

The commercial-residential building and local urban form

Howard Davis

School of Architecture and Allied Arts, University of Oregon
Eugene, OR 97403, USA. E-mail: hdavis@uoregon.edu

Revised version received 15 January 2009

Abstract. *Many buildings that combine commercial and residential uses share attributes of urban location and architectural organization that occur in different cultures. These similarities come about because of similar factors of local urban economics. Comparisons between commercial-residential buildings in three cities – New York, Amsterdam, and Kyoto – show that they are located on streets with connectivity to larger business districts, and in places that are suited to both commercial and residential activity. Their architectural features are also dependent on their urban location. They are narrow buildings, their residential entrances are restrained relative to their commercial frontage, and their façades display both commercial and residential functions. These common attributes combine with culturally-determined features of style, architectural organization and construction to produce buildings that are both unique to their place and recognizable across the world.*

Key Words: commercial-residential building, building types, Amsterdam, New York, Kyoto

This paper describes a phenomenon that lies at the boundary between the architecture of buildings and their location in the city. It concerns the urban building with both commercial space and dwellings, a building so common that it is often taken for granted as an architectural or urban phenomenon. The presence of such buildings is sometimes mentioned in individual studies of cities, and the presence of commercial space is occasionally mentioned as well in studies of residential building types. But this kind of building has rarely been looked at as a type of its own, as a cross-cultural phenomenon, or in relationship to questions of urban form.¹

Buildings of this kind are found in many different cultures. They include the Chinese shophouse,² the Japanese *machiya*,³ the merchant's house in Amsterdam,⁴ Lubeck⁵ and

other cities of northern Europe, the terraced house in English cities that includes a shop in the front room, and many cultural derivatives of these forms. It also includes buildings such as the Parisian building with multiple flats over streetfront shops, similar buildings in Rome and Florence⁶ that are descendants of ancient forms, the New York apartment house, with shops below, the American main street building, and numerous others.

The building in which the same family works in the shop and lives upstairs is typologically related to the building in which the shop and dwellings are independent. This is demonstrated by certain hybrid forms. For example, in both Ostia Antica and early twentieth-century New York, apartments are directly connected to shops in buildings that also have independent apartments. Or, Asian

shophouses, in which one family occupies the shop and dwelling, may be partly converted to include independent housing units above. This is a very wide mix, and architectural theorists would balk at categorizing them as a singular 'type'. However, although buildings sharing commercial and residential features may be very different from each other in architectural terms, they do share certain common organizational features and common attributes of urban location.⁷

As a matter of definition, in this paper I am using the term commercial-residential building to describe this kind of building. A specific version of this building is the shophouse, a term used to describe such buildings in Chinese cities and South-East Asia.

This paper deals with two aspects of the commercial-residential building: first, its general distribution and location in the city,

and secondly, the architectural attributes that result from its specific location. Examples demonstrate that similar economic and social attributes across different cultures result in common urban and architectural features. The building is shown to be strongly linked to its urban context, so much so that the building and its urban surroundings cannot really be understood separately.

The commercial-residential building emerges in cities as a balance between three needs. First, is the need to concentrate retail shops where people are; secondly, is the need to maximize rents on a particular piece of land; and thirdly, is the need for shopkeepers, when they live in the building, to reduce their own expenses as much as possible. Indeed, many of these buildings exhibit three kinds of space – the shop, the shopkeeper's apartment above or behind the shop, and rental apartments. The

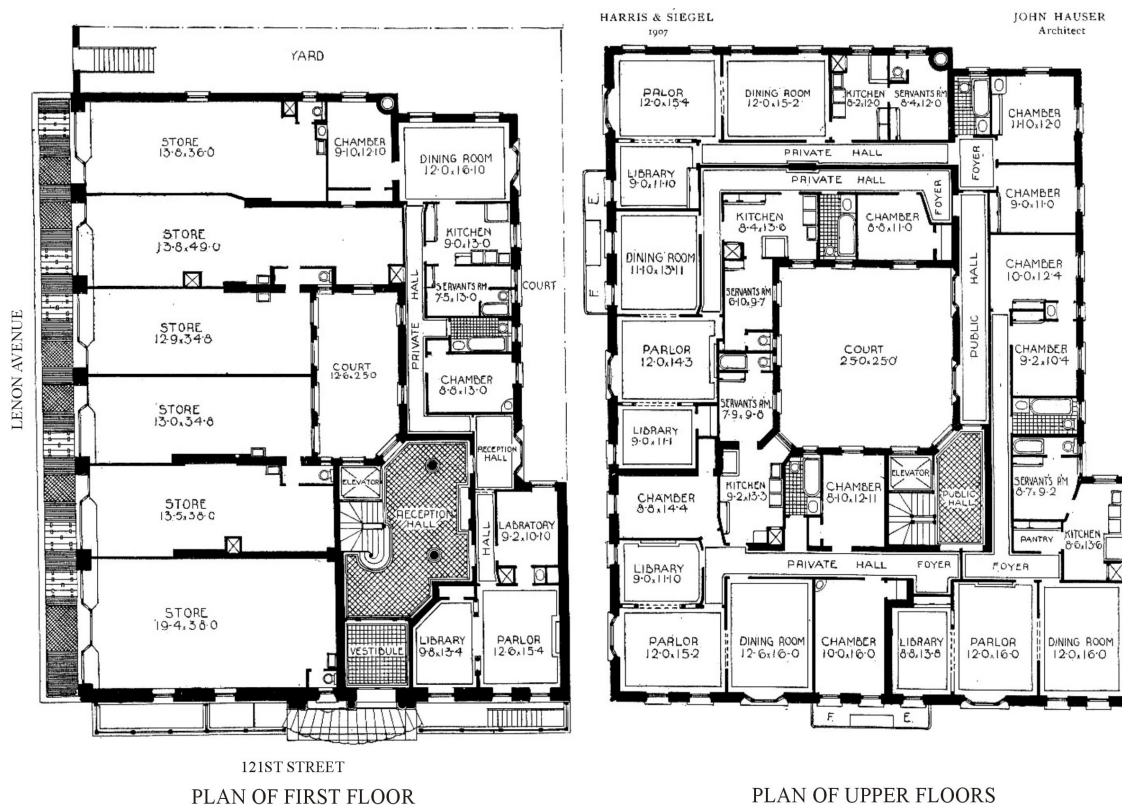


Figure 1. The ground floor and typical upper floor of a New York apartment building with shops on its ground floor. The residential entrance is along the residential street (121st Street), leaving the full frontage on the commercial street (Lenox Avenue) for shops. Measurements are in feet. Reproduced from Anon, p. 115 (note 10).



Figure 2. Looking east along East 80th Street at the intersection of Upper Broadway in New York. The photograph shows the commercial frontage on Broadway (to the left), the residential entrance to the apartment building (centre of image) and the smaller residential buildings farther down the block. Photograph by the author.

shop is there because the value of real estate at the street level is highest for commercial activity. The shopkeeper lives there so that his travelling expenses can be low, and his effective rent is minimized if he owns the building. And the rental apartments are there so that the land can produce more income.

A description of three cities in which the commercial-residential building plays an important role in the local urban fabric – New York, Amsterdam, and Kyoto – will be followed by an analysis in which aspects of commercial-residential building location in these cities will be compared, in order to develop a more general understanding of the relationships between urban location and the design of commercial-residential buildings.

New York

The New York apartment house with shops at the ground level is typical on commercial streets that run through, or are on the edge of, residential districts. It has an important typological root in the row or terraced house, which is largely an English importation.⁸ In New York, during nineteenth-century industrialization and urban population growth, houses occupied by one family were subdivided and ultimately led to the construction of buildings containing multiple apartments or flats. On streets with high pedestrian activity in districts where the density was high enough, the ground floor of these buildings was viable for commercial

activity, and a hybrid commercial-residential building resulted. In most of these buildings today, the shop and apartments are not occupied by the same family.

The New York grid has blocks that are 200 feet long in a north-south direction, which is the direction of the avenues that have the most neighbourhood commercial activity. The length of east-west blocks varies on the island of Manhattan, but is almost always at least 400 feet. When the typical frontage of 25 feet in the original platting was combined,⁹ a large percentage of sites along the avenues became corner sites – leading to buildings in which residential entrances were on a different street from the commercial frontages (Figures 1 and 2).

Where individual lots 25 feet wide have been aggregated into lots that have larger buildings on them – these are often buildings that are 75 or 100 feet wide – the pattern of lots 25 feet wide is often maintained in the commercial units. The commercial units can be easily combined, or redivided, so that each unit maintains a street frontage.

Corner buildings in these situations usually have commercial frontage only on the commercial street, with the entrance to the apartment lobby on the side, or residential, street. The entrance is usually located far enough from the corner to allow the corner store to be as long as possible. The entrance leads to a stair hall that serves the upper floors, and may be adjacent to a courtyard or light well that also brings light to rooms of apartments that do not face onto an outer wall of the building.

The upper floors of the building, which usually consist only of apartments, are organized so that public circulation is minimized and major rooms such as parlours and dining rooms in as many apartments as possible face one of the two streets. This arrangement is typical even of apartment buildings that do not have shops on their ground floors.¹⁰

The same phenomenon is evident in many neighbourhoods in Manhattan. The pattern is most clear in neighbourhoods that have a regular orthogonal street grid and a clear

difference between lengths of blocks on the north-south streets. The Upper West Side is particularly interesting because of the strong influence of Broadway, a major street that has apartment buildings with retail functions at their base, but which is also a desirable place for apartments.

The early-twentieth-century New York apartment building with shops is much larger than the smaller Amsterdam and Kyoto buildings. It usually no longer includes families who both work in the shop and live in the apartments upstairs. But these buildings are placed in the same category for two reasons.

First, the New York apartment building is a typological ‘descendant’ of smaller buildings that are much more similar to the Amsterdam buildings, and which often did include families who lived and worked in the same building. In developmental terms it is therefore related to these smaller buildings.

Secondly, the New York apartment building historically often did include arrangements in which shops were directly connected to apartments. It is therefore related to these smaller buildings from a functional point of view.

Amsterdam

The seventeenth-century Amsterdam house, common in the districts around the central system of three major canals, emerged out of the long wooden buildings that were prevalent in northern Europe. The earliest examples of Amsterdam houses, even those that had party walls and were perpendicular to the street or canal, had timber frames; later buildings maintained timber beams but walls were now built with brick rather than being timber framed (Figure 3).¹¹

In all cases, the building is narrow, shallow and tall, allowing daylight to penetrate its major rooms. The shop was naturally in the front room – the *voorhuis* – of the ground floor. When it was not a shop, the *voorhuis* was a general receiving room for the house. From an architectural point of view, the

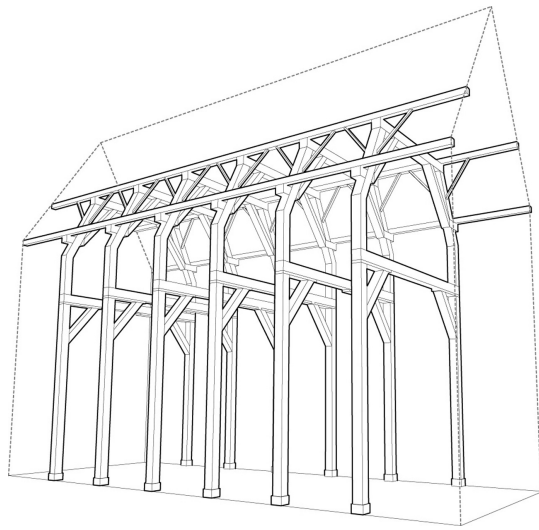


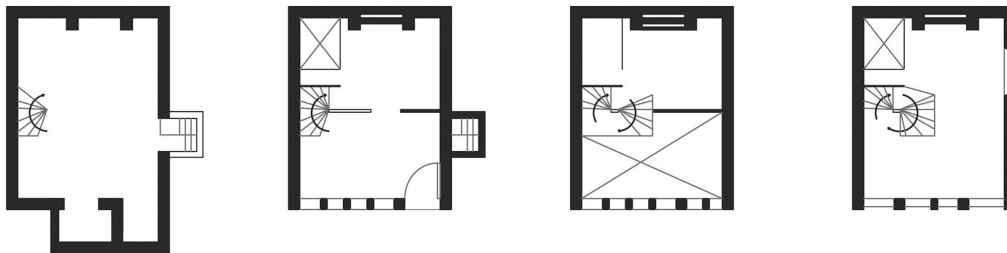
Figure 3. The timber frame of an early Amsterdam house. Drawing by Tuan Vu after a drawing in Janse *op. cit.* p. 49 (note 11).

voorhuis was identical whether or not it served as a shop, making it easy for the use of the room to change over time.¹² This flexible use of the front room is typical of such buildings.

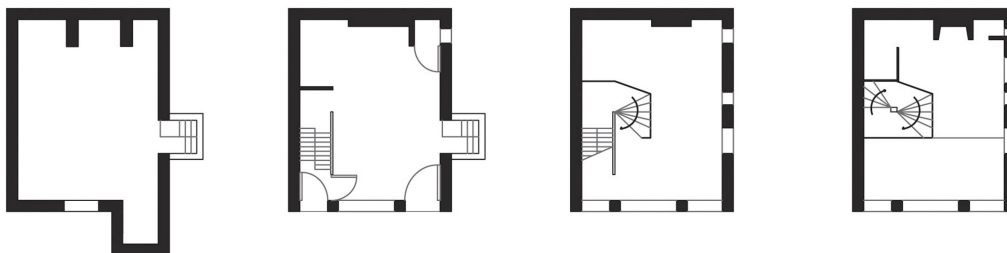
Because the building was tall and shallow, the internal location of the stair was critical for circulation among its rooms. In many cases the stair was located behind the *voorhuis*, meaning that the shop was always a part of the circulation path from the street to all the rooms of the house. In other buildings, the stair came forward to the street, allowing upstairs rooms to be accessed independently of the *voorhuis*; this is often an indication of separate occupancy of the upper floors (Figure 4).

Today, the seventeenth-century buildings that contain shops are located according to identifiable patterns in the central, historic part of Amsterdam. Three of the canals built

1658



1955



Basement

Ground floor

First floor

Second floor

Figure 4. Plans of Oudekerksplein 50 in 1658 and 1955. The ground floor plan shows how it is necessary to move through the front room to gain access to the stair. In 1955 the building had been transformed by bringing the stair forward to the front façade. But even in this case, the stair hall is narrow leaving a wide frontage for the front room, which could have been a shop. Drawings by Tuan Vu after drawings by Meischke *et al.*, *op. cit.* p. 140 (note 4).

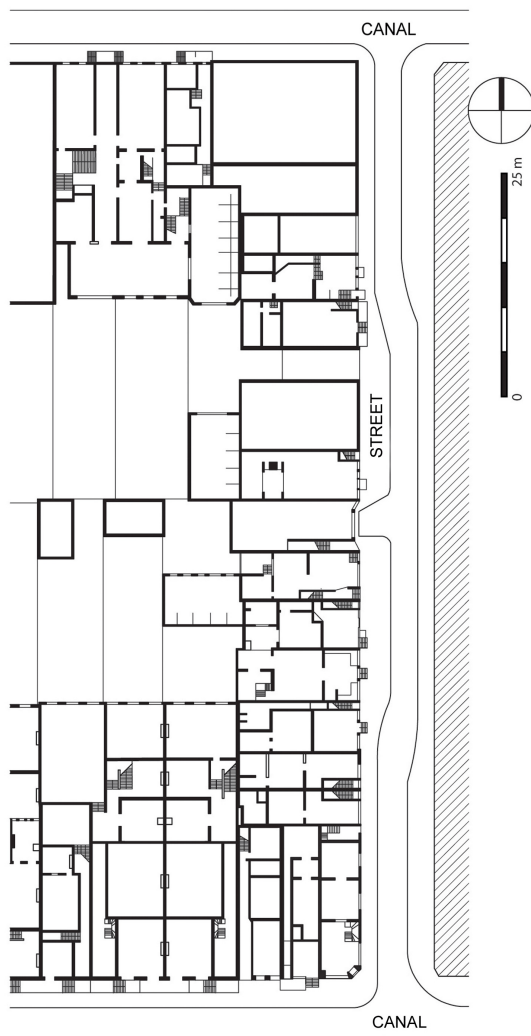


Figure 5. A narrow street in Amsterdam perpendicular to the canal. The plans show stairs coming forward to the street façade, indicating separate occupancy of the flats above the ground floors, which are mostly occupied by shops. The streets to the north and south are alongside canals, and consist primarily of dwellings without shops. Drawings by Tuan Vu after Komossa *et al.*, *op. cit.* p. 19 (note 13).

during the seventeenth century – the Herengracht, Keizersgracht, and Prinsengracht – consist of concentric semicircles around the city centre, and form the centres of streets that are lined with what are now dwellings. Perpendicular to these streets, in a more or less radial pattern toward the city centre are streets with shorter blocks.

Originally, many of the buildings along the canals were commercial-residential buildings, containing dwellings and, near places along the canals where boats docked, warehouses. The pattern of exclusively residential buildings along the canals emerged gradually, as the importance of the canals in shipping declined.¹³ Now, the smaller streets perpendicular to the canals leading to the city centre are the locations of retail shops with dwellings above them. These have short blocks compared to the all-residential blocks along the canals, and the plans of the buildings, with stairs coming forward to the street, suggest that the dwellings and shops are independent (Figures 5 and 6).

Kyoto

The third example is the shophouse in Kyoto, and other cities in Japan. Known in Japanese as the *machiya* (*machi* = building; *ya* = town), this building traditionally has only one family occupying the building. Similar buildings are entirely residential. The mixed-use buildings are often on long, narrow lots and share party walls or have blank side walls with minimal space separating them from adjacent buildings. They are often just one storey high for most of their length, with perhaps only a low warehouse or sleeping space above one portion. A passage at ground level stretches from the street along one side of the building through to the back, and off this passage are raised rooms, their sizes corresponding to the modules of *tatami* mats that are approximately 3 x 6 feet in size. These rooms act as living space, and selling space in the case of the front room. The ground-level passage is used as a kitchen for delivery of goods, and provides access to the rooms and outdoor space that may be at the back of the house (Figures 7, 8 and 9).

The neighbourhood near the temple complex of Myoshinji is typical of Kyoto and includes many of these buildings. A narrow main street, Myoshinji-dori, is lined with *machiya*. They contain a wide variety of family-run businesses, including food shops, restaurants,



Figure 6. View along a street in Amsterdam, with commercial-residential buildings perpendicular to a canal. Photograph by the author.

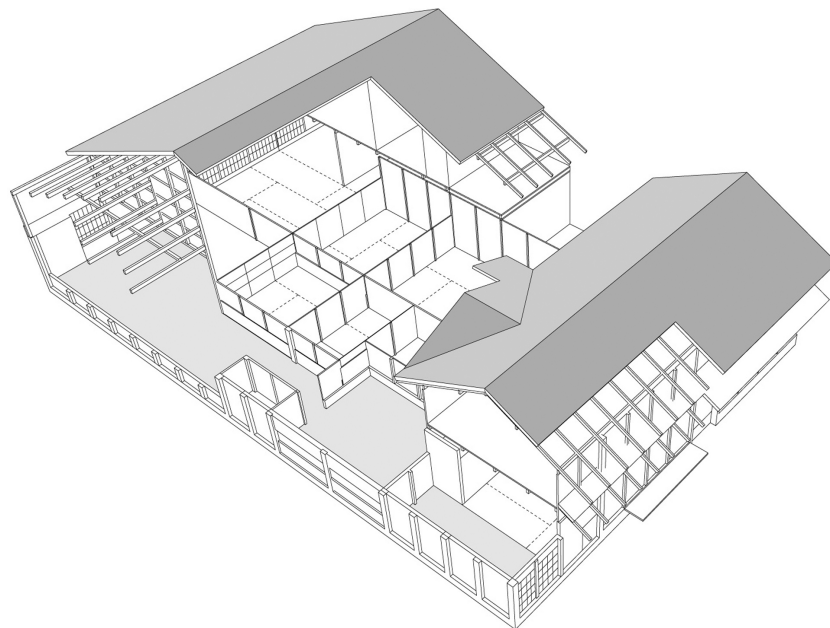


Figure 7. A large Japanese *machiya*. The shaded area on the ground floor is the passage that runs through the house from front to back. The shop is located on the right, just behind the street wall, and may be accessed either directly from the street, or from the passage. Drawing by Tuan Vu.

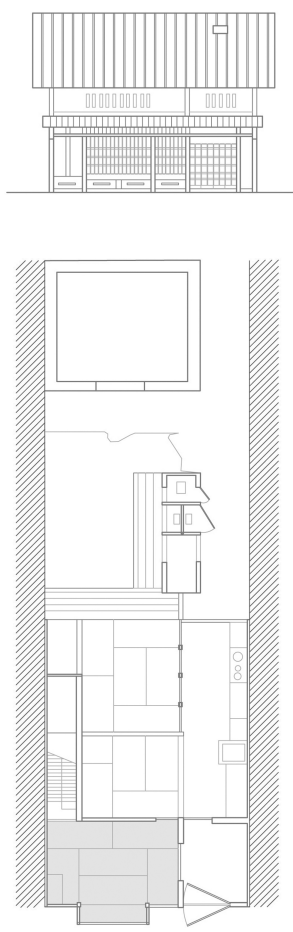


Figure 8. Plan of a machiya house. The room at the bottom left is the *mise*, and may act as the front room of the house or as the shop. Drawing by Tuan Vu.

services of different kinds, shoe and clothing shops, and tatami-mat factories. Many of these buildings have modern shopfronts that have been built onto old wooden frameworks. Families live behind the shops.

Commonalities

The examples that have been described demonstrate commonalities in both the distribution of the buildings in their urban districts, and in the design of the buildings in relation to their immediate urban locations.

The remainder of this paper is concerned with these commonalities and their origin in urban economic life. With regard to the distribution of buildings, two general features apply that are common to the three cities: location on collector streets and location on commercial-residential boundaries.

Location on collector streets

Commercial-residential buildings are located on streets on which there is connectivity to larger commercial and cultural districts, often streets that are ‘collector’ streets relative to residential streets that have little or no commercial activity.

In New York, these streets are the north-south avenues that collect the foot traffic from the long east-west residential blocks. The north-south avenues lead to the commercial districts of midtown and downtown, and are the locations of bus and subway lines (Figure 10).

In Amsterdam, the short streets perpendicular to the canals are now the location of most of the commercial-residential buildings in this district of the city. These streets lead to the centre of the city and, like the avenues of New York, funnel pedestrians from the longer blocks along the canals that are largely residential (Figure 11).

In Kyoto, Myoshinji-dori acts in a similar way. It helps to funnel pedestrian traffic from the small residential streets that are perpendicular to it. It leads to the main gate of Myoshinji Temple, a major religious complex of 47 sub-temples around which the street originally formed; opposite this entrance is a street, perpendicular to Myoshinji-dori, that leads to a station on a commuter railway line (Figure 12).

In all cases, this geometry seems to provide enough pedestrian traffic for retail and other commercial functions to survive. But at the same time there is not so much pedestrian traffic as to destroy the possibility of domestic life. So in New York, for example, the pattern of ‘commercial-residential avenue’ only exists in places away from midtown, where the local



Figure 9. *Machiya* along a street in Kyoto. The drawing shows the narrow plots and front rooms that may be shops. The dark areas represent *kura* – masonry storehouses to keep valuable possessions safe in case of fire, and which helped to act as fire walls between blocks. Drawing by Tuan Vu.

population is not overwhelmed by the influx of workers from other places.

Location on commercial-residential boundaries

Commercial-residential buildings are located in places where attributes that favour retail location combine with those that favour residential location. Often they are on the boundary between locations that are purely residential and purely commercial.

The districts examined in New York, Amsterdam and Kyoto clearly have residential densities that are high enough to support retail shops. Indeed, in all three places, there are a variety of kinds of retail shops, including local shops that serve people mostly in the immediate neighbourhood, as well as more specialized shops that have a larger catchment area.

Dwelling location is guided by a different set

of variables, including the proximity or cost of transport to work, the quality of location, including the proximity of retail services, parks and schools, and the quality of the dwelling environment itself. In some cases this means distancing the dwelling from the public realm of the street, in order to give the dwelling privacy and quiet.

This may mean that commercial buildings and residential buildings locate themselves according to forces that are in opposition to each other. Commercial buildings need residential density. But density is not necessarily desired for housing. Many cultures find ways for dwellings to be removed from the commercial activity that depends on the proximity of housing. To some extent this explains the location of the Georgian squares of London,¹⁴ the courtyards and vertical organization of Paris buildings, and the east-west residential streets of New York that exist in quiet contrast to the busier avenues.

Almost universally, within the context of



Figure 10. The main commercial street of Broadway, Upper Manhattan, showing larger apartment buildings that have shops on their ground floors in black. Narrow row houses are along the perpendicular residential streets. Drawing by Tuan Vu, after the Bromley maps of Manhattan.

these factors of location, there is also the desire to maximize return on a particular piece of land. In general, retail functions need to be at street level, leaving everything above available for further development. In particularly intense retail environments there may be more than one level of retailing. This is the case in parts of Asian cities, in some places in New York, on streets like Newbury Street in Boston, and in downtowns where department stores and multi-level shopping malls are profitable because of very high pedestrian densities. But in many places the volume of space above retail shops is available

to give the land additional value – and this is generally provided by housing.

Dwelling location and retail location thereby reach a balance, and the commercial-residential building therefore exists in places where a number of attributes exist.

First, housing densities need to be high enough to allow for acceptable catchment areas for certain kinds of retail uses. This puts retail uses into particular general locations.

Secondly, depending on the retail use, pedestrian densities on the street need to be high enough to make retailing profitable. In New York, Amsterdam and Kyoto, this is supported by an arrangement of streets in which retail uses are on shorter blocks and residential uses on longer blocks.

Thirdly, housing densities need to be high enough to make it desirable to have housing on an otherwise commercial street, rather than restricting it to a separate all-residential street, and local land values need to be high enough to stimulate use of the site that is more intensive than just the first storey or first two storeys of the building. This results in housing being on particular streets, and to some extent in competition with retailing. It means that two uses co-exist in the same building, and not just side-by-side on a street. In all three cities, the commercial-residential buildings represent a three-dimensional use of the site, allowing for its maximum profitability. A piece of land that is satisfying commercial demands may also satisfy the residential demands that come from high residential density.

Fourthly, it is necessary for building types to exist, as they do in many cultures, that allow housing and commercial functions to occupy the same building. This makes the combination possible – and shows how the building type is essentially the architectural mechanism that allows the social-economic phenomenon to manifest itself. In each of the three cities, a hybrid building type has evolved in a way that is consistent with the local culture but also shares certain architectural attributes with the other cultures.

The building type is therefore partially determined by its economic function, which itself comes about partly as a result of its



Figure 11. Part of the seventeenth-century canal district of Amsterdam. Shophouses are shaded, and are concentrated in the narrow streets, perpendicular to the canals, that lead to the city centre, to the north. Survey conducted in 2003 by the author. Drawing by Tuan Vu.

location. The general typological attributes of the building that knit the building together with its context are threefold: narrow frontages, building organization and retail frontage, and building façade.

Narrow frontages

Commercial-residential buildings have narrow frontages toward the street. This is a direct result of high pedestrian density and the consequent competition for land on commercial streets. This is clear in Amsterdam, where original lots were narrow, and where building frontages on the streets that now have commercial-residential

buildings are narrower than those along the canals. This characteristic is also present in Kyoto, which has long and narrow lots, and where the design of the *machiya* itself developed along a passage that stretched back from the street, with rooms that grew increasingly more private toward the rear.

The New York case is more complex, because of the amalgamation of the original lots in the late-nineteenth and twentieth centuries. Nevertheless, even at the base of apartment buildings that are 100 feet or even 200 feet wide, the original frontage of 25 feet was often maintained for the individual shop. In this case, the building combines the efficiency of internal circulation that is characteristic of large apartment buildings and



Figure 12. Area near Myoshinji Temple, Kyoto. Myoshinji-dori is the east-west street near the northern edge of the map. It has shophouses along it, and the narrow residential streets perpendicular to it have less traffic. Drawing by Tuan Vu.



Figure 13. Façade of a commercial-residential building in Amsterdam. Even though the windows on the front façade serving residential space are large, there is still a strong distinction between that part of the façade and the shopfront below. This illustration also shows at least two separate entrances to residential parts of the building. Photograph by the author.



Figure 14. A building on Broadway on the Upper West Side of Manhattan, showing open shopfronts and the more enclosed apartments above. Photograph by the author.

the older pattern of narrow frontages for shops.

Building organization and retail frontage

The architectural organization of the building is based partly on the need to maximize retail frontage. As a general rule, the amount of street frontage given over to the residential entrance is minimized in order to maximize commercial frontage and therefore rents. This is done either by entering the residential space through the shop, or by making the residential entrance very narrow, or by moving the entrance to a less intensely commercial street, which can be done with corner buildings.

The building is organized with vertical circulation and service spaces deep inside the building, so that street frontage can be used for commercial space and important rooms in dwellings. This is the case for apartment

buildings in general and not only for mixed-use buildings. It is particularly clear with the New York buildings, where public circulation is not only brought deep into the building, but also minimized in area. In the New York corner buildings, bringing the residential entrance onto the minor street does two things. It allows the entire frontage on the commercial street to be devoted to commercial uses, and it puts the residential entrance onto the residential street, so that residents see their dwelling on that street.

When the residential entrance is moved to the side street, it may be architecturally elaborated in a way similar to other purely residential buildings on that street. There are also examples of this in Amsterdam, for corner buildings where there are independent dwellings above the shop.

In Kyoto, the *machiya* is built in one of two ways: where the residence is entered directly



Figure 15. Myoshinji-dori, Kyoto, 2006, showing *machiya* with open shopfronts and more private dwellings above. Photograph by the author.

through the shop, so that all the frontage is given over to the shop, or by means of the narrow passage that is along the edge of the building.

When the shop is operated by the family that lives in the dwelling above, the dwelling is entered through the shop, as it is in the early Amsterdam examples and in many of the Kyoto buildings. Sometimes the Amsterdam buildings have been transformed to put separate apartments upstairs. In these cases, there is a separate entrance leading to the stair. But this entrance is narrow, still leaving most of the frontage for commercial uses.

In all of these cases the building's organization derives from the building's immediate location in the city, allowing the commercial function of the building to connect as strongly as possible to the street.

The building façade

The building façade shows both commercial and residential uses, with openness at the ground floor and more enclosure above. At least since the nineteenth century, and in many cases before, the façades of commercial-residential buildings have had a great deal of

openness on the ground floor, but enclosure on the floors above. This comes directly out of the different privacy requirements of commercial and residential space, as well as reflecting a new attitude toward the sale and marketing of retail goods that came with industrialization.

In Amsterdam, the ground floor containing the front room that was sometimes a shop often had a higher ceiling than the other floors, and had large windows that brought light deep into the house. In the nineteenth and twentieth centuries, some of these fronts were changed to indicate a retail function behind them (Figure 13).

In the case of the New York buildings, and many similar buildings in which control over shopfronts is not exercised by the occupiers of the dwellings above, the shopfronts may be very different from each other, based on the differences in the businesses that are behind them. There may be a strong contrast between the apparent disorder of the shopfronts and the repetitive order of the apartment windows above (Figure 14).

In Kyoto, traditional *machiya* often have wooden screens across their façades which may be completely open during opening hours of shops. These buildings often have only one

storey, or one storey plus a modest loft above, so the impression on the street is largely of shopfronts, allowing families who live behind the shops to maintain their privacy (Figure 15).

This architectural feature of commercial-residential buildings is also connected to questions of location described earlier. Although dwellings and shops may be located in the same building, both the position of the dwelling in the building, and the way in which the shop is articulated on the façade with respect to the dwelling, help to maintain the dwelling's privacy even when the commercial-residential building is located on a busy commercial street. This contrast within the façade itself helps the building's design to resolve the basic contradiction between the density that the shop needs and the privacy that the dwellings need.

Conclusion

The commercial-residential building is intimately related to its urban fabric; so closely that it becomes conceptually difficult to separate the building from the city. Both the building's function and its organization are at least partly determined by the building's position and role in the city. And in like manner, the streets and urban districts in which commercial-residential buildings are located are given much of their form and identity by the buildings themselves. The buildings and their contexts form a single functional and spatial unit, suggesting that further work needs to be undertaken at the intersection of architecture and the organization of cities.

The examples described in this paper are for the most part in dense areas of large cities, but commercial-residential buildings exist in other places as well. In North America, for example, there are commercial-residential buildings on the main streets of small towns, and on commercial streets in urban residential neighbourhoods away from city centres. The same is true in the so-called Third World, in which the integration of business and residence is still a common part of everyday life and where commercial-residential

buildings exist in locations in and out of cities.

The motivation for building and occupying these buildings in such locations is partly an economic one and partly a matter of cultural habit and family history. Further investigations may show whether there is a similarity in organizing principles between these other places all around the world and the dense neighbourhoods described in this paper.

The ubiquitous nature of the commercial-residential building can only be hinted at in this paper. In cities and towns worldwide, this building embodies what is a strong economic and social phenomenon, in which certain architectural and urban attributes support its functional role. In some places, such as the United States, it is much less common than it once was, after decades of mono-functional zoning. In other places it continues to be built and remains a strong component of urban life. The widespread presence of this kind of building and the fact that buildings in different places do share attributes of organization and location make it a potentially fruitful subject for further study.

Notes

1. See, for example, Cromley, E.C. (1990) *Alone together: a history of New York's early apartments* (Cornell University Press, Ithaca) and Muthesius, S. (1982) *The English terraced house* (Yale University Press, New Haven). These books both mention the presence of shops in residential buildings, but neither deals extensively with the idea of the hybrid building.
2. Most literature in English deals with the Chinese shophouse in its versions in South-East Asia and not in China. See, for example, Lee, H.Y. (2003) 'The Singapore shophouse: an Anglo-Chinese urban vernacular', in Knapp, R. (ed.) *China's old dwellings: tradition, resilience and change* (Oxford University Press, Hong Kong).
3. The best account in English of the *machiya* is Lofgren, K. (2003) 'Machiya: architecture and history of the Kyoto town house' (PhD dissertation, Kungliga Tekniska högskolan, Stockholm). See also Yamasaki, M. (1994) *Kyoto: its cityscape, traditions and heritage*

- Process Architecture 116 (Books Nippan, Tokyo).
4. Meischke, R., Zantkuijl, H. J., Raue, W. and Rosenberg, P. T. E. E. (1995) *Huizen in Nederland: Amsterdam* (Wanders Uitgevers, Zwolle).
 5. Finke, M., Knuppel, R., Mai, K. and Buning, U. (1989) *Historische hauser in Lubeck* (Charles Coleman, Lubeck).
 6. Bascia, L., Carlotti, P. and Maffei, G. L. (2000) *La casa Romana: nella storia della citta dale origini all'Ottocento* (Alinea, Florence) and Maffei, G. L. (1990) *La casa Fiorentina nella storia della citta* (Marsilio Editore, Venezia).
 7. This point is also made in Lofgren *op. cit.* 1 (note 3).
 8. American literature on urban vernacular buildings is not nearly as extensive as that in Europe. But two useful sources on New York brownstones are Lockwood, C. (1972) *Bricks and brownstone: the New York row house 1783-1929* (Abbeville Press, New York) and Plunz, R. (1990) *A history of housing in New York city: dwelling type and social change in the American metropolis* (Columbia University Press, New York).
 9. This process is similar to that in San Francisco, described in Moudon, A. V. (1986) *Built for change: neighborhood architecture in San Francisco* (MIT Press, Cambridge, MA).
 10. Many of these buildings are illustrated in Anon. (1908) *Apartment houses of the metropolis* (Hesselgren, New York).
 11. Janse, H. (2001) *Building Amsterdam* (De Brink, Amsterdam) 48-9.
 12. Conversation with Paul Rosenberg, Amsterdam, 2003.
 13. Komossa, S. (2005) 'The ring canals: Amsterdam', in Komossa, S., Meyer, H., Risselada, M., Thomaes, S. and Jutten, N. *Atlas of the Dutch urban block* (THOTH, Bussum) 16-25.
 14. Islington's Lonsdale Square is post-Georgian, built in the middle of the nineteenth century. Its isolation from principal commercial streets is described using an analysis based on space syntax: see Hillier, B. and Hanson, J. (1984) *The social logic of space* (Cambridge University Press, Cambridge) 125-7.

Seventeenth International Seminar on Urban Form

The Seventeenth International Seminar on Urban Form (ISUF 2010) will take place in the Geomatikum in Hamburg between 20 and 23 August 2010. It will be organized by the Institut für vergleichende Städtegeschichte (Institute of Comparative Urban History) at the University of Münster, in conjunction with the Institut für Geographie (Institute for Geography) of the University of Hamburg. There will be an excursion to Lübeck on 24 August.

The general theme of the conference is 'Formation and persistence of townscapes'. Special concerns of the conference are:

- Urban morphological theory
- Past and present models of town planning
- Methods of analyzing and mapping the development of townscapes
- The internal dialectic of form and function in urban development
- The morphogenetic history of particular towns
- Historical dimensions of the evolution of townscapes in different cultural contexts
- Historic preservation, sympathetic architecture, and innovative design as strategies for the development of urban areas
- The morphology of urban open space in history and planning
- Defensible architecture and gated communities in the past and the present
- Townscape problems in growing or shrinking towns
- Perception and cognitive mapping of urban space
- The design of digital cities

Proposals of papers should have the following format: name of author(s), affiliation, postal address, e-mail address, telephone number, fax number, title of paper and an abstract of about 250 words in English. They should be sent in PDF or DOC format to info@isuf2010.de before 31 January 2010. Further information is available from the official website of ISUF 2010 (www.isuf2010.de).
