Mark Gilbert
the surveyor's contract: *property as fundamental fact of the city.*
Essay, 2015

First published in konstruktiv #299*, September 2015 issue, 8-15*
Revised October 2017

At Harvard's GSD in the late 1980's, Raimund Abraham gave a lecture about the origins of architecture. Repudiating both Abbé Laugier and Quatremaire de Quincy, he stated that the built world did *not* begin with the primitive hut. Instead, he proclaimed, the aboriginal protagonist of human habitat was the surveyor's rod. At first it may seem fairly innocuous, but this assertion is a fundamental deconstruction of how and why we build. Contrary to customary postulates, which say that we build in order to create a place for ourselves in the world, Abraham argued that we divide the world into places so that we can build. And, even more radically: the primary reason that we build is not to protect ourselves from the intrusions of *nature*, but to protect our place in the world from the intrusions of our *neighbors*. Now, we may or may not agree with Abraham's proposition, but it certainly does raise profound questions about the values and intentions we attach to the act of building.

By giving primacy to the surveyor's labor, Abraham declares that the social division of space was the initial, nascent act in the habitation of the world. This means that the first step in building is the determination of what is yours and what is mine. This, of course, is where the surveyor comes in. Surveying divides space and demarcates it for ownership; we cannot *own* anything until we establish *what* that thing is. Property comes into being when the surveyor wields his measuring rod and divides the world into individually ownable parcels of land.

Yet the question remains: why do we need to divide our world into private parcels of land? It is an issue of both utility and status. We value land because it is necessary for our existence: we need it to live on, and to provide our material needs. Private property is therefore a cultural instrument for defining the allocation and the use of land, and this makes it a mechanism for determining how much material value an individual can procure from their environment. More and better land equals more value. As humans are animals who create and live in hierarchical social systems, the possession of this instrument (and its potential for material production) confer status upon its owner. How we appropriate and use land is not just an issue of fulfilling material needs. It is also a question of social organization and cultural meaning.

Ours is now a capitalist, urbanized world. Whether we like it or not, the possession and exchange of private property defines our way of life. As much, if not most, of humanity now live in cities organized according to the precepts of capitalism, it is useful to consider what a capitalist city is. A good definition might be: *a complex social system predicated upon the subdivision of urban space into private properties that are physically developed for profit-generating economic activities*. Or, to put it more simply: a capitalist city is form of coexistence, in which land is privatized and then exploited in accordance with the profit principle. So, however you may formulate it, real property is clearly *the* fundamental building block of the city. And, in the same way that capitalism demands that investment bring returns, the capitalist city expects property to perform and produce value. Where this gets interesting is that there is no one universal definition for the optimal performance of real estate. How we use and value property is culturally established: spatial practice is the backbone of cultural tradition. As land is not only a utilitarian material commodity but also a cultural good, the determination of the most valuable way to use property is one of the most highly contested issues in all societies.

It is a common trope that cities in our globalized are becoming ever more generic and alike. Yet I believe that social values – and therefore the cultural expectations about what the optimal performance of real property should be – remain insistently local phenomena. Each urban area evolves within its own distinctive cultural and historical context; each society projects their own unique set of values upon the ownership and use of land. How these values manifest themselves in the built environment both reflects and speaks volumes about the culture that created them

measurement, allotment and the value of urban land

Whatever philosophical meanings we may read into the surveyor's labor, the product of his handiwork is impressively simple. He measures out pieces of land called *plots*. These become the property of individuals or corporate persons[i]. A plot is circumscribed by a boundary line that divides the property from its

neighbors. The essential issue here is whether you are *inside* or *outside* of this line. This simple difference has far-reaching consequences: my relationship to a boundary defines the primal dichotomy of *mine* and *yours*. Within my property, I possess certain rights of occupation and usage. Outside of my property, these rights belong to me no more.

Certain sets of activities are inherently connected to private property. Domesticity, for example. The family is certainly not the only type of domestic household, but it is traditionally its primary form. By most common definitions, families are private social entities, and therefore their existence requires some form of private space. In capitalist societies, the intimacy of couples, the act of procreation, and the process of child-rearing are therefore existentially connected to plots of real private property. But family property not only serves as an abode, it is a space of economic activity as well. The English word *economy* stems from the ancient Greek word *oikonomia*, meaning "household management, thrift" and further from *oikos* meaning "house, abode, dwelling".[ii] In western civilization, the archetype of economic activity are household endeavors which are occur within the boundaries of a private plot. Irrespective of the specific legal form of the "family" and "household" in question, or of the particular definition of their private space, this archetype still informs our understandings of economy, business and property to this day.

Not only is the division of land into patterns of measured properties the framework for private occupation and usage, it is foundation of the public realm as well. The provision of land for the common weal is a central tenet of urbanity, even in the capitalist city. The city's complex interplay of social and economic activity requires the interaction – and therefore the interconnection – of its individual private spaces. At one level, this interconnection is undeniably material: the public domain provides the transportation corridors that connect plots together, and it supplies the infrastructure that nurtures their daily functions. However, urban interconnectivity is more than just a series of physical connections. The public realm is where the city exchanges its ideas and shares its social values. If the private plot designates what is *mine* and what is *yours*, public space embodies what is *ours*. The public realm is where urban society expresses itself as a collective, and articulates the responsibility that individuals share for shaping and maintaining the community.

This principle of shared responsibility affects how private property is used. I have rights of usage, but I am also responsible for insuring that what is done on my land does not harm my neighbors or the community at large. Based upon this principle, cities regulate not only how property can be used, but also what, and how much, can be built upon any plot of land. What does get built is driven by market forces, which reflect prevailing cultural expectations, economic practices and the social value and prestige that can be derived from the use of the land. These market imperatives are counterbalanced by sets of restrictions – such as zoning, height limits, setbacks, minimum standards for construction and hygiene – that the community places upon the use of individual property. Building in the city is the dialectic between individual desire and collective restraint.

These restraints take on many forms. They can be normative, which is to say, they are legislated. Or they can be conventional, that is, based upon social expectations and peer pressure. The way that an urban society regulates the use of private property reflects the relative value it attaches to individual and collective interests, and shapes its stakeholder expectations of what the appropriate property performance should be. A city is a spatially articulated text that articulates cultural attitudes about privacy, property, individual rights, and collective interests – and how these attitudes have evolved as the city has developed over time.

If the city is a text written in the language of property, how can we begin to read it? One might begin by considering how private households occupy and use plots of land. This illuminates fundamental and idealized concepts of public and private. A next question would be: how these plots interact with each other, as well as with the public realm? The division of plots reflect ideas of social propriety and the idealized proximity of households. Finally, we might ask how restrictions upon usage influence the continuing (re)development of the city. The interplay of socio-legal regulation and built form makes relative valuation of private and community interests within a culture manifestly legible.

privacy, enclosure and the ideal abode

It seems reasonable to claim that each culture possesses a particular, often idiosyncratic set of ideal forms for dwelling. There may be one or many ideal types, and each type may address a segment of the society. A type evolves out of the way that a specific culture manifests social relationship in space.

The conception of privacy strongly affects the form of typical housing units. Consider the differences between Japanese and American domestic models. In the USA, for example, a “room of one’s own” has high social value. Domestic walls should be solid, with a door that can be closed when desired. The principle extends to the house as well. Walls define closure: the doors and windows are openings that selectively allow light in, and views out. In contrast, personal and domestic privacy in Japan seems more a psychological state than a physical refugium. In traditional domestic architecture, rooms hardly existed at all, much less a room of one’s own. With their sliding, rice-paper *shoji* screens, Japanese interiors were open and changeable. As permanent walls did not exist, the floor plane assumed the responsibility for demarcating space: earth-floored service zones, wooden verandas for circulation, straw *tatami* for sitting and sleeping. The envelope of the building functioned in much the same way. Platform and the roof took precedence to the wall; the facade had few fixed partitions, if any at all.

If notions of privacy shape the form of the typical house, this form also governs the boundary conditions of the plot it occupies. In the classic US suburb, privacy begins at the solid walls of the house. The property line need not be fenced-in at all. Many regions consider it bad manners to enclose the plot; one need only know, for the practical purpose of mowing, where their own lawn ends and their neighbors’ begin. In Japan, however, open facades meant that the house required a respectable distance to the perimeter of the plot. Thus, some classic Japanese houses – for example, those of the *Samurai* – were surrounded by wooden stockades or high stone walls, but householders of lesser social rank had to make do with a tiny spot of fenced-in garden to make place between themselves and the neighbors. Clearly, one fundamental reason that Japanese and American cities are not alike is because the different diagrams of their typical houses generate different boundary conditions.

property, propriety and urban morphology

The formulation of boundaries generates rules of property adjacency, and thereby molds spatial relations between neighbors, as well as between the private and the public realm. How we can place houses close together and still maintain privacy is one of the major issues of city design, and local ideas of appropriate distance and separation affect how what the market wants and what the regulator allows. The idea of how the house fits onto its plot is the basic diagram for building the city.

A fundamental parameter of property is the number of households that may occupy a single plot. The crucial dichotomy here is *one* or *many.* If more than one domestic or economic unit resides upon and uses the property, the plot must be internally divided, and equipped with a set of rules to determine has access to which parts of the plot, as well how they can use it. These rules can be formulated in many ways, and these different formulations generate a diverse array of internal spatial patterns for different plot types. These patterns affect, and are affected by, the size of the plot as well as its relationship to its neighbors.

A private plot needs to access the public realm. Again, the decisive dichotomy of *one* or *many* defines the two fundamental morphologies of property. If one householder (or tenant, which can also be the case) occupies one plot with one access point to the public space, the entry points to the individual properties will be dispersed along the street. In this case, each occupant needs but *one key* to pass from the public to the private realm. The English theoreticians Bill Hillier and Julianne Hanson, categorize plots of this type as *distributed.* In contrast, they regard plots occupied by more than one household as being *non-distributed*. This is because, instead of distributing household entries along the street, this typology bundles them together into a single, shared door. In this case, some sort of semi-private space, such as staircases or courtyards that connect the individual dwellings with the public realm, is required for the property to properly function. Householders or tenants need *two or more keys* to travel from the street to their private abode.[iii]

London and Vienna provide an illuminating comparison. Two of the worlds’ largest and most important cities in 1914, much of their present built fabric were built in the decades leading up to the first world war. In many ways, the types of buildings developed during that era have shaped both cities’ conventional ideas for dwelling and property usage until this day.

The London row house was, and still is, a distinctively urban, middle-class and domestic building type, and its configuration reflects the value system of the 19th century English middle class. The domestic ideal of the family demanded that the dwelling be separate from work, and the idea that “a man’s home is his castle” meant that a proper family lived under one roof on its own private piece of land.[iv] The cultural standard for respectable housing became the row house terrace, whose small, individual plots had front-yard entries distributed along a network of streets and squares. This morphological type, reduced in size

and appointment, became the accepted model for the working class as well. In keeping with the class principles of English society, government act designated four separate classes for the houses themselves; one could determine a person's position in society simply by knowing their address and the class of house built on their street.[v]

Vienna dwellings scandalized 19th century English sensibilities. The fact that families could, and would, live stacked up over each other, separated only by floor and ceiling, went against everything their sense of domestic propriety stood for. In contrast to the conventional London house, the Viennese typology manifested neither a particularly urban nor a newly modern sense of dwelling. Vienna's courtyard-like, non-distributed morphology derives from rural typologies indigenous to the villages along the perimeter of the city.[vi] These shared many typological and social correlations with their upscale cousins, the palaces of the nobility. Both embodied a pre-modern, patriarchal social hierarchy, where servants, retainers and lodgers would live together with their patron under the rambling roof of his many-chambered house.[vii]

Compared to Londoners, the Viennese attached less importance to the exclusive occupation of a plot. For a "respectable" family, there was little stigma attached to living with other households under one roof. The Viennese *Mietshaus* – be it a "bügerliches Stadthaus" or a working-class "Bassenahaus" – bundles numerous apartments onto one site; these share a common stair and courtyards that light and ventilate the back rooms.

proper[ty]values: the economic and social utility of land

Cultural ideals of privacy and propriety generate diagrammatic form of the dwelling as well as the morphological rules for integrating dwellings onto plots. However, development pressures in the capitalist city demand increasing density of usage for nearly every plot. Here, the private interests of property conflict with the welfare and safety of tenants, neighbors and the community at large. The city demands that we maximize utility; in the capitalist city, that means optimizing the exchange value of property itself.

Yet, even in capitalism, the perception of optimized exchange value remains a question of culture and custom. As Marx noted, exchange value has two components. One is the qualitatively determined *use-value* of the commodity. The other is the commodity's *value-form*, which factors the social relationships involved in the production of a commodity into its exchange value in the real world. This is a complex process of valuation, which correlates the relative social prestige involved in the production, possession and usage of the commodity. As property is the fundamental commodity of the capitalist city, the individual way that each city determines urban property's ideal relationship between use-value and value-form will strongly influence its built appearance.

Consider Manhattan's famous gridiron as an instrument for maximizing use-value of commoditized domestic forms. The Commissioners'' Plan of 1811 parceled out identical, 25ftx100ft plots over the length of the island. At that time, the ideal house form was the single-family rowhouse, similar what was being built in London at the time.[viii] The commissioners' chosen plot size was ideal for such row houses, and they deliberately selected the rectilinear form to facilitate both the sale of plots and the construction of these dwellings. The public realm was not forgotten. The streets were wide; parks, markets and an aqueduct were planned. Although it radically commoditized urban space, the aesthetic and atmospheric quality of this plan is evident to anyone who visits Chelsea, or the Upper West Side.

However, as Manhattan grew, population pressures made single-family houses increasingly unaffordable. In accordance with the principal of value-maximization, rowhouses were subdivided, and multi-family rental dwellings were constructed upon the 25x100ft plots. The railroad flats that resulted had no interior windows and were an unmitigated hygienic disaster. In response, the city passed a series of tenement laws that regulated how plots could be built in plan. These codes insured light and air for all rooms, and effectively balanced economic optimization against renters' needs. Later, when the electric elevator increased vertical site exploitation, the city responded by passing the Zoning Law of 1914, with its famous setback scheme that regulated property usage in section.[ix] Today, Manhattan can be interpreted as built expression of an arms race between the maximization of private economic value and public strategies that regulated property use in service of the common good.

In Tokyo's Yamanote district, one quickly notices the ever-present and exquisitely attenuated spaces between its modern buildings. Circa 60-90cm wide, these spaces do not help against earthquakes (quite the opposite, in fact), do not aid ventilation and do little to prevent the spread of fire. Although we expect

the use of urban property to pursue a strategy of value maximization, it is difficult to imagine how these spaces could serve private interest or public good. Something else is happening here.

In the pre-industrial society that preceded the *Meiji* restoration, essentially all real property in Tokyo (then known as Edo) belonged to the *bakufu* government of the shogunate. There was no real estate market as we know it; land was allotted to nobles and their retainers by decree. The size and location of the property reflected the status of the occupant, and the form of the house and the boundary of its plot were strictly regulated to match that status.[x] While there is a real estate market in modern-day Japan, the valuation of property in some ways remains rooted in the cultural practices of the shogunate. As the samurai caste evolved into the middle class, it held on to old attitudes about the propriety of house form and property boundaries.[xi] The social prestige provided by the possession of property in a certain location is often greater than the financial gain that could be made by selling the land. A proper house maintains a respectable distance to the boundary of its plot, and propriety is often more important than revenue maximization through building to the property's edge. The gaps between Yamanote's buildings reflect a radically different interpretation of the value-form – and therefore cultural expectations of optimal property performance – than we find in Manhattan.

---

i A corporate person can be defined in many ways, but the principle is that there are enforceable rules regulating the interactions between the individuals that comprise the corporation. Examples of corporate persons could be families, partnerships, limited liability companies, etc. The ownership of common parcels is a distinct form of property administration. The public realm is that freely accessible land owned and/or operated by the corporate entity of the community. The community is a corporate person; it can define itself at many scales and levels, be it the commune, the state, or the nation, or even supranational organizations. The essential criteria are that the community be sovereign and can assert social and political control over the area in question.

ii http://www.etymonline.com/index.php?term=economy

iii Hillier, Bill and Hanson, Julienne; *The Social Logic of Space.* Cambridge, London and New York, Cambridge University Press. 52-83

iv In fact, the problem of subletting was present as soon as the row-house type became the conventional housing form in London. The presence of the lodger in the proper middle-class house was a flaw in the system that was often socially or psychologically repressed. Sharon Marcus has even claimed that the literary genre of the haunted house was a story-telling method for processing the cultural dissonance represented by the presence of these of unwanted and improper spirits in the otherwise respectable homes. See: Marcus, Sharon; *Apartment Stories: City and Home in Nineteenth-Century Paris and London.* Berkeley, University of California Press, 1999. 83-134

v See: Muthesius, Stefan; *Das englische Reihenhaus: Die Entwicklung einer modernen Wohnform*. Königstein im Taunus, Karl Robert Langewiesche Nachfolger Hans Köster, 1990.
Also: McKeller, Elisabeth; *The Birth of Modern London: The Development and Design of the City 1660-1720*; Manchester and New York, Manchester University Press. 1999

vi See, for example, Klar, Adalbert; *Die Siedlungsformen Wiens*. Wien – Hamburg, Paul Zsolnay Verlag. 1971

vii Barea, Ilsa; *Vienna: Legend and Reality*; London, Pimlico, 1992. 37-57

viii See, for example: Blackmar, Elizabeth; *Manhattan For Rent, 1785-1850*; Ithaca and London, Cornell University Press, 1989.

ix There are many sources for this discussion, but possibly the simplest, yet most comprehensive presentation of this material has been written by Richard Plunz. See: Plunz, Richard; *A History of Housing in New York: Dwelling Type and Social Change in the American Metropolis*; New York, Columbia University Press, 1990

x See: Naito, Akira; *Edo, the City that Became Tokyo*; Tokyo, Kodansha International Ltd., 2003

xi Sand, Jordan; *House and Home in Modern Japan*; Cambridge and London, Harvard University Press, 2003, 162-202.