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## The kind building

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### ABSTRACT

This paper introduces the concepts of the *kind building* – the one that would represent an architecture that seeks to favor public life and improve the pedestrian experience as they move around the city – and the *hostile building*, its antithesis. In Brazilian cities – and most likely in cities all around the world – many building additions, in new areas or in urban renewal processes, have very little, if any, concern to the public realm, bringing opacities and barriers to the streets. The kind building aims to outline a horizon for new architectural production, in a scenario of loss of urban vitality. It seeks to overcome the limitations imposed by occupation parameters, poor urban design, program constraints, and some client desires, as it's architecture stems from choices based on a repertoire of spatial patterns that favor public life around it. This work treats architecture as an independent variable and focuses on the *interface*, one of the three levels of analysis encompassing studies on the configuration of public spaces and their relationship to the presence or absence of people. The interface level concerns the impact building frontages and components (access doors, public/private delimitation features, activities, windows) have on public life. The literature review helps define interface and boundary, discusses main concerns on public/private relationships, such as delimitation and alignment, setbacks, openings and activities, and brings studies on *building-street interface* in order to address its spatial qualities that influence pedestrian flow and encounter possibilities. From there, this paper presents, discusses, and illustrates the eight qualities of the kind building, showing that those qualities are not bounded to a certain kind of land use: i) be at ground level; ii) align with the public space, configuring it and turning their faces towards it; iii) invite and welcome pedestrians and cyclists before the car; iv) open doors to public spaces; v) open windows to public spaces; vi) do not use opaque elements as secondary boundaries; vii) do not use features to drive people away; and viii) do not place on their façade materials or objects that might worsen the external microclimate. Finally, it concludes that naming a phenomenon is a good start to raising awareness.



## KEYWORDS

Architectural configuration, Space syntax, Public spaces, Interface, Kind building

## 1 INTRODUCTION

Studies on the configuration of public spaces and their relationship with the presence or absence of people cover three levels of analysis: context, place, and interface (Tenorio 2019). At the *context* level, global attributes are analyzed, such as the urban structure in which the space is inserted, measures of integration, connectivity, zoning. The *place* level looks at the configuration of the space itself, its permeabilities and barriers to movement, its opacities and transparencies to vision, its structures that support diverse activities, its elements that mitigate climate effect etc. Finally, at the *interface* level, the analysis focuses on the façades that delimit the public space, the doors that allow the movement between public and private realms, the activities housed in the building, the windows that face the place. This paper is centered around the *interface* level, understanding the design of buildings as a crucial aspect impacting public life, which is defined as the actions carried out by people in public spaces (passage, permanence, activities, self-expression, interaction, etc.).

Buildings in various areas of the contemporary city, instead of turning their “eyes” – doors, windows – to public spaces (Jacobs 2007, p. 35), turn their “back” or “shoulders” – rear/side, opaque/blank façades – (Holanda 2013, p. 240). They confine themselves within walls and high bars, they elevate their ground floors to outcrop underground garages, they interiorize activities that could otherwise open directly onto the sidewalks, and, with all that, they harm the urban vitality. There are countless examples of that architecture and still little debate about it.

Future architects and urbanists understand the role of interfaces in attracting and retaining people in the places they configure, as my teaching experience at the Faculty of Architecture of the University of Brasilia shows. Leading at elective course to conduct post-occupancy evaluations of public spaces based on the evaluation method of Tenorio (2019), students learn how attributes such as contiguity, building variety, uses, public/private relationship, number of doors can impact public life. Several authors and empirical experiences support this understanding, and this seems to be clear to students, who, in the end, recommend varied buildings typologies, diversified uses, direct public and private relationships, many openings, and continuous, permeable, and transparent façades.

Unfortunately, to comply with those recommendations, many difficulties appear. Some of these are long-standing and would require so many resources to overcome them that it would be practically impossible to do so. For instance, if a neighborhood design were distinct, if the dimensions and shapes of plots were more suitable for direct public/private relationship, if the occupancy parameters were different, if the allowed uses and activities were reviewed, etc., we



could have buildings that would better serve the public realm through its interface. These more desirable practices remain a bet for future neighborhoods' design.

However, even in a scenario where those best practices are in place, it would still be possible to have buildings with interfaces harmful to public life. Similarly, today, it is possible to make good design choices in an adverse scenario so that new or retrofitted buildings have façades more suitable for public life. Thus, it seemed essential to change the problem's point of view, and deal with the interface not from the perspective of who analyses, re-proposes, or plans the public space but from whoever designs the building itself. Hence the concept of the *kind building*.

The kind building represents an architecture that seeks to overcome the limitations imposed by occupation parameters, poor urban design, program constraints, and some client desires. The kind building's architecture stems from choices based on a repertoire of spatial patterns that favor public life around it. I argue that, for example, even if codes impose minimum front setbacks or prevent the ground floors from being commercial, it is still possible to design a building that contributes to a better pedestrian experience.

Day by day, Brazilian cities – and most likely cities all around the world - are shaped by individual buildings additions and, if it is true that we have some strong building regulations, it is also true that they say nothing or very little about how to treat the ground floor, how to prevent blank walls, how to make a kind interface to passers-by. Even streets with pre-modern building typology, that present all the attributes of a place that enhances public life, are suffering urban renewal processes in which new buildings are damaging those original qualities. The kind building seeks to outline a horizon for new architectural production, in a scenario of loss of urban vitality.

The term *kind* makes us think of similar ones. *Gentle architecture* (1982) is a book by American architect Malcolm Wells, who advocated for environmentally responsible design. Wells spread the idea of “leave the land no worse than you found it,” suggesting that buildings should gently tread the earth and, ideally, be built underground to leave the landscape free. *Kind architecture* is a research project by Norway-based architects Sareh Saeidi and Matthew Anderson, exploring the relationship between architecture and ecology. “Kind architecture heightens the perception of human-nonhuman entanglements in built environments. It facilitates a renewed socio-cultural disposition that leads to a more liveable Earth-future” (2022). Although it is crucial to bring ecological concerns and incorporate low environmental impact techniques into contemporary architectural practice, the kind building focuses on people in their local and everyday experience.

Recently, in Brazil, the term *urban kindness* (*gentileza urbana*) can often be found in real estate projects advertisements to designate voluntary actions to improve public spaces adjacent to them. The urban kindness would be like a “gift” that the new construction would offer to the city,

usually encompassing sidewalks' expansion and improvement, new public living spaces, and landscape design that often contribute to the new construction valorization. These improvements, however, do not replace the attributes needed for a kind building. Although they are positive and should be encouraged, they often mask the hostility of new constructions.

Since the definition of a concept brings its antithesis, at the other extreme, we have the *hostile building*. Thus, the term *hostile architecture* comes to mind, which designates the product of a practice as old as it is abominable: to place, in public spaces or around buildings, elements of street furniture or obstacles to keep people away, restrict their behavior or make their experience less comfortable. Also known as defensible urban design, it materializes by fixing stones under bypasses, placing metal spikes on ledges, or even programming water jets on the perimeter of private properties. The kind building, as we will see, repudiates those practices.

This paper reviews the literature on the subject to support it and proposes the eight qualities of the kind building. Then, it discusses those principles, exemplifies good and bad practices in different architectural programs, and demonstrates that naming a phenomenon is a good start to raise awareness, especially for those responsible for the production of cities.

## 2 LITERATURE REVIEW

The interface describes a space where a building and a street meet and where there is a possibility for an access point enabling transition between the private and the public realms (Wir-Konas and Seo 2017). Every plot side facing a public space is considered an interface and helps shaping the open space. Hanson and Zako (2007) define two types of architectural boundaries that, combined, shape the open space: "Primary boundaries are materially formed from the perimeter of the 'figure' or building footprint that outlines the building's shape and the position of its facades. Secondary boundaries are the walls, fences and the like, that divide up the 'ground' or unbuilt spaces on which the buildings are placed."

From the concepts of permeability and transparency, Hanson and Zako's database allows them to classify primary boundaries as (a) active frontages (retail); (b) buildings with doors and windows, or (c) only doors, or (d) only windows at ground level; (e) buildings with blank walls at ground level and upper level visibility (windows); and (f) buildings with total blank walls. It is interesting to note that the authors consider what occurs in the upper levels only if the ground level is a blank wall. As for the secondary boundaries, the classification consists in (a) low or (b) very low walls/fences; (c) high see-through walls/fences; and (d) high opaque walls/fences.

Of interest here, then, is the *building-street interface*, as Palaiologou et al. (2016) put it, the micro-morphological scale. The design of the façades facing public areas, and, more specifically, the building sitting on its plot and the treatment given to the ground floor frontage. If the building



has a setback, and if the property boundary is fenced, its interface is described by these two boundaries and what happens between them (if this space is visible from the sidewalk).

From there, do building interfaces and their surrounding environment have any influence on pedestrian flow? Can they arouse people's interest, help provide them with the necessary security to move around with ease, and offer them something useful, which would allow them to linger and, maybe, interact with each other? What spatial qualities of these interfaces would influence all of this?

The concern with the architectural form that configures public space and its influence on public life already was expressed by Jane Jacobs, in 1961. She understood that the new modern spatial pattern was harming urban life in New York and other cities, with many social side effects – low diversity, disruption of community ties, insecurity.

## 2.1 Delimitation and alignment

According to Jacobs, a city street that has safety as a fundamental condition for the use of public spaces presents three main qualities, being the interface treatment responsible for two of them: “clear demarcation between what is public space and what is private space” and “eyes upon the street” (2007, p. 35). As for the first, we could use the example of housing complexes of repeated buildings, scattered in public areas, set back from the roads and not aligned with them, resulting in amorphous surrounding and interstitial spaces, which do not make their nature clear: whether public or private. According to her, people tend not to do informal surveillance in a space where public and private boundaries are unclear, as it is not known who is responsible for it.

With the argument of difficulty of appropriation, Alexander et al. also care about these amorphous public areas: “outdoor spaces which are merely ‘left over’ between buildings will, in general, not be used” (1977, p. 518). They say that outdoor space must be positive, which means that public spaces need to have some degree of enclosure to be identified as places.

Buildings scattered in public areas were already found in Ebenezer Howard's drawings for his garden city in 1898 (Howard 2002); the alignment of dwellings along the street was prohibited by the Charter of Athens (CIAM 1933, item 27) and stressed by Le Corbusier, who preached the need for orthogonality in the arrangement of buildings to obtain “a spectacle of order” (2000, p. 198). These formulas made the roads increasingly two-dimensional, no longer coinciding with the convex spaces formed by the built mass of the city, which motivated later studies to recommend exactly the opposite, that is, what was done in the pre-modern city. Alexander et al. state: “build right up to the paths [...] and let the building fronts take on slightly uneven angles as they accommodate to the shape of the streets” (1977, p. 594), and stress: no setbacks!

## 2.2 Setbacks

The lack of front setbacks is always mentioned as crucial for street life, as it results in the direct public/private relationship and exchanges between exterior and interior. The eagerness of the modern movement to seek the “ideal” conditions of habitability generated the solution of large setbacks and oversized spaces, which Jacobs and Appleyard (1986) emphatically criticize, based on the premise that, in a city, people “should be able to live in reasonable (though not excessive) safety, cleanliness, and security.” They say that almost always, “the requirement of adequate sunlight has resulted in buildings and people inordinately far from each other, beyond what demonstrable need for light would dictate. Safety concerns have been the justifications for ever wider streets and wide, sweeping curves rather than narrow ways and sharp corners. Buildings are removed from streets because of noise considerations when there might be other ways to deal with this concern.”

Big front setbacks weaken the very delimitation of the street and its relationship with the ground floor. The edge between the building and the sidewalk can be an attractive, active zone (Bentley et al. 1985, p. 58), especially the exterior part adjacent to the entrance, called *threshold* by Hillier & Hanson (1984, p. 19). When it gives way to the extension of ground floor activities, housing objects, or actions that attract people’s attention, transforming a displacement into a walk, this zone can also be called a *soft edge* (Bentley et al. 1985; Gehl 2006; Alexander et al. 1977). If all this potential is far from the edge of the sidewalk, public life is impoverished, and it is challenging to install shops and services on the ground floor, which can still be worsened if the large front setback areas include sterile elements such as parking lots.

There are some occasions in which a small front setback, combined with very low walls/fences as secondary boundaries, is used for privacy purposes, especially in residential buildings. In buildings typologies, such as town houses, for example, it helps maintain residential use close to the sidewalk and keep - or even raise - the number of doors to public space (Palaologou et al. 2016).

Along with the criticism of the front setbacks comes the criticism of side setbacks, as together they push the building more and more to the middle of the plot, eliminating the relations it could have with the public space and other buildings. The notion of the ensemble is lost, the role of a building in the context in which it is inserted is ignored, and the self-referential and individual architecture is all we see (Netto 2017).

Side setbacks require plots with wider fronts, increasing the feeling of distance for the pedestrian. Suppose a block 120 meters long, composed of plots without setbacks with 8 meters wide. In that case, we will have 30 different buildings on both sides of the street, 30 accesses, 30 ground floors with potential for activities. If side setbacks became mandatory and plots were 10 meters wide,

the number of buildings on the street would decrease by a third, as well as its attractiveness and its potential for variety.

Less contiguity brings lower use of the ground floor façade, reducing the opportunity for more openings - windows and doors - and making it difficult, for example, to establish commercial streets since the retail activity benefits from proximity and continuity. This is especially true if the streets have high accessibility due to their global attributes.

Front setbacks and low contiguity make it especially difficult to implement the most sought-after attributes in public spaces that are intended to be beneficial to public life – active façades, defined as single-story façades with many doors and offer of activities, directly related to the street. Gehl (2007) even proposes a classification for the type of façade based on the number of openings, in which an attractive façade would have 15 to 20 doors in a 100 meters distance. This would make a storefront or building five meters wide with no side setbacks.

However, setbacks' worst legacy is the need for the secondary boundary, the property's fencing, the prior control of access to the buffer zone that leads to the interior of the plot and to the ground floor of the building (which is not so bad when it allows visual permeability). Walls, railings, hedges impede the direct public/private relationship and become the main boundary of public spaces.

### 2.3 Openings and activities

The absence of blind walls is precisely Jane Jacobs' second safety recommendation, related to the interface of buildings: "They cannot turn their backs or blank sides on it and leave it blind" (2007, p. 35). When there is an inversion of the figure-background relationship, dismantling the block structure, or when the urban design decides to make a plot coincide with a block, or when the legislation allows for the unlimited consolidation of plots, the buildings end up having more than one side facing the public place. This usually results in inactive or blind façades on the faces that are not the main access, in addition to making the walls proliferate. Bentley et al. are very didactic at this point when they show the need for buildings to have legitimate backs, facing the interior of the block, protected from the public road. Users or inhabitants can have the chance to do whatever they want in this private space, "including the right to make rubbish and clutter, without compromising the publicness of public space" (1985, p. 14). Holanda (2013, p. 240) comments that, in the pre-industrial city, buildings, because of their contiguity, did not turn their shoulders (sides) towards the public space, and their backs were invisible, as they turned towards the interior of the blocks, in the private space of the corresponding plots. The exceptions would be special buildings, which carefully treated all façades facing public places, such as Notre Dame Cathedral in Paris. To be fair, modern architecture also has good examples, as will be seen later.



As for the influence of the ground floor of buildings on public life, Karssenberg et al. state that “the ground floor may be only 10% of a building, but it determines 90% of the building’s contribution to the experience of the environment” (2015, p. 16). What matters here is not only its design and the treatment given to its surface but also the activities it houses and offers.

Gehl (2010, p. 44) contrasts the 5 km/h city, to be apprehended at the pedestrian’s scale – their displacement speed, the range of their vision and hearing – with the 60 km/h city, to be apprehended by someone who is in a vehicle. Certainly, the first one has a series of details perceived at close range and at low speeds that would draw the pedestrian’s attention, changing the perception of their walk to something shorter.

Jacobs (2007) mentions the need to have many establishments with a varied offer of products and services along the sidewalks, to facilitate the movement of people and informal surveillance. The idea is to open doors, create windows, spread indoor activities to the outside, attract looks, stimulate the public space. If the building has no uses which would benefit from links with public space, even so, it is possible that it contains activities that can contribute to the animation of the public space itself, provided they can be within sight of passers-by (Bentley et al. 1985, p. 63).

Nonetheless, not all the ground floors of a city can offer commerce and services; in fact, most ground floors in a city are not like that. If we think about the ground floors of non-commercial buildings, the discourse of security and privacy ends up harmonizing with the front setbacks and fences, which provide the means to control borders and isolate the authorized person from the unauthorized one to penetrate the property. In this context, the design of the interface and gateways is relevant, as they can do just the opposite: bring them closer. “The space outside the entrance constituted a potential interface between the inhabitant and the stranger; and the entrance was a means not only of establishing the identity of the inhabitant but also a means of converting a stranger into a visitor” (Hillier e Hanson 1984, p. 19).

Delimitation, alignment, contiguity, direct public/private relationship, many doors and windows, diversified activities on the ground floor are the most recurrent recommendations in the literature for the architectural form to contribute positively to public life. They also coincide with characteristics of what would be, according to Holanda, the paradigm of urbanity, whose spatial patterns are “historically identified with secular use” (2022, p. 100). However, Saboya et al. argue that “despite being widely accepted in the urban design literature, these ‘morphological factors of vitality’ are, to a large extent, worked only in the internal logic of the arguments” (2017, p. 52).

There is research within the scope of urban morphology, architectural morphology and spatial syntax that aim to quantify morphological and spatial qualities of the *building-street interface*. However, the emphasis is usually given on two themes.

In the first one, the focus is on the transformations of ground floor plans, whether or not based on relationships with the street. In addition, attention is focused on buildings for residential use, not so much on those that house other activities.

Vialard and Bafna (2009) study the American single house in a historical perspective (from 1908 to 1954), showing that the changes in its physical form correspond with social changes in American domestic life. Although the authors were focused in the domestic floor planes, regarding front façades, conclude they have changed from narrow and aligned with the street to long, complex massing that breaks the alignment.

This is also the concern of Wir-Konas and Seo (2017), when studying 1906 domestic floor plans in 3 British housing typologies (terraced, semi-detached and detached houses), each relating with the streets with 3 typical ways (terraced – two house-street interfaces, semi-detached and detached – one). What they considered an atypical relationship is the corner plot, where the side boundary is not to be share with a neighbour, but with the adjacent street. The interesting finding is that “in 63% of cases, the floor plan followed the morphology common to the housing type without addressing additional interfaces”, and they conclude that “not addressing the interface during the design process is more likely to deteriorate the condition of one or both spaces”.

Wir-Konas and Seo (2019) study the incremental changes in front interfaces in a district of Newcastle upon Tyne, UK, through the analysis of the convex space between the house walls and the limit of the plot. Vialard et al. (2021) explores how the building and the plot, in the US and in the UK, respond to the street hierarchy by use of yards, room layout and architectural features. the concern is with internal arrangements, from, for example, interfaces with heavy traffic streets

In the second theme, the concern is with the effects on public life a set of building types bring to a street segment or to a neighborhood, usually in comparison with streets segments or neighborhoods that have other types, or that have undergone transformations over the course of time. In those studies, the *building-street interface* characterization is made to allow the analysis of the *block-street interface*, or the *street interface*, mostly together with the street segment level.

Hanson (2000) presents as a case study the morphological changes that have taken place in the design of housing in a small Inner London neighbourhood. The goal was to show the shift in design paradigms over time, while linking them into an account of changing social ideas. The main morphological shift is from “streets” to “estates” and, in what concern to buildings, the shift was from direct interface and front doors to indirect interface with few entrances; from buildings front onto streets to buildings back onto streets; from buildings defining the streets to buildings loose in a landscape. The recent morphology has worsened the pedestrian experience. In her words: “The practical consequence for a pedestrian in Somers Town today is that for most of the

time he or she is walking adjacent to the open spaces of estate layouts that are sealed off from the streets by their secondary boundaries, not next to the facades of buildings and their doorways.”

Hanson and Zako (2007) studied 30 residential developments in 3 cities, selecting samples from 4 historical periods: from pre 1890 to post 1980. Representations and quantitative methods have considered, among other key-elements, the way the building frontages and facades create boundaries and interfaces between interior and exterior space. The main purpose of the analysis was to “pinpoint those variables that are associated with ‘liveability’ in the design and experience of external space in residential neighbourhoods and any spatial factors that may contribute to the abuse of public space and antisocial behaviour”, which was complemented with the postal opinion survey. One of the conclusions was that “the traditional streets and squares (...) are often taken as a benchmark for civilized and sociable urban living (...) but they are not without problems. However, the sense of neighbourliness, mutual awareness, co-presence and the mix of inhabitants and passers-by on the street outside lead to a particular kind of informal sense of belonging (...) that architects and designers from all periods have tried to emulate.”

Palaiologou and Vaugh (2014) discusses the way in which pedestrian experience varies as the characteristics of streets façades change, on west Village, Manhattan, based on mapped and quantitative data collected for the area. Five building typologies were considered, between historic and non-historic buildings, but the analysis treated the block frontage as a morphological. Concluding on the morphology of a sociable *street interface* (that is composed by several *building-street interfaces*, the authors recommend “i) the plot size; narrow plots for narrow building façades which in turn increases the potential for a high threshold frequency across the block frontage; ii) functional mixture; the mixture of building uses within the block frontage length; iii) morphological mixture; buildings with varying architectural styles and consequently varying treatment of private public transition.”

Saboya et al. (2017) have grouped buildings into three types: 1) isolated/tower, with front and side setbacks, delimited by walls or railings, with less visual relationship with the street and fewer doors opening to it; 2) compact/continuous type, without setbacks, walls or railings, greater visual relationship with the street and more doors opening onto it; 3) hybrid, which has a base without setbacks and an isolated tower. They tested the hypothesis that types 2 and 3 would be positively correlated to the vitality of urban spaces and that type 1 would be negatively correlated. Among the variables considered are those listed here, previously: front setbacks; façade continuity (ratio between façade size and plot frontage – related to side setbacks); physical permeability and visual permeability on the ground floor, activities on the ground floor.

It is possible to perceive that these interface attributes, that is, related to the façades of buildings facing public spaces, are all local. In fact, most authors are only concerned with aspects of place

and interface, not consistently and systematically addressing the aspects and influences of context, which Space Syntax and its tools do so well.

Local attributes of interface (characteristics of borders and their activities) and place (infrastructure intended for people, which gives them support when passing or staying) are important. Still, one cannot do without the analysis of global attributes, such as topological accessibility or choice, that allow us to understand the role of that place in the fabric of the neighborhood or the entire city. That's because the buildings and infrastructure of a street can bring all the negative lessons to support public life, and that street may still have many people passing by simply because it belongs to the integrating core of the system.

Saboya et al. (2017) say that correlating architectural form and the presence of people requires minimizing the influence of other variables. That's precisely what they did, regarding the global attributes: they analyzed hundreds of street segments and thousands of buildings gathered in groups, in areas of high, medium, and low topological accessibility, in three Brazilian cities: Rio de Janeiro/RJ, Florianópolis/SC and Porto Alegre/RS (Netto et al. 2017).

The findings constitute a significant contribution to the field of knowledge. For brevity, I only share those from Florianópolis (Saboya et al. 2017): compact and continuous types (2 and 3) are more associated with urban vitality, and there are indications of a causal relationship between architectural types and urban vitality. They conclude that it is urgent to review the planning instruments that guide and control urban use and occupation since the Brazilian master plans have been privileging the architectural type that brings the worst performance to public life.

In the meantime, the requirements that result in isolated types/towers, harmful to public life, are there in force. What can be done, then? I propose that we use the same building-centered logic of planning to put it in evidence, classifying it as kind or hostile, depending on its positive or negative contribution to the public sphere. I start from the following principle: it is possible to develop a gentle interface for public life, even without required alignments, even with mandatory setbacks, even in oversized plots with more than one front to public spaces, even in non-commercial uses, despite the client requirements and program constraints. Everything is a matter of choice.

### 3 THE KIND BUILDING

As seen, there are spatial attributes of the *building-street interface* that are more likely to contribute to the vitality of the public space. In a general way, the kind building should eliminate barriers, avoid opacities, and promote permeabilities and transparencies, supporting all people – not just those authorized to enter it – in their activities of passing by and staying. The goal is to make the pedestrian experience, at least as they pass along its façade, the best possible. The hostile building represents the opposite of all this.

The kind building has eight qualities, as follows:

### 3.1 The kind building sits on the ground level

*It sits on the ground in such a way that all its façades facing public spaces are level with them. It resolves level differences internally. It does not bring up its underground floor. It integrates its ground floor with the public space. It is accessible without creating barriers.*

Although this is the first and fundamental quality of the kind building, it is rare to find explicit mention in the literature of the way a building sits on the ground. The direct public/private relationship presupposes that they are both on the same level; the existence of active façades presupposes that the doors open onto the sidewalk and not onto a kind of leveled gallery, which must be accessed via a staircase. Leveling the ground floor of the building with that of the ground on all sides is an imperative starting point.

There are several reasons why the ground floor of a building is not completely level with the ground: ignorance of the age-old lessons of how to place a building on a sloping site; wish to create artificial elevations to “highlight the architecture” (or any discourse like that); economic constraints, etc. In all items, and not just this one, one could list the reasons for non-compliance; however, the interest here is in the effects of the decisions, not their causes (although they are relevant).

Streets can be more or less steep, and the front of the building must follow the terrain’s natural slope. If a building has more than one front, the ground floor of all of them must be at the sidewalk level, and the architecture is responsible for internally harmonizing the differences in level, adopting solutions with different ceiling heights.

The exception - The basement must not outcrop, forcing the ground floor to be on another level and creating barriers around its perimeter, *unless* its design solution does not break the link each door has with the sidewalk. In figure 1c, left, the solution of this commercial building in Brasilia creates an artificial ground (a clear private space), and the storefronts are not related to the sidewalk, thus creating blank façade. In figure 1c, right, the ground floor of this commercial buildings in London is raised, and the basement floor results in a semi-underground floor, visible and accessible from the sidewalk. There are numerous cases of building types in which this occurs, without prejudice to the building’s good relationship with the public space. The row houses in Manhattan, and the Terrace houses in London, studied by Palaiologou et al. (2016) are another good example: “Where a basement exists, the need for a basement window to provide daylight and fresh air creates a complex micro-morphology for the terraced/row house fronts featuring small ‘areas’ (or ‘areaways’, as called in the American type) and ‘stoops’ (a flight of steps leading to the building entrance).



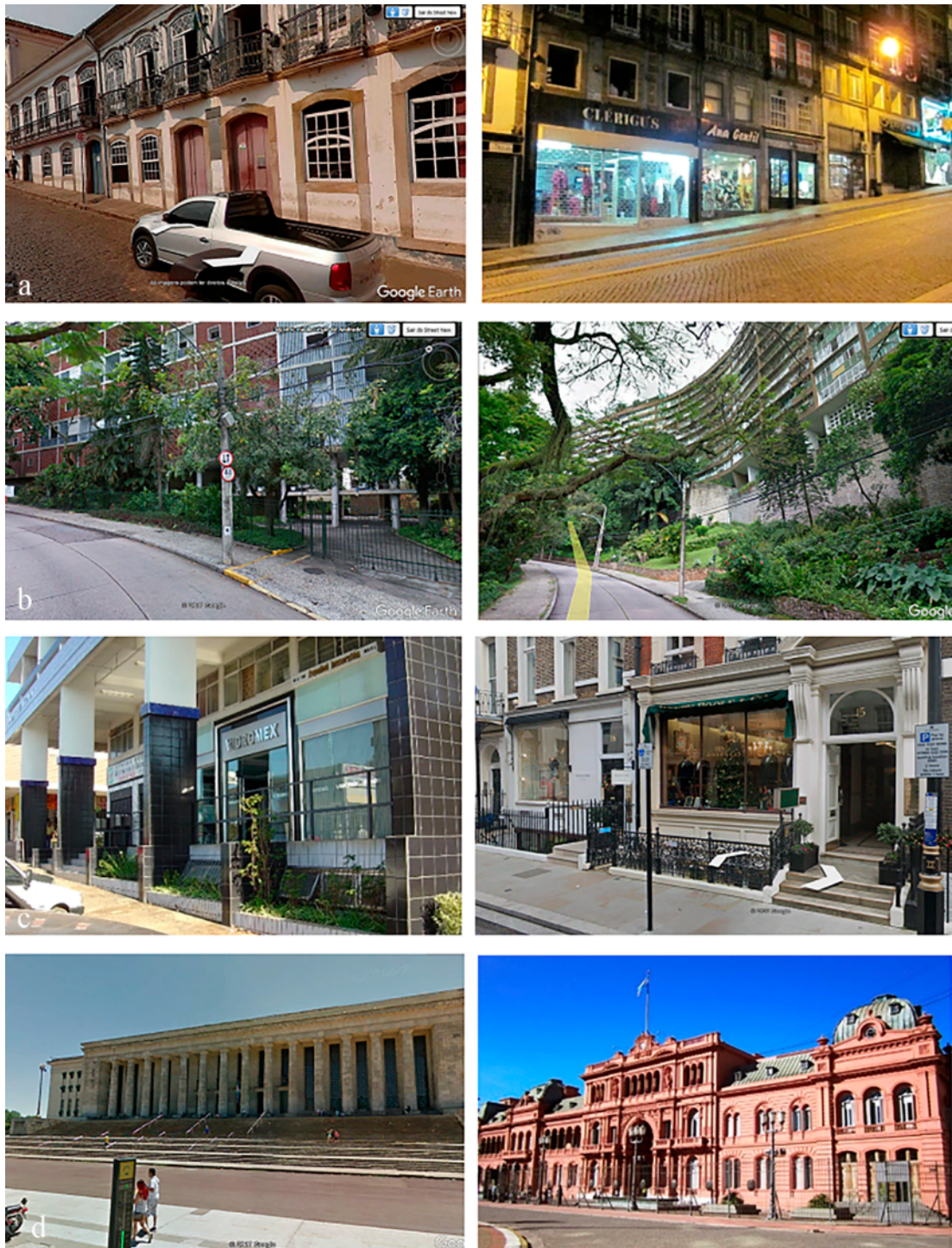


Figure 1: a. Left: Ouro Preto, Brazil (Google Earth). Right: Porto, Portugal (Gabriela Tenorio). Examples of perfect building siting in steep terrain.

b. Left: Lucio Costa's buildings pilotis at Parque Guinle, Rio de Janeiro, Brazil, adapt perfectly to the terrain (Google Earth): masterful example of modern architecture that was ignored by its peers in the hostile buildings that followed, at right (Google Earth).

c. Left: in this local commercial building in Brasilia, Brazil, the elevation of the ground floor isolates it from the sidewalk (Gabriela Tenorio). Right: building typology on Savile Row, London, UK. Here, the elevation of the ground floor and the visibility of the basement do not detract from the pedestrian experience (Google Earth).

d. Left: Buenos Aires Law School, Argentina, and its staircase as arrogant as it is unnecessary (Google Earth). Right: the country's most important building does not need this artifice. Casa Rosada, by Carl Kihlberg, Henrik Åberg, Francesco Tamburini, office of the President of Argentina, is accessible and interested in Plaza de Mayo (Gabriela Tenorio).



These micro-morphologies move the building entrance away from the sidewalk.

Configurationalally, this means that, on the one hand, the interior-exterior accessibility becomes indirect, but on the other hand, that another entrance (one leading to the basement) is added in the configuration.” These areas and stoops function as a buffer zone, allowing some privacy to the activities inside the building, without great distance from the sidewalk. It is important to emphasize that it would be necessary to overcome universal accessibility issues in solutions such as these, like the addition of elements that allow people with wheelchairs to enter the building.

### 3.2 The kind building faces the public space, configuring it



Figure 2: a. Left: New York, USA. Aerial view of a stretch of street that contrasts housing projects scattered in the public space and not aligned with the roads with contiguous buildings facing the streets (Google Earth). Right: street view of the same stretch (Google Earth).  
b. South local commercial buildings, in Brasilia, Brazil, have two façades facing public spaces. The one facing the street is treated as the front (left - Google Earth), the one facing the superblock is treated as the back (right - Gabriela Tenorio).  
c. The stunning building of the dean’s office at the University of Brasilia, Brazil, by Paulo Zimbres, has four front façades facing public spaces and gracefully welcomes pedestrians at ground level in each of them. (Google Earth).



*It aligns its façades with the surrounding public space. It does not turn its “back” or “shoulders” to the public space. It considers all its façades to the public space as fronts and designs them accordingly.*

The mandatory setbacks allow buildings to be placed in the middle of the plot, not necessarily aligned with its limits. Consequently, they may not face the street, which can generate residual and undefined spaces and harm the definition of public space. It is necessary that they turn to the streets, use the minimum value of setback distances, and seek to minimize their effects with elements that guarantee the continuity of the façade and attract the interest of the pedestrian.

It is essential to design as many façades as there are fronts, even though one of them will be the main one, minimizing the negative impact that a side or back façade brings to the public space. This is valid for the ground floor level and for the upper floors.

### **3.3 The kind building invites and welcomes pedestrians and cyclists before the car**

*It does not place parking lots between itself and the street. It considers the location of bus stops, bike paths, crosswalks. It gives continuity to the sidewalks without blockages, interruptions, or bottlenecks. It implements accessibility requirements. Car access to the plot does not detract from the pedestrian/cyclist experience.*

The kind building facilitates access for those who travel by public transport. It identifies nearby stops, pedestrian crossings and leads people to it. It also identifies cycle routes and seeks to contribute to their continuity, offering connection and infrastructure. It implements sidewalks, imagining that they are part of a longitudinal path, making them generous, as wide as possible, without any blockage, deviation, or strangulation, respecting accessibility standards. Thus, it contributes to the pedestrian being able to walk along its façade without effort. If it has more than one interface, it considers that its main façade is the one facing a better-integrated road, served with public transport.

When front setbacks are mandatory, they could be used to accommodate pedestrians, creating attractive spaces suitable for their vision or permanence. Mandatory surface parking within the plot must be completely invisible from the façade, and their accesses must be reduced to a minimum, preferably one, bidirectional so that the sidewalk does not suffer too many interruptions. Garage ramps must occur inside the plot without harming the levelling of the sidewalks.





Figure 3: Three examples in Brasilia, Brazil.

- a. Left: cars take precedence over pedestrians in the area in front of this cafeteria in Guar4 (Gabriela Tenorio). Right: the garage and the ramps have completely blocked the sidewalk (Google Earth).
- b. Four driveways to a single building that has made all the bad choices: with two fronts to the public space, it has decided to turn its back to the road with the best transit service and has destinated its front setback to parking lot (Google Earth).

### 3.4 The kind building opens doors to the public space

*It opens itself to the public space, at ground level. Its main entrances are for pedestrians. Its entrances are clear and evident. It has more transparencies than opacities in the ground floor façade.*

Regardless of the length of the façade, it is essential to have transitions – if not many, at least generous and unequivocal – between the public and the private, at the sidewalk level, receiving the person who came on foot, by public transport or bicycle before anyone coming by car.



Figure 4: Buildings on W3 South Avenue, Brasilia, Brazil. Left: contiguous buildings, narrow façades, plenty of doors and windows (Google Earth). Right: built from the consolidation of several plots, this building kept only one door. The rest of the ground floor façade has dull and uninteresting surfaces. (Google Earth).

The treatment given to the rest of the ground floor façade must allow for visibility from the outside to the inside, and vice versa. Mirrored, dark glasses, or opaque surfaces should not be used. The lighting coming from inside the ground floor brings a welcoming atmosphere, arouses interest and encourages people to move around at night (see figure 1a, Rua do Porto, Portugal, at night).

### 3.5 The kind building opens windows to the public space

*It has windows and balconies facing the public space. It has more transparencies than opacities in the upper floors' façade.*

All visible parts of the façade above the ground floor must have many windows and balconies. Mirrored or dark glass should not be used (see figure 4). The street ambiance is not only given by the ground floor. The lighting of the windows brings a welcoming atmosphere, arouses interest, and encourages people to move around at night. The kind building conveys the feeling that each of its floors is interested in what happens in the public space.



Figure 5: a. Left: the delicate and transparent Palácio do Planalto, by Oscar Niemeyer, office of the President of Brazil, contrasts with the windowless building of the Federal Senate, Brasília, Brazil (Gabriela Tenorio). Right, windowless building in Copenhagen, Denmark (Gabriela Tenorio).  
b. Left: plenty of windows and balconies in Porto, Portugal. Right: lit windows on the upper floors in Copenhagen, Denmark (Reinaldo Germano).



### 3.6 The kind building does not use walls or opaque elements as secondary boundaries

*It uses transition areas strategies, or delimits its private plot with visually permeable solutions*

It is important to eliminate any element that could constitute a blind surface, even if there is a need to delimit the private space of the plot. The visual permeability must be as wide as possible, and, in this scenario, there is no room for high walls or hedges, only railings, which allow you to see something captivating in this private area, between the sidewalk and the ground floor façade, and to entertain pedestrians along their path.

As an alternative to the use of a railing, the idea of creating a transition zone from the boundary of the plot to its ground floor façade comes to light. Distance protects the ground floor façade if its activity does not benefit from the direct public/private relationship (such as schools) and can make the passersby feel included in this frontal space.



Figure 6: Three schools in Brasilia, Brazil.

a. Left: walled elementary school in Ceilândia. Right: kindergarten in Vicente Pires with visually permeable boundaries (Google Earth).

b. The beautiful building by Elvin Dubugras for Cultura Inglesa: no fences, no walls, just generous free space that preserves the educational activity and, at the same time, makes the passersby feel included and invited. (Google Earth).

### 3.7 The kind building does not use elements to drive people away

*It does not use hostile architecture resources to prevent people from sitting, laying down or approaching, nor does it undermine peoples' practices*

Hostile architecture resources take place on the façade and surroundings of the building and, in general, are accessory elements, which can be removed, or even practices linked to the administration of the place, which can be changed. But they can also be thought about along with the design of the project.

It is interesting to note that buildings that receive these interventions *a posteriori*, originally offered inviting places on their façade to sit and linger, which is a great sign of their kindness. This item, therefore, speaks more about people than architecture.



Figure 7: a. Left: Building in Buenos Aires, Argentina. (Gabriela Tenorio). Right: building in Brasilia, Brazil (Gabriela Tenorio)

### 3.8 The kind building does not place in its façades materials and objects that might worsen the external microclimate

*It seeks to solve its internal microclimate issues without harming the external environment. It does not use coatings that could cause glare or thermal discomfort. It does not place noise or heat-generating equipment facing the public space.*

This item lacks further development, with the support of specialists in the field of bioclimatic studies and environmental comfort, but it is crucial for the kind building because the choices of surfaces, the treatment of free areas on the ground floor, and the positioning of equipment interfere with comfort and well-being of the pedestrians, whether in terms of temperature, lighting, acoustics, or air quality. Buildings must offer solutions to enhance the comfort of those inside, but not at the expense of the surrounding environment.

This is not about sustainable buildings or buildings certified for having high energy efficiency, promoting water savings, reuse of gray water, and other environmental benefits, although this should be valued and pursued. A building is not kind just because it is sustainable. These are buildings that do not block the ventilation of the surroundings, that provide shade, whose surfaces do not contribute to the formation of heat islands or to the glare of pedestrians, among other characteristics.



Figure 8: Left: 20 Fenchurch Street, known as the Walkie Talkie building, London, UK, with its shape and highly reflexive surface, melted some parts of a car parked nearby (bbc.com). Right: Parkroyal on Pickering Hotel, Singapore, has an international sustainability award, but the pedestrian experience near it – or under it – is very poor and frustrating (conexaoplaneta.com.br).

## 4 CONCLUSION

Kind building and hostile building are at opposite ends of a ruler with intermediate gradations. In the classification of examples, some characteristics help compensate for others, as it is possible to notice that not all have the same weight (even if no weight has been given to them). Usually, features that are very difficult to change and should have been secured before the building was completed have the greatest weight. For example, an overgrown garage on a plot without setbacks is practically an insoluble problem. Still, a façade with reflective elements that melt cars parked on the street can be coated with another material and thus be corrected. The diagnosis of the negative attribute also helps search for solutions so that existing buildings are more responsible for public life.

In the classroom, it is evident not only the rapid assimilation of concepts by the students but mainly the increase in awareness of buildings they have already designed. Comments like “Oh my God, now I’ll have to redo my entire project!” are common. However, in the exercises of appreciation of examples, some controversial buildings always appear, which generate exciting debates on how to classify them. In this situation, other aspects of the architecture are cited to justify an evaluation. Considering here the eight-function model, summarized in Holanda (2021), namely:

*“Functional aspects.* Does the place satisfy the practical exigencies of daily life in terms of the type and the number of spaces required by the necessary activities and their mutual relations?

*Bio-climatic aspects.* Does the place provide adequate conditions of lighting, acoustics, air temperature, humidity, speed, and quality?

*Economic aspects.* Are maintenance costs compatible with the purchasing power of the people concerned?

*Sociologic aspects.* Does the configuration of form-space (solids, voids, and their relations) imply desirable ways of individuals and groups deploying themselves in places and moving through them, and accordingly desirable conditions for encounters and avoidances and the visibility of the other? Do the type, quantity, and relative location of activities imply desirable utilization patterns of places in space and time?



*Topoceptive aspects.* Is the place visually legible? Does the place offer good conditions for orientability?

*Affective aspects.* Does the place have a clear, strong affective personality? How does it affect people's emotional state?

*Symbolic aspects.* Is the place rich in architectural elements that remind us of other elements on a larger scale?

*Aesthetic aspects.* Is the place beautiful?"



Figure 9: a. Embassies in Brasilia, Brazil. Left: Lebanon's embassy (Google Earth). Right: México's embassy. Teodoro González de León, Abraham Zabludowsky e Francisco Serrano have designed an inviting and generous interface even in a program that demands security and access control (Google Earth).  
b. National Museum, Brasilia, Brazil. Oscar Niemeyer. Aerial view (Google Earth) and street view (Gabriela Tenorio).  
c. Le Vinci International Congress Center, Tours, France. Atelier Jean Nouvel. Aerial view (Google Earth) and street view (Gabriela Tenorio).

The kind building is primarily linked to the sociological aspects of architecture, followed by the functional and bioclimatic ones, but not other aspects of the eight-function model. A building may not be beautiful but be kind; it may not symbolize anything but be kind; it can be expensive to maintain

but be kind. On the other hand, a building can be a world heritage cultural site because it represents the ideals of architecture at a certain point in the history of humankind and be hostile. We can use lenses to look at the same building. It is necessary to use the proper ones.

The kind building qualities are not tied to specific land uses. It seems logical to imagine that commercial buildings tend to be kinder due to the nature of the activities they host. Still, any program can generate a kind or a hostile building. Lebanon's embassy is next to Mexico's embassy in Brasilia, and their interfaces couldn't be more different. As a cultural building concept, the National Museum, also in Brasilia, is radically opposed to the Le Vinci International Congress Center in Tours. The latter unfolded its program on the ground floor facing a preexisting street, creating a series of small shops that help maintain the scale and character of the place, even in the face of a contemporary intervention of that magnitude.

Netto et al. say that "when things and relationships are named, they consciously exist in our visions and practices" (2017, p.15). The expressions *kind building* and *hostile building* are proposed to highlight positive and negative building patterns of interface. In other words, to help distinguish buildings that provide a service from those that provide a disservice to the public space and public life of our cities.

Those qualities are topics to be aware of, and are not to be measured or quantified, at least not yet. Literature measures and quantifies what happens with a street full of kind buildings, or with a street full of hostile ones, at the *block-street interface*, or the *street-interface*, level. In this context, measure attributes, such as those used to compose the space syntax interface map (Hanson 2000) are relevant, and gives us arguments to establish those qualities. But in a context of a *building-street interface*, what can a single kind building do for a walled, uninteresting street that can be observed, measured, and quantified? Maybe it could provoke the same reactions of those who pass-by Paley Park, in Manhattan, as Willian Whyte describes in *The Social Life of Small Urban Spaces* (1980): "about a half will turn and look, about a half of them will smile (...) this visual enjoyment, this secondary use (...) Paley is a site, a place to show people, to point to, to discuss". Maybe it could just make people change sidewalks to pass along it, or maybe it could make people lower their pace, look at its direction, rest a little in some urban furniture it provides, refrain from vandalizing it. The possibilities for further investigation are many.

Everything is a matter of choice, as already said, and there is no naiveté here. The motivation to explore this theme and create these terms was to provide future architects with a lens that would reveal these specific effects of the architectural form and be used in the classroom and incorporated into their professional lives. Much of the production of hostile architecture does not come from ignorance of its effects, but from conscious choices – political, above all, and economic or related to other topics. This relevant field is not my focus of research. Concerning architecture as an independent variable, the contribution of this work comes in the sense of naming the phenomenon,



making its understanding and relevance didactic, to, with luck, guide more generous architectural practices now and in the future.

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