, and it took a price platform of around \$3,000 psf - first established in 2004 at the Time Warner Center, then at 15 Central Park West – to make their basic economics work. Today, top prices for the first completed 57th Street towers have achieved an astonishing \$9,000

to \$11,000 psf, and the expectations for new projects are now generally reported in the range of \$4,000 to \$8,000 psf.<sup>3</sup>

The first group clustered at the southern edge of Central Park and on the wide, fashionable cross-town commercial 57th Street, nicknamed Billionaires' Row. More than anything, their location is predicated on views of the park. Views have value, and in New York, the gold standard is Central Park. Here is the vista from the duplexpenthouse of One57 (see Figure 2). Such trophy assets are in limited supply, whether Picassos, Pollacks, or penthouses. But any apartment with a Central Park view has premium value, even an avenue or two away, or even five blocks south, as in the case of the MoMA tower. Every floor under the penthouse needs to have a view to have value, too, so slenderness becomes the way to lift all their apartments high in the sky. Other areas of the city capitalize on exceptional panoramas, especially downtown, where



Figure 1. Shown in the top row, left to right: One57 by Christian de Portzamparc; 111 W 57 by SHoP; 432 Park Avenue by Rafael Viñoly; Nordstrom Tower by Adrian Smith + Gordon Gill Architecture; 220 Central Park South by Robert A.M. Stern Architects; 520 Park Avenue by Robert A.M. Stern Architects; 53 West 53rd by Ateliers Jean Nouvel; 56 Leonard by Herzog & de Meuron Architekten; 30 Park Place by Robert A.M. Stern; 50 West Street by JAHN, 100 East 53rd Street by Foster + Partners; 45 East 22nd Street by Kohn Pederson Fox Associates (Source: The Skyscraper Museum from images provided by Christian De Portzamparc; SHoP Architects; CIM Group & Macklowe Properties; YIMBY; RAMSA, rendering by Neoscape; Zeckendorf Development LLC and Seventh Art; NYC Department of City Planning; Alexico Group; dBox )



Figure 2. View of Central Park from penthouse of One57 (Source: The Skyscraper Museum)

harbor and river views are arguably even more spectacular, even though not as expensive.

Branded design matters in the developers' marketing. Pritzker-Prize winners Jean Nouvel, Norman Foster, Herzog & de Meuron, and Christian de Portzamparc) are featured in the marketing of the towers, and Robert A.M. Stern, a traditionalist associated with high-end architecture, has been tapped for three of the super-slender towers under construction. Glass wall or picture window, though, it's the view that sells the apartment.

The design approach of the super-slenders is not stylistic, as can be seen in this compiled view of a dozen that are now under construction. The façade treatment can be a continuous glass membrane or a masonry curtain wall with punch windows. The structural system can range from internal shear walls and mega-columns, to an exterior bearing wall, to structural expressionism. Some of the towers are exceptionally tall: indeed, and the loftiest one will have a penthouse higher than the roof of One WTC. But to be clear: it's not height that characterizes the type, it's slenderness.

Slenderness is the design and development strategy of these towers, whether they rise to 600 feet (183 meters) or 1,500+ feet

3: The Skyscraper Museum compiled a history of luxury condominium prices from the 1980s to 2013 in a single graphic chart for its exhibition "SKY HIGH & the Logic of Luxury." It can be viewed here: http://www. skyscraper.org/EXHIBITIONS/SKY\_HIGH/timeline.php.



Figure 3. Left to right; One Madison by Cetra/Ruddy; 432 Park by Rafael Viñoly; 111 W 57 by SHoP. (Source: The Skyscraper Museum from images provided by CetraRuddy; CIM Group & Macklowe Properties; SHoP Architects)

(457 meters). The slenderness ratio – the relationship of the width of the base to the building's height - in all of the towers discussed here is at least 1:10 and ranges to an astonishing 1:23 Here is the 621 foot (189 meter) tall One Madison, which with a base of 50 feetfoot (15 meter) wide has a slenderness ratio of 1:12. Compare it to 432 Park Avenue, which with a square base of 93 feet (28 meters) on a side and a height of 1,396 feet (425 meters) has a ratio of 1:15. The most slender building in the world, currently in its early stages of construction, will be 111 W. 57th Street, which, rising to a height of 1,428 feet (435 meters) on a base just 59 feet (18 meters) wide, has the appearance of a feather-quill pen standing erect in an inkwell (see Figure 3).4

The slenderness strategy makes floor plates small in order to lift as many apartments as high in the sky as possible to clear surrounding buildings to capture views. Small floor plates- as tiny as 2,400 square feet (223 square meters), and generally no more than 8,000 square feet (743 sugare meters) – also create the ideal condition to limit apartments to one or two units per floor. Exclusivity commands premium prices, and it also produces a very compact core, wherein the number of elevators can be greatly reduced. At 111 W. 57 Street, there are two passenger elevators serve its 80 stories and 60 apartments. High ceilings, with up to 15 ½ feet (4.7 meters) between floor slabs, also increase the sense of spaciousness and luxury (see Figure 4).

To make towers into periscopes, the developers and their design team both conform to and exploit two key aspects of New York's zoning law: the "floor area ratio" formula (FAR) and air rights, also known as TDRs, or transferable air rights. The code is complex, but there is no way to understand how the towers take shape without reviewing some of its history and details.

Since 1916, when New York passed its first zoning law and mandated setbacks at upper levels to protect sunlight on the streets, the city has regulated the forms, or "envelope" of tall buildings. Major revisions to the law in 1961 changed the formula – from a stepped pyramid, with a 25-percent tower that could rise to unlimited height – to a "floor area ratio" (FAR), which set the maximum space in square feet that an owner could erect on a given lot. It did not prescribe a specific form. In other words, while the 1961 law does not specifically limit height, it does have that effect by limiting a maximum floor area.<sup>5</sup>

While dramatically "down-zoning" the city compared to the 1916 regulations, the 1961 law also created two provisions that re-set the approach to real estate development in ways that can significantly impact the size and shape of towers and the experience of the urban space around them. First, it established the principle of "as-of-right," which allows property owners to design and build whatever they wish without a public review process, so long as they follow zoning rules and do not exceed the maximum

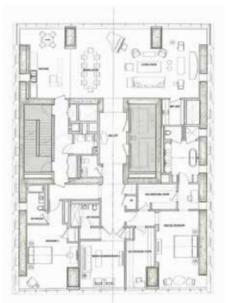


Figure 4. Floor plan of typical tower unit, 111 W 57th (Source: 6sqft. Retrieved July 1, 2015)

FAR allowed for that lot. Second, it created the concept of air rights, which said that if an existing building has not used all of the FAR allowed in that lot, the unused "air rights" could be sold to the owner of an adjacent lot/s and used there. This mechanism, also known as "transferable development rights" (TDRs), lets developers join lots to increase the FAR that can be piled onto a single site. However, when the underbuilt area of a lot is sold and used on an adjacent site, that low-rise space will then remain open forever. FAR is finite: it can only be used once. TDRs are a cap-and-trade system.

All of the super-slender towers use this method of assembling lots and transferring air rights to consolidate and concentrate their collective FAR into one tall tower. Developers generally demolish the underbuilt structures to create a larger site for their project, even if the tower will cover only a portion. At 432 Park Avenue, for example, the mid-block tower is only 93 feet square (8.6 square meters) and is set back 60 feet (18 meters) from 56th Street and fronted by a plaza. A low-rise commercial building at the corner creates another zone of open space where the 22-story Drake Hotel once stood (see Figure 5).

Developers will, of course, prefer to build as-of-right, because it avoids the uncertainties introduced by the regulatory process. All our dozen towers, save three, are being built as of right, without Department of City Planning review or Landmarks Preservation Commission approval.<sup>6</sup> Indeed, it is that lack of public

<sup>4:</sup> The building heights and floor numbers used in this paper derive from The Skyscraper Museum's research for its 2013 exhibition, as well as from the CTBUH Skyscraper Center database. 5: The Department of City Planning's history of the 1961 zoning law can be accessed here: http://www.nyc.gov/html/dcp/html/zone/zonehis.shtml#1961. An explanation of the 1961 zoning law can be found in the exhibition "SKY HIGH & the Logic of Luxury" here: http://www.skyscraper.org/EXHIBITIONS/SKY\_HIGH/nw\_09-5.php. A discussion of its application can be found in the exhibition here: http://www.skyscraper.org/EXHIBITIONS/SKY\_HIGH/shearwall\_invmonopoly.php.

<sup>6:</sup> The three buildings that are not being built as of right are the MoMA Tower, 111 West 57th Street, and the Nordstrom Tower. The first was subject to Department of City Planning review and the second two to review by the Landmarks Preservation Commission.

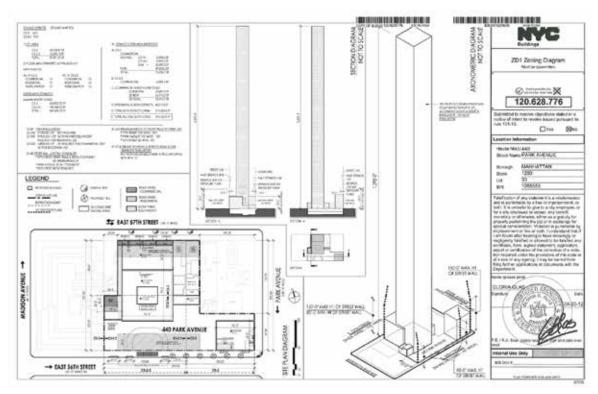


Figure 5. NYC Department of Buildings Zoning Diagram (ZD1) for 432 Park (Source: NYC Department of Buildings)

involvement that has led to a wave of criticism in the press that will be discussed below and that has occasional calls for height restrictions or a moratorium on new construction.

#### The Logic of Luxury

Put simply, the developers of the current super-slender, ultra-luxury towers endeavor to use the expensive FAR of both their original lots and purchased air rights to rearrange their floor area as high in the sky as possible. In my book Form Follows Finance, I analyzed how in the 1890s -1930s, the same factors shaped office buildings differently in New York and Chicago. The "logic of luxury" is a 21st century corollary of a different formula for profits that nevertheless follows parallel principles. Spending more on design and construction can reap exceptional profits.

What are the characteristics of the ultra-luxury towers? Spaciousness, exclusivity, amenities, and spectacular views. Some specific examples illustrate how the mechanics of the logic of luxury work.

One way for a developer to increase both the spaciousness of apartments and the overall height of the tower is to raise ceiling heights. A 12.5 foot (3.8 meter) ceiling in New York is considered grand, but now 15.5 feet (4.7 meters)

between floor slabs is becoming standard for the new slender towers. Since zoning regulations count FAR only as floor area, not as volume, this additional 3 feet (.9 meters) almost 25 percent more air between floors - also cumulatively increases the tower's full height, thereby lifting more apartments higher into the sky. Why 15.5 feet (4.7 meters)? Because of the efficiencies of the humble switchback scissor stair, which allows for a more compact service core. The project architect for 432 Park Avenue, the first tower where this approach was used, has explained:"in most New York City typical residential buildings, cast-in-placeconcrete scissor stairs are used to achieve more net-to-gross area efficiency."7 By combining two stair enclosures in one intertwined unit, scissor stairs can be about 10 percent more efficient than two independent stairs. At 432 Park Avenue, the architects and engineers haveof developed their own design for a prefabricated staircase that complied with the building code's stair height clearances and created the most minimal footprint and thinnest profile possible (see Figure 6). Thus, by raising the height of the ceiling the developer could reduce the space occupied by the service areas and turn it into area to be sold to the condo buyer at top prices now recorded at more than \$8,000 psf. That is the logic of luxury.

The utmost in luxury is the full-floor unit, no matter the size of the floor plan is vast or tiny,

or whether the apartments are penthouses or lower floors. The range among the super-slender towers is great. The largest apartment sold far is Unit 75 in One57, measuring 13,544 square feet (1258 square meter), which closed on March 27, 2015 for \$91,541,053, or approximately \$6,759 psf. This apartment is not the penthouse, but occupies a lower floor that still has a doubleheight living room, as well as a terraced enclosed winter garden on the roof of one of the building's setbacks. The true penthouse of One57 comprises only 10,923 square feet (1015 square meters), and sold for \$100,471,453 on December 23, 2014 for a price of \$9,198 psf. At 432 Park Avenue, where the penthouse recently went into contract for \$95 million, the full-floor apartment, minus the service core measures about 7,200 square feet (669 square meters). By contrast, the tiny tower footprint of 111 W. 57th St. of just under 59 feet by 79 feet (19 meters by 24 meters), will squeeze apartments at the top floors, given the required setbacks, into floor plans of 2,400 square feet (223 square meters), including service spaces and an estimated 1,939 square feet (180 square meters) of apartment area: two-floor units are planned.8

With only one or two units per floor, the number of elevators serving the tower can be radically reduced. Stepping out of the elevator directly into the private apartment towards a stunning view of Central Park or other panorama is the ultimate power trip. Direct access also maximizes

<sup>7:</sup> A description of the staircase by project architect Jim Herr of RVA can be found in the exhibition "SKY HIGH & the Logic of Luxury" here: http://www.skyscraper.org/EXHIBITIONS/SKY\_HIGH/logic.php. 8: 111 W57th Street has a building dimension of 58.75' by 78.42' which is approx. 4,607 sq ft (which includes the space designated to the service core (elevators/stairs) that is approx. 521.85 sq ft,). Not including the service core of the building the floor plate is approx. 4,085 sq ft of useable space. With a typical setback of 5.42' along the 57th street wall at the 80th floor the building loses 32'6" feet, bringing the floor plate to 42'x 58'9' (2,461 sq ft,) This results in a floor plate that is 1,939' sq ft of sellable space to the condo buyer and profit to the developer and 521'10" sq ft of cost to the developer.

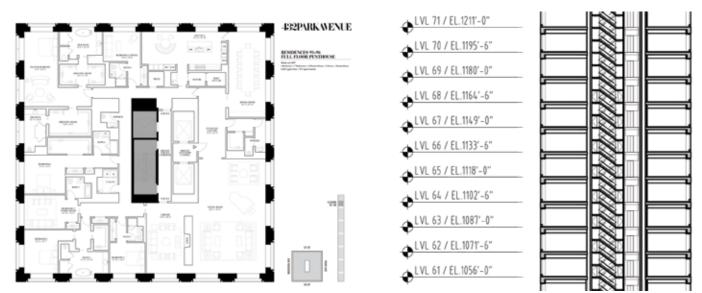


Figure 6. Penthouse floor plan and section through the elevation of 432 Park Avenue. (Source: Rafael Viñoly Associates and CIM Group & Macklowe Properties)

the area sold to the condo buyer. Towers that are entirely private residences, rather than buildings that include hotels in their bases, can exploit extreme slenderness by minimizing the vertical circulation and corridor area. At 432 Park Avenue, the 80 floors ("96-stories") are served by six elevators, including dedicated service cabs, with only two shafts for the top range of floors. At 111 W. 57th Street, the thin reed that will rise to 1,428 feet (435 meters) has just two elevators!

The higher the better for the trophy view: what developers are selling is the openness of space outside the window and not so much the capacious space within the walls. Low floors of the towers without views need to be utilized for their best value, so that is where the many windowless amenities are located: the screening rooms, wine closets, storage, pool, gym, and spa, as well as nanny apartments. At 432 Park Avenue, the first apartment with a view and a premium price begins above 300 ft (91 meters).

All of the above features of the slenderness strategy serve to stretch the supertall towers higher into the sky in order to elevate eyeballs and produce exceptional profits. My analysis of the logic of luxury is offered as an explanation, not an endorsement. What is clear from the numerous examples of super-slender, ultraluxury towers is that New York has produced a new type of skyscraper, virtually unprecedented. Other pencil towers in the world, notably in Dubai, contain many more apartments per floor. The Princess Tower in Dubai, for example, while about 40 feet (12 meters) shorter than 432 Park Avenue, has 101 floors and is divided into 763 units, versus 104 units at 432 Park Avenue. The New York towers are shaped by the particular constraints and opportunities of the city's

zoning law and by the economics of the logic of luxury. Exclusivity makes these condominium towers exceptionally valuable, as does, of course, their location in the city that has few peers (save London and Hong Kong) for attractiveness to a world of wealth.<sup>9</sup>

## Towers of Inequality?

So, as we say in New York: "What's not to like?" Plenty, if you are an architecture critic, or the New York Times, or a host of other writers who have penned screeds against them. Some are dazzling essays by well-known wordsmiths. As critic Michael Sorkin wrote in the May 2015 issue of Architectural Record, themed "Architecture & Money": "The rise of the horrible, steroidal collection of towers near Central Park, with their absentee oligarch owners, their \$100 million price tags, their limp starchitect designs,

their shadows over the park, their public subsidies, and their preening San Gimignano competition for the most vertiginous views has launched a thousand critiques of the city's rampant up-bulking." And Martin Filler emoted in the New York Review of Books: "Those of us who believe that architecture invariably (and often unintentionally) embodies the values of the society that creates it will look upon these etiolated oddities less with wonder over their cunning mechanics than with revulsion over the larger, darker machinations they more accurately represent." The New York Times preferred the phrase "Towers of Secrecy" to locate those "darker machinations" of money launderers and other nefarious owners in the towers that border Central Park. The most common trope is "Towers of Inequality," for as Paul Goldberger wrote simply in Vanity Fair: "If you seek a symbol of income inequality, look no farther than 57th Street." 10



Figure 7. Rendering of the future Central Park South skyline. (Source: New York YIMBY)

9: Summary of other foreign slender towers, Dubai: http://www.skyscraper.org/EXHIBITIONS/SKY\_HIGH/nw\_17.php, Hong Kong: http://www.skyscraper.org/EXHIBITIONS/SKY\_HIGH/nw\_16.php. 10: Michael Sorkin, "Too Rich, Too Skinny," Architectural Record, May 2015. http://architecord.construction.com/features/2015/1505-too-rich-too-skinny.asp. Martin Filler, "New York: Conspicuous Construction," The New York Review of Books, April 2, 2015. http://www.nybooks.com/articles/archives/2015/apr/02/new-york-conspicuous-construction. Paul Goldberger, "Too Rich, Too Thing, Too Tall?," Vanity Fair, May 2014. http://www.vanityfair.com/unchanged/2014/05/condo-towers-architecture-new-york-city. There have been many such articles, and they are important to view as a group because they are both shaping and reinforcing public opinion against the towers. If you listen to NPR, or ask my friends whether they think the towers are immoral and should be stopped, they'll instantly say "yes." A principal motivation for their moral outrage is an understandable concern about the cumulative effect of afternoon shadows cast on Central Park, but their arguments are also driven by disdain for the developers whom they see as gaming the system to receive lucrative tax breaks, as well as for wealthy foreign buyers, who as non-residents can avoid city income taxes. Critics therefore view the luxury towers as private property that has been created at direct public expense and which offers no benefits to the city.

Is it possible to get past the headlines of \$100 million penthouses and populist resentment of the "rootless rich" to analyze the actual impact of the super-slender towers and to raise some basic questions and principles of planning and urban policy? If we could all be comfortable that these expensive new towers were paying their fair share of taxes into the city coffers – as they surely, surely should do – then what issues remain that upset people? What is, or will be, their impact on increased density, on streets and parks, and on the market for housing?

The effect on the skyline is easy to predict and has been visualized in numerous digital dioramas compiled for real estate websites and blogs such as YIMBY and CityRealty (see Figure 7). A half dozen or more beanstalk towers will poke up on the southern perimeter of Central Park, on 57th Street, and east on Park Avenue. They are not all supertall: for example, 520 Park Avenue will stand 781 feet (238 meters) and 220 Central Park South will be 950 feet (290 meters) But the tallest building in North American will rise at the corner of the park, topping out at 1,775 feet (541 meters) with a highest occupied floor, at around 1,500 feet (457 meters), nearly 300 feet (91 meters) taller than the highest occupied floor of One WTC.

In lower Manhattan, the three towers now under construction – 56 Leonard, 30 Park Place, and 50 West Street, all designed before the recession, but started after 2012 - will be joined by two or three additional buildings that were recently announced. Given its commanding views of the harbor, rivers, and midtown skyline, the area seems ripe for the type. But many prime downtown sites - i.e., south of Chambers Street and City Hall Park- are limited by the historic character of lower Manhattan with its bounty of landmark buildings that either cannot (because they are protected by designation) or should not be demolished, or because they contain larger floor area (zoning FAR) than new construction (after demolition) would allow. Indeed, many of the early twentieth-century skyscrapers and high-rises in the financial district are being converted to residential, including the slender spires of the 67-story 70 Pine Street and the 57-story 20 Exchange Place.

Mid-midtown, principally the area on either side of Fifth Avenue in the 20s and 30s, is the fertile new ground for super-slims. The area was pioneered in 2006-2007 by two projects, Sky House and One Madison. Now a second, taller tower on E. 22 St. is on the rise and at least four additional towers of between 600 feet (183 meters) and 800 feet (244 meters) have been announced. Characterized by a mix of high-rise commercial and residential uses, with the cross streets that contain many older buildings with under-developed air rights, the area does not have the cache of 57th Street, but it has the advantages of a central location and dramatic urban views. Apartments in this area are unlikely to command the 50-to-100 million dollar prices of Billionaires' Row, but at 5-to-50 million dollars, there is still a lot of money to be made creating and marketing premium apartments. And while construction costs will be about the same for all super-slenders, the land costs in the midtown area are more affordable for developers (see Figure 8).

The proliferation of these second-tier towers suggests the question: just how many potential sites still exist in Manhattan where there are sufficient available FAR to assemble into an as-of-right slender luxury tower? One analysis by architects at KPF has used sophisticated software to map available underdeveloped sites and transferable air rights: they have projected that there are 97 sites with the potential to shape tall and slender towers of varying heights.<sup>11</sup> This may sound like a lot, but many of the sites are in neighborhoods where the extra expense of super-slender design and construction would not be supported by sale prices.

Whatever the number of future towers, the super-slenders will dramatically change the skyline by punctuating with excited exclamation points the middling mass of high-rises produced in the postwar period after the 1961 zoning law effectively limited the heights of commercial buildings to the range of 40 to 50 stories. Also, it must again be emphasized, they will not increase the density of the city by one square foot: FAR is finite, and any transfer of development rights from one site to its neighbors to pile up in the air will leave a perpetually open space closer to the street.



Figure 8. Aerial rendering of the future skyline of Midtown. (Source: Digital Renderings by Ondel Hylton. Courtesy CityRealty)

11: Kohn Pedersen Fox Associates, "Slender Residential Tower Analysis: Quantifying Current Trends and Speculating on the Future."



Figure 9. The front-page article, "Towers of Secrecy," New York Times, February 8, 2015 (Source: The Skyscraper Museum)

#### Laundry List

The potential effect of the new towers on streets and public spaces, especially parks, is much more complex and controversial which is to say political. Most of the criticism focuses on the claim that the condo owners occupy their privileged spaces at the public's expense, with an underlying suspicion that tax exemptions to the developers and tax avoidance by non-resident foreigners corrupt the entire process and raise fundamental issues of fairness. There are four principal points voiced: that the new buildings strain the existing infrastructure; that the many absentee apartment owners are bad for local businesses and neighborhoods; that they skew the housing market, to the detriment of moreaffordable housing for "regular New Yorkers;" and that they steal the light from the streets and cast shadows on parks and public space.

The complaint that the supertall towers strain the existing public infrastructure of streets, schools, transit, etc. is a mixed bag, with some objections easily dismissed. It's hard to imagine that the elite residents will overpopulate public-school classrooms or overcrowd subway platforms. And while the towers require protection by the fire, police, and like, their share of the costs of those municipal services are covered by property taxes, which represent the largest segment of the city tax revenues and budget. The fact that non-US residents do not have to pay income tax to the City if they are in residence less than half the year holds true no matter the address. If they happen to concentrate in the new towers – and estimates suggest foreign buyers represent more than half of the purchasers of Billionaires' Row condos – then the City should use tax policy to replace the foregone income.<sup>12</sup> (Unfortunately, a proposal to impose a "mansion tax" failed to pass the New York State legislature in June 2015, but there is "always next year.")

An additional criticism argues that the high proportion of very part-time residents create dead zones in the city. In London, where a similar problem afflicts swaths of posh row houses, the phenomenon has been labeled "zombie urbanism." Critics complain that neighborhoods depopulated by absentee owners can't support shops, restaurants, and services, so local businesses suffer economic decline. If it's true, as seems logical, that empty apartments deaden neighborhoods, then the smartest planning response to maintain an active street life and retail economy would be to concentrate a large number of apartments in point towers, translating vacancies in horizontal sprawl into high vertical density. Has anyone noticed a decline in pedestrians or shuttered shops on 57th Street or at the Time Warner Center at Columbus Circle?

A more serious citywide concern is the contention that the boom in ultra-luxury housing is distorting the housing market overall and discouraging construction of less-thanluxury buildings and, especially, of affordable housing for low-income New Yorkers. Is it true, as real estate reporter Charles Bagli claimed in a May 19, 2013, front-page feature in the New York Times, that the ultra-luxury buildings are "warping the local real estate market" and that the trend is driving up the overall cost of land in the city."<sup>13</sup> Since there is no logical or meaningful way to determine causality in linking housing values or land prices across city neighborhoods to the specific economics of the Billionaires' Row apartments, let's simply dismiss this statement as hyperbole. Still, what about the basic economics of supply and demand? Doesn't it make more sense to say that competition for housing at all income levels is driving up prices of rents and condos everywhere and that this escalation relates to the current appeal of New York to newcomers of all ilk - immigrants and students, millennials and empty-nesters, entrepreneurs and executives - rather than just Bagli's categories of "the rootless superrich: Russian metals barons, Latin American tycoons, Arab sheiks and Asian billionaires"? Isn't this demand more a function of the economic cycle and the ascending fortunes of the city, rather the agency of a new form of high-rise meant to attract the super-rich?

Who in fact is buying apartments priced at \$30 million and up? The question of demographics has become a central point of public attention, for the reasons outlined above. Actual statistics on sales are hard to come by for a variety of regulatory reasons, so most reports are anecdotal and must be gathered from news articles, like the record-breaking \$88 million sale of former Citigroup CEO Sanford Weill's apartment at 15 Central Park West to the daughter of the Russian fertilizer billionaire Dmitriy Rybolovlev. The "Big Ticket" column in every Sunday's New York Times real estate section, which spotlights the highest recorded sale of that week, is another good source of information that put prices in the context of the larger market: One57 figures regularly in the column both because it is expensive

<sup>12:</sup> The issue of taxing non-residents is discussed in the article by James B. Stewart, "Plan to Tax the Rich Could Aim Higher," The New York Times, October 25, 2013. http://www.nytimes.com/2013/10/26/business/ taxing-new-yorkers-but-not-the-ultrarich.html?\_r=0. 13: Bagli, May 19, 2013, page A1.

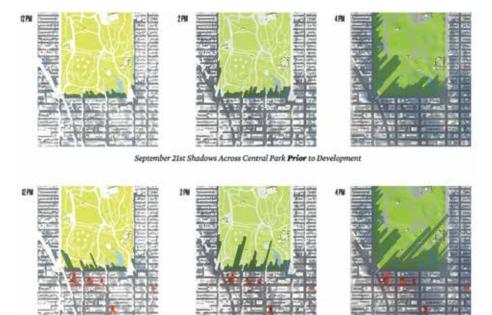


Figure 10. "The Accidental Skyline," The Municipal Art Society of New York. December, 2013. Page 28. Shadows across Central Park Before and After Development (September 21st) (Source: The Municipal Art Society of New York)

and because, as a new building, it has lots of apartments for sale. While closings are listed in public records, the specific names of the condo buyers almost always remain concealed behind an invented name for the limited liability corporation (LLC) that was formed to purchase the apartment. Developers do often publicize their high sales, and their descriptions of the proportion of foreign buyers is generally pegged around 60 percent, with demographics that include Russians, Chinese, South Americans, Saudis, and other Middle-Easterners.

A dogged effort to discover the identities of the owners of Manhattan's priciest apartments was the subject of a year-long investigation by a team of New York Times reporters led by Louise Story and Stephanie Saul. The 25,000-word series, launched on Sunday, February 8, 2015, with a front-page, above-the-fold article entitled "Towers of Secrecy," was followed by four more days of lengthy double-page-plus spreads. The starting point for the investigation focused on the "secret buyers" of apartments in the Time Warner Center and in five other luxury buildings, including One57, which were illustrated by miniature-building graphics highlighted in yellow to indicate LLC-owned units (see Figure 9). As the Times editors explained in a selfcongratulatory summary web page for the series, their investigations "pierced the secrecy of more than 200 shell companies that have owned condominiums at ... the Time Warner Center." Their research unmasked a rogues gallery of unsavory characters from Malaysia to India, Mexico, and Russia and beyond.14

The "Towers of Secrecy" series deserves an "A" for effort and an "F" for analysis. Their framing of the story distorted their findings. They did find bad characters who used illicit gains to invest in highend real estate, but the focus on limited liability companies (LLCs) was deeply problematic. The anonymous shell companies the team labored so hard to ferret out are perfectly legal business structures, established under state law.<sup>15</sup> LLCs are created not just by shady foreigners, as the Times was forced to explain in a sidebar on the second day of the series, but also "for other purposes, including avoiding exposure to lawsuits or double taxation...(and) in multiparty real estate transactions ... (as well as) in inheritance matters and investment strategies." It is not the point of my paper to digress further into bad journalism other than to ask why the Time Warner Center and the other new skyscrapers were the only places the Times team shined their flashlights? Surely they would have found the same types of characters and financial investments in re-sales in other upscale condos or in East Side townhouses, or mansions in the Hamptons. In fact, what do skyscrapers have to do with their subject at all? Why was it remotely relevant to repeat criticisms of 421-a property tax exemptions (of which the Time Warner Center did not partake); or non-resident exemptions from city income taxes; or to mention Mayor Bloomberg's defense of billionaires' benefit to the city's economy, or to assert yet again that "skyrocketing prices of the pieds-à-terre are affecting the price of real estate in the city more broadly"? Why were no balancing quotes offered to represent an alternate view?

There is a blind spot in the Times presentation of facts in "Towers of Secrecy" and in other articles on the new towers that ring Central Park. Why does that matter? Because the Times, more than any other institution or voice in New York, shapes informed public opinion. When the paper repeatedly links the creation of high-end housing to the lack of new affordable housing, for example, people begin to accept and quote that connection as fact. The placement of multiple articles critical of the luxury towers on Page One of newspaper gives both confidence and moral authority to their growing ranks of opponents, whether community board activists, civic good government organizations, or architecture critics.

If, though, we can get passed the misinformation and muddled thinking and agree that tax policy is the best way to achieve both fairness and prosperity from the addition of new luxury units to the city's overall housing supply, then what significant issues remain to be addressed in the pros and cons of supertall towers? The most compelling point is the ur-objection that sparked the first strong opposition to the new skyscrapers and continues to excite popular outrage: shadows on Central Park. A summary of the arguments can be found in the December 2013 report of the civic watchdog organization the Municipal Art Society (MAS) entitled The Accidental Skyline that focused on the impact of the skyscraper shadows along the southern end of Central Park and criticized the absence of oversight that allowed private development to infringe on public space.<sup>16</sup> The widely publicized report was illustrated by a series of computer renderings that simulated the towers' precise shadows on the park at specific times in fall and winter (see Figure 10). They show, for example, that at 4:00 pm on the September equinox the shadows of the future 1,500 feet (457 meter) Nordstrom Tower (recently re-branded Central Park Tower) at the southwest corner of the park would stretch 4,000 feet (1219 meters), three-quarters of a mile (1.2 kilometers) to Fifth Avenue. While the images and the numbers are striking, they are also somewhat misleading, since the slenderness of the towers means the shadows cast are long and thin, and so would move fast, like sundials.

An example of the difference in impact of a fast-moving shadow of the slender tower can be seen in a time-lapse compilation I shot from my apartment window overlooking Madison Square Park (see Figure 11). It shows the shadow of the 50-story One Madison from approximately noon to 1:00 pm on an early

14: A Summary of "Towers of Secrecy" was published by The New York Times, "The Hidden Money Buying Condos at the Time Warner Center," and can be found here: http://www.nytimes. com/2015/02/08/nyregion/the-hidden-money-buying-up-new-york-real-estate.html?module=RelatedCoverage. 15: Louise Story and Stephanie Saul, "Towers of Secrecy: Stream of Foreign Wealth Flows to Elite New York Real Estate," The New York Times, February 7, 2015. http://www.nytimes.com/2015/02/08/ nyregion/Stream-of-foreign-wealth-flows-to-time-warner-condos.html?module=RelatedCoverage. A version of this article appeared in print on February 8, 2015 on page A1. 16: The Municipal Art Society report "The Accidental Skyline" can viewed here: http://www.scribd.com/doc/193282206/Accidental-Skyline.



Figure 11. Shadows on Madison Square Park; From 12-1 pm . (Source: The Skyscraper Museum)

January day. The other large rectangular shadow is my apartment building where I live on the penultimate thirtieth floor: not shown here is another photo illustrating that by 3:30 pm that same afternoon, my building cast its shade across the entire three-block length of the park. To make better planning decisions, those who consider shadow studies should treat them as dynamic and analyze the harm or benefit on a relative basis, given both the context of existing structures and the zoning code for the area. In the world of shadows, some are bad and others are, if not good, better. Still, we should remember that zoning's allowable FAR is a cap-and-trade system, so the total amount of building and the total amount of shadow, composed either as mid-rise building or as a supertall, should be roughly the same: long, thin shadows are a trade off for more openness on the street below. (An important exception to this observation regarding ceiling heights and FAR will be detailed below.)

For many park advocates, however, all shadows are bad, and the way to rectify the problem is to limit building heights. Six hundred feet (183 meters) on the blocks on the periphery and south of Central Park is the proposal by the local Community Board 5, which held public meetings on "mega-tall towers" attended by hundreds and established a "Central Park Sunshine Task Force" that issued a report recommending a moratorium on new construction. A similar call for more public oversight, echoing the publication of "The Accidental Skyline," appeared in yet another New York Times front-page in a piece by the critic Michael Kimmelman, who opined that "the city should put a limit on air rights that can be merged without public review." Similarly, critic Justin Davidson in New York Magazine called for "an automatic public review on any building

over 1,000 feet (305 meters)," adding, "What we need is a new ethics of the skyline."<sup>17</sup>

There's a larger issue to consider, though, in proposing a height limit or process for regulating shadows cast on Central Park, for while that beloved patch of public green is indeed special, other New Yorkers across the boroughs think their parks and playgrounds special, too. A law established to protect Central Park should apply everywhere, should it not? If the principle of public review is established for all sites bordering parks, there would, for sure, be an impact across the city. How will the Administration and planners deal with the repercussions on a host of issues, from the effect on housing supply and prices, to a diminished tax base, to incentive programs for affordable housing? There is no question that a requirement of public review would add time and cost to the development process, which will affect prices across those neighborhoods.

The "as-of-right" provision, which has been in place for more than five decades, has served the city well in both economic and aesthetic terms. It established the rules of the game for the invisible monopoly of high-stakes real estate, and its system is embedded in precedents: dramatic changes selectively lowering development rights in particular areas would likely trigger law suits on the Fifth Amendment issue of "taking." But, further, I would argue that "as-of-right" produces the glorious variety and vitality of the Manhattan skyline, and amplified by the ability to purchase and pile up air rights, the combination creates buildings that express the quintessence of New York.

But what of shadows and fairness? One modest idea that could rein in heights somewhat would have the Department of City Planning revisit the language and intentions of the 1961 zoning law and its FAR formulas. If they decided that, implicit in the original idea of FAR as a constraint on the overall building envelope, there was also an assumption of a standard maximum ceiling height of, for example, 12.5 feet (3.8 meters), then the now standard floor-to-floor slabs of 15.5 feet (4.7 meters) would lose 20 percent or more of their height, and by extension, so would the whole building. I have been told that the height of the first massing study of 432 Park Avenue was approximately 1,250 feet tall (381 meters) (rather than its final 1,396 feet (426 meters)), even though the tower would have had the same FAR.

Since circa 2007, a new type of skyscraper has been born of the native conditions of Manhattan - high land values, assembled air rights, sophisticated design, and a heightened demand for ultra-luxury lifestyles and trophy properties. The ancestry of the super-slender towers connects them both to the storied narratives of robber-baron mansions and to the romance of the Rainbow Room and the Chrysler Building's spire. In 2050, when these slender towers are eligible for landmark protection, I have no doubt that some – such as 432 Park Avenue and 111 W 57 Street - will be designated as superior examples of the iconic forms characteristic of New York of the 2010s. If we truly value the richness and history of Manhattan's skyline, we should celebrate these extraordinary 21st-century skyscrapers and look to other means, especially taxes, to ensure the whole city benefits from multifamily housing for millionaires and billionaires.

17: Community Board Five's "Central Park Sunshine Task Force Report" can be found in its entirety here: https://drive.google.com/file/d/0Bx8AWyfKvtQdVFVHRWhuSzdPUEE/view. Michael Kimmelman, "Seeing a Need for Oversight of New York's Lordly Towers," New York Times, December 22, 2013. http://www.nytimes.com/2013/12/23/arts/design/seeing-a-need-for-oversight-of-new-yorks-lordly-towers. html?pagewanted=all&\_r=0. A version of this article appeared in print on December 23, 2013 on page A1 of the New York Edition. Justin Davidson, "The Rise of the Mile-High Building," New York Magazine, March 24, 2015. http://nymag.com/daily/intelligencer/2015/03/how-tall-can-tall-skyscrapers-be.html. This article appeared in print in the March 23, 2015 issue.