University of Oum El Bouaghi
Faculty of Earth Sciences and Architecture

Department of Architecture

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I. URBAN COMPOSITION AND URBAN SPACE

1. THE CONCEPT OF URBAN COMPOSITION

The foundation of post-agricultural urban settlements lies in their spatial organization, shaped by the traditional rules of daily life. This heritage, though fragile, is invaluable. The layout of streets and public spaces constitutes a true urban structure:

Streets are not simply thoroughfares, but design elements that define and articulate open spaces, while also promoting social interaction.
These lines are essential to a city's identity.

ROMEYER (2013) reminds us that these interstitial spaces remain understudied. The urban composition, which integrates buildings, streets, and squares, forms a dynamic and coherent network, reflecting the social, cultural, and economic dynamics of a society in
movement.

Studies on British cities confirm that each agglomeration develops a unique morphology, shaped by this spatial organization (Zeka & Ali Yüzer, 2014; BagNolo & Manca, 2019).

2.1 Key elements for understanding urban composition

Urban composition is based on the analysis of the spatial and formal organization of the city, particularly through four key interconnected elements:

ÿ Street,
ÿ plots of land,
ÿ buildings and ÿ
public spaces.

These components structure movements, uses, and social interactions.

Streets, in particular, define access and hierarchies (main street, local street, alley), thus influencing urban morphology.

2.2 Operational definition of urban composition

Urban composition is the intentional arrangement of the physical elements of the city (buildings, roads, open spaces, facilities) according to formal, functional, and symbolic principles, in order to create:

-Spatial readability (the structure is understandable),

-Morphological coherence (the parts interact),

-A quality of use (the space invites one to inhabit, move around, appropriate).

Table 1. Operating principles of the composition

Principle	The	Field application
1. Hierarchy	**challenge:** Avoid uniformity, create reference points	Main road (20 m), secondary street (10 m) passage (3 m)
2. Alignment & pace	Visual coherence, memory urban	Facades aligned on the ground floor; alternating open spaces/urban areas (bays, loggias)
3. Human scale	Priority to pedestrian perception	Building height / street width ÿ 2 (e.g., H = 12 m / L = 8 m ÿ H/L = 1.5
4. Porosity & crossing	Connecting spaces, avoid walls	Multiple entrances to the block, covered walkways, Views through, active ground floor
5. Polarity	Structure using anchor points	Central square and amenities (market, school, garden) ÿ becomes the heart of the neighborhood

Thus, urban space is now conceived not as a simple physical container, but as a complex, inhabited, cultural and multisensory entity, a vision reinforced by the work of Boeing (2021).

2. INTRODUCTION TO URBAN PUBLIC SPACES

Urban public spaces are much more than just open spaces: they are essential places for social life, democratic dialogue and collective expression.
Their success depends on careful design that combines respect for planning principles, understanding of daily uses and enhancement of the identity of the place.
As Yousefi and Fardi (2016) point out, transforming an ordinary space into a living place requires the harmonious arrangement of six key elements, whose strategic location enhances both attractiveness and functionality.

3. URBAN SPACE, THE SIX DIMENSIONS OF URBAN COMPOSITION (Carmona et al., 2003)

Citizens perceive the city not as a mere collection of buildings, but as a complex whole integrating streets, open spaces, and social dynamics. To better understand this complexity, Bassand, Michel, and Dominique Joye (2001) propose a **six-dimensional framework for analyzing urban composition,** encompassing morphological, perceptual, visual, social, functional, and urban rights aspects. Ignoring any one of these dimensions risks compromising urban sustainability and the quality of public space.
Successful urban planning therefore depends on the ability to articulate these dimensions and to prioritize strategies adapted to their interaction.

- the morphological dimension : grid, block, plot network, relationship between built-public space, return to traditional urban space and street, block models.

- **the dimension of perception :** senses, visual perception and image

- **the visual dimension :** aesthetics, architecture, mineral and plant landscape

- **the social dimension :** space and society

- **the functional dimension :** space and activity

- **the temporal dimension :** long time (history) and short time (seasons, events…)

These dimensions are not watertight, they are interconnected and interlock.

3.1 Morphological dimension: configuration and shape

Urban public spaces are essential to the social activities and events of cities. Their formation is influenced by historical conditions, human interactions, and local governance.

Understanding contemporary urban public spaces involves comparing cities like London, Berlin, and Istanbul, focusing on their morphological aspects. Interviews with experts in urban branding strategy and public transformations revealed a global consensus on the essential needs of urban public spaces. The configuration and form of these spaces significantly influence their evolution.

3.1.1 Types of urban space organization

A. **Traditional urban space:** Buildings/blocks that define urban space

B. **Modern Urban Space:** Buildings in urban space (disappearance of the city block)
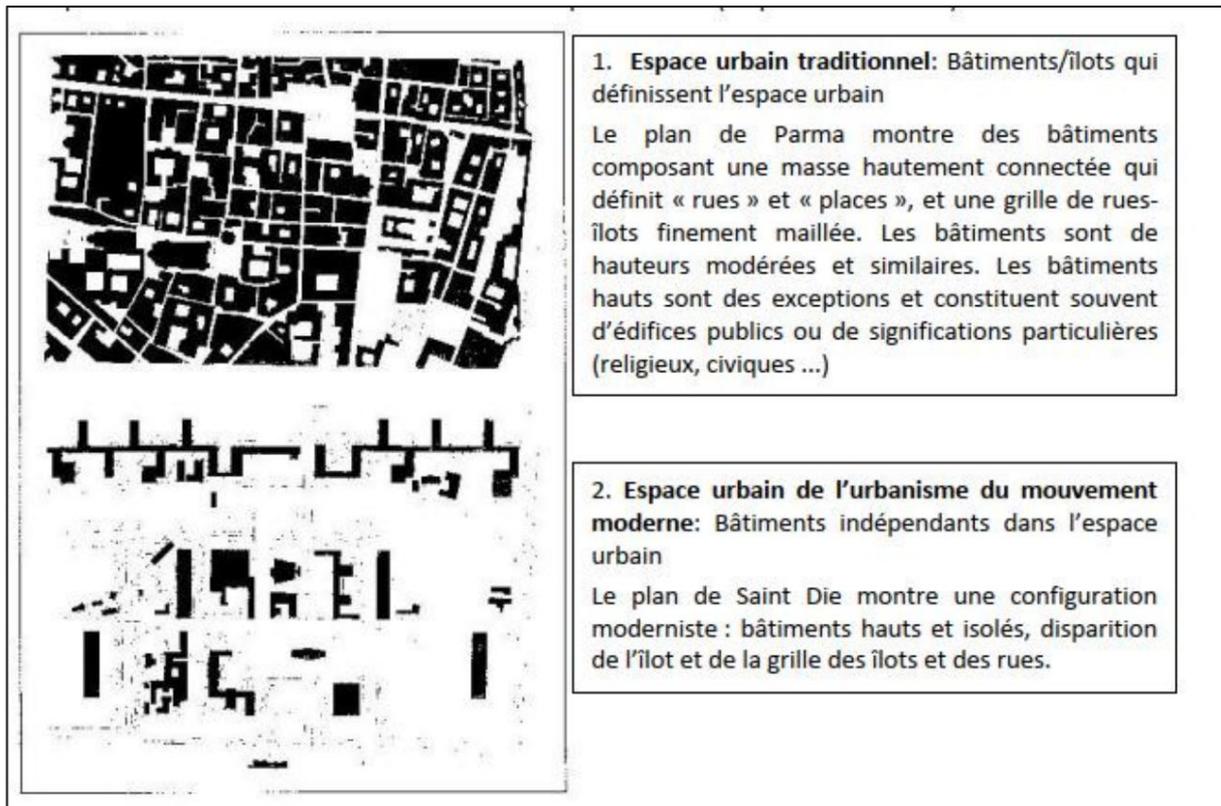
Figure 1. ground diagrams of Parma and Saint.Die1

Modern urban space   Traditional urban space

Figure 2. Urban spaces

C- **Contemporary urban space :** Intermediate situation between the two previous ones (3rd age of the city): return to the system of blocks – plots – buildings structuring the urban space: street, square, Heart of the block
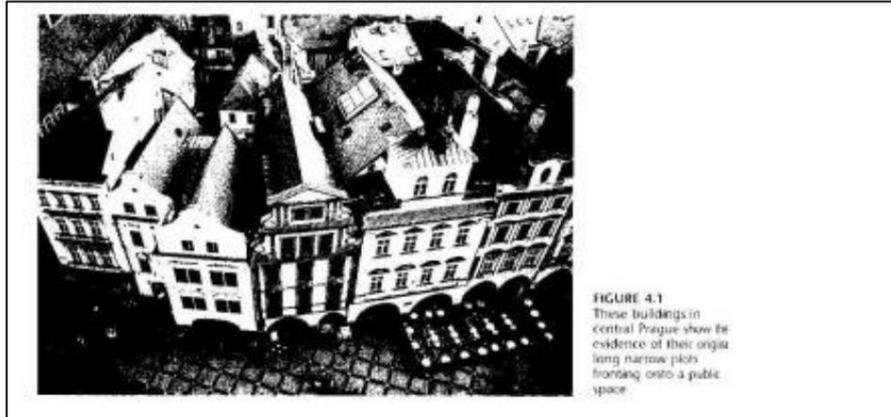

retour au système îlots – parcelles – bâtiments structurant l'espace urbain : rue, place, cœur d'îlot

Projet urbain le Trapèze Paris-Val de Seine : "Label Eco Quartier" 2013. Mixité urbaine ; Crédit photo : Ph. Guignard - Val de Seine Aménagement

Des espaces publics généreux.

https://www.ileseguin-rivesdeseine.fr/fr

Figure 3. Contemporary urban space2

3.1.2 Elements of Urban Morphology

- Land use

- Building structures

- Parcel division, foundation of rhythms and configurations, island

- Urban framework/hierarchical road networks

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[2] Methodological course by Professor Kettaf, 2013

FIGURE 4.1
These buildings in
central Prague show the
evidence of their original
long narrow plots
fronting onto a public
space

Figure 4. These buildings

Form: topology (relations, insertion into the site), segmentation, geometry, dimensions (scale and template), and surface arrangements are important in the morphological reading of urban space.

The quality of urban life rests on concrete, everyday elements: street layout, aesthetics, natural features, and landscaping materials, which together influence safety, accessibility, and user-friendliness. Well-designed public spaces become places for socializing, exchanging ideas, celebrating, or protesting, while also supporting economic activity. According to Jasim Essa Al-Saaidy (2022), their transformation depends on both daily uses and targeted interventions, highlighting the importance of urban materiality. Shaping cities therefore requires reconciling material investments, collective dynamics, and the preservation of landscape heritage, particularly within the context of ongoing and complex urban reform.

3.2 Perceptual dimension: senses and visual perception

3.2.1 Sensory perception: visual, auditory, tactile, olfactory.

   - Visual perception: Strong elements that allow an individual to orient themselves and to structure

its route. For example, monuments are landmarks used to locate the neighborhood of

residence or place of work.

   Several levels of perception:

   - Compared to the city

   - In relation to arrivals at an urban space

   - In relation to its own space

These are the joints in the urban structure:

   - Territoriality (use of space)

- Of "imaginability": landmarks, routes, limits, districts and nodes (mind map).

These elements, proposed by K. Lynch (1961), define space and allow for construction of a mind map; which are based on the reading of the identity, structure and meaning of an urban space.
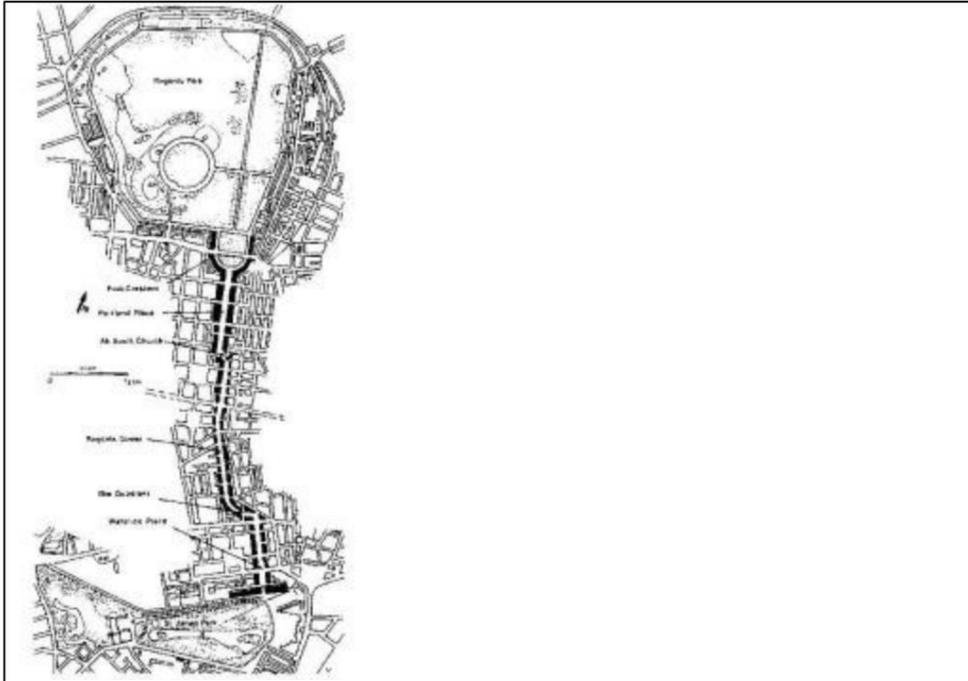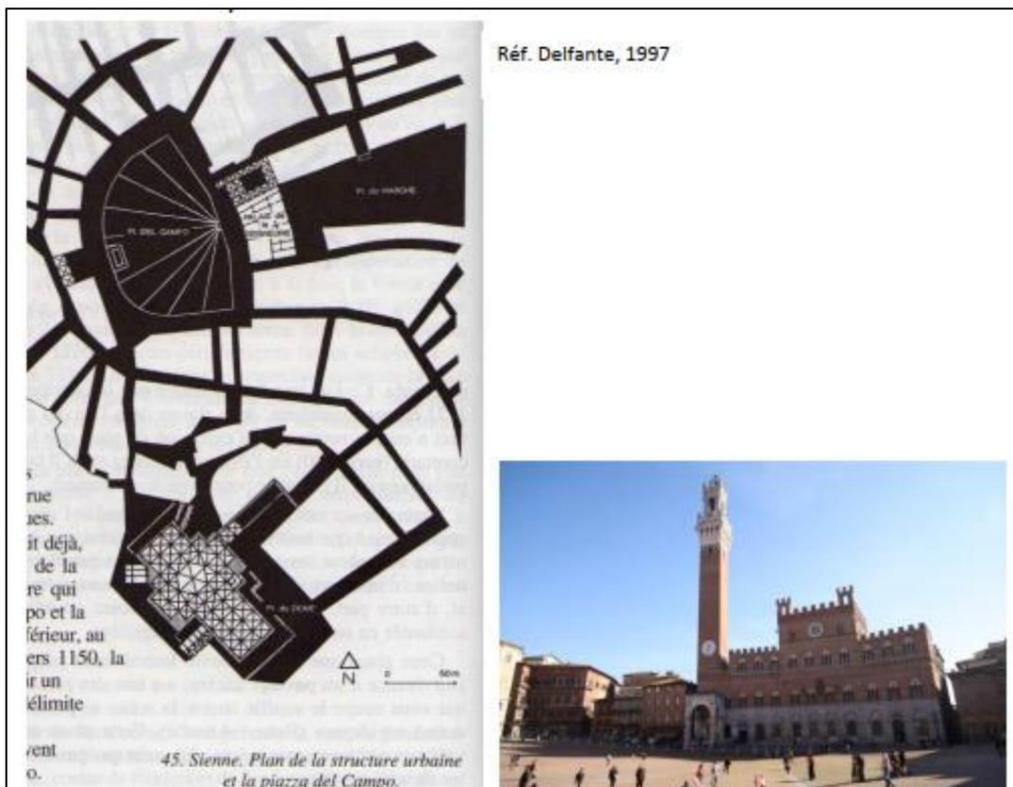

Figure 5. Perceptual path

Figure 6. Piazza d'El Campo, Siena, Italy

Figure 7. Identity plan (urban structure plan)

Urban public spaces embody an essential framework for social life, carrying values and meanings crucial for healthy urban development. Yet, rapid urbanization, influenced by commercial logic and functional specialization, limits the ability of designers to respond to cultural shifts and changing uses.

Faced with this challenge, a new, more flexible, integrated, and sensitive approach is needed— one that considers not only the form, but also how users perceive, imagine, and make sense of these spaces. While the mental image of public space enriches our understanding of the urban experience, it risks being reduced to a purely visual dimension, to the detriment of the meaning constructed through use, appropriation, and daily life.

As BagNolo & Manca (2019) and Ho & Tung Au (2020) point out, urban planners must therefore refocus their attention on the dynamic interaction between the individual and their environment, going beyond aesthetic representation to embrace the complexity of practices and lived experiences.

3.3 Visual Dimension: Aesthetics and Landscape

3.3.1 Aesthetic considerations

Jack Nasar (in: Carmona et al., 2003) identifies five attributes of a desirable environment:

- the presence of nature

- Maintenance/ civility

- the defined opening/space

- the historical meaning and content

- order: in terms of organization, coherence, readability, clarity.

2- Aesthetic models and orders (some elements of composition)

Smith identifies four components:

- Rhyme and the pattern

- The rhythm

- Balance

- Harmonious relationships

Toulouse   Marseille

Paris   Constantine

Figure 8. Balance and proportion

3.3.2 Positive space and negative space

Urban spaces can be considered in terms of "positive" space or "negative" space
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 - Positive space (hard space):

Relatively enclosed. It can be measured and has clearly defined boundaries. Its shape is
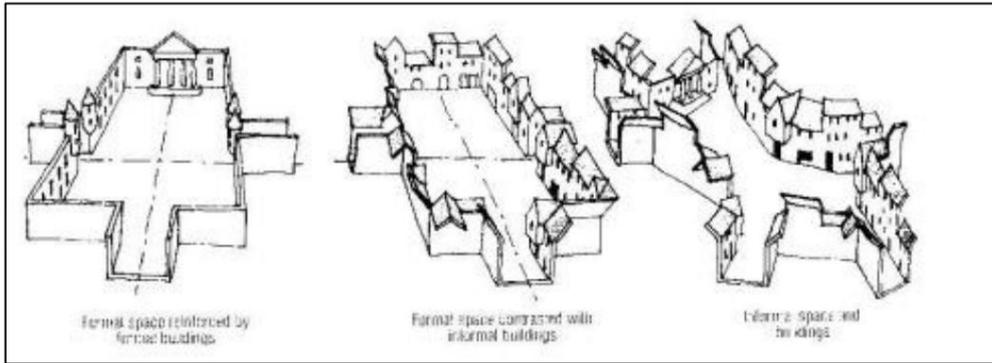as important as that of the buildings surrounding it (enclosure).

Figure 9. Positive and negative space

Figure 10. The Panier district in Marseille (positive space)

Place and street are interpreted in relation to the configuration of the walls that constitute them, to the nature and

the layout of their land and the contours of the sky lines that crown them: For the square, there is the form (a box), the monument and the plant element (according to cultures and climates)...

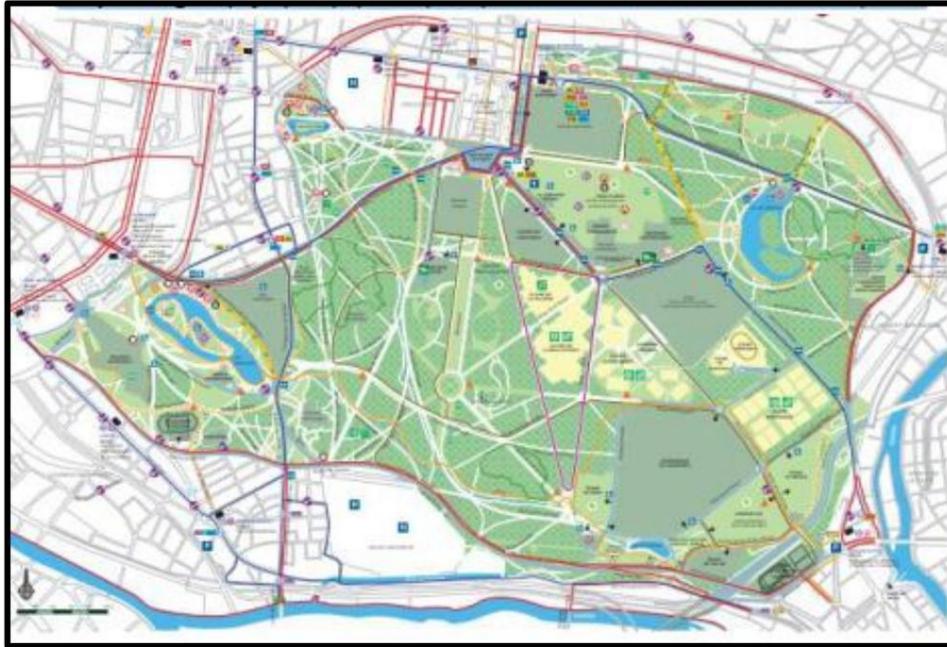**Negative space (soft space):** no perception of boundaries or shape: Parks, woods…

Figure 11. Negative space (https://bonplangratos.fr/plan-gratuit-bois-vincennes)

3.3.3 Architecture, floorscape design, street art and plant elements: examples

Ground drawing in Alikante and buildings painted by an artist (www.monnuage.fr=

Architecture, floor design, and vegetation

The visual dimension of urban public space encompasses the aesthetic aspects of the space itself, taking into account the landscape and the site's visual identity. Visual considerations are paramount in the planning and design of urban public spaces, as their qualities engage residents and mobilize the community as a whole (BAGNOLO & MANCA, 2019). Beauty and harmony have been subjects of research for centuries.

The aesthetic quality of urban space, based on harmony, coherence, beauty, and suitability to the context, is no longer solely a matter of artistic judgment, but constitutes a

A central challenge of contemporary urban planning, architecture and design must now integrate not only forms, materials, and colors, but also the site, its users, and their perceptions. Public art and natural elements, particularly green spaces and water features, are essential components of the urban landscape, as they enrich the perceived environment, improve quality of life, and strengthen attachment to place. According to environmental psychology, a high-quality public space promotes well-being, social interaction, and community identity, thus creating a lasting emotional bond between residents and their neighborhood.

Figure 12. Madrid wall painting

3.4 Social dimension: space and society

3.4.1 Space and society

The choice of being in a given context depends in part on the characteristics and situation of each individual: their ego, personality, goals, values, resources, experiences, standard of living, etc.

Maslow (1968, in: Carmona et al., 2003) identifies five hierarchical levels of basic human needs:

- Physiological needs: warmth and comfort

- Safety and security needs

- Affiliation needs: belonging to a community, for example

- Needs for self-actualization: personal fulfillment.

3.4.2 Public space and public life

Public life can be categorized into two related types:

The "formal" and the "informal." Understanding informal practices and their relationship to

public space provides additional information about its nature (Carmona, 2003).

Figure 13. Formal and informal space in Algeria

-Accessibility

One of the important elements of public space is accessibility.

Carr et al. (in: Carmona et al., 2003) identify three forms:

- Visual accessibility

- Symbolic accessibility

- Physical accessibility

Examples of spaces that offer three types of accessibility: visual, physical, and symbolic.

Figure 14. St. Peter's Square, Vatican City

Figure 15. The Haram of Mecca

The interaction between space and society, particularly through urban public space and spatial planning, constitutes an interdisciplinary field at the intersection of geography, sociology, and urbanism. It studies how these spaces, open and accessible to all, are constituted, managed, and used. The term "urban" serves both as an adjective (describing housing, employment, crime, etc.) and as a prefix in expressions such as "urban life" or "urban structure." The increasingly numerous and complex functions of public space involve intentional use aimed at guiding, promoting, or responding to specific social behaviors, particularly within the framework of local policies and contemporary development plans.

3.5 Functional dimension: space and activities

3.5.1 Space – activities

Carr et al. (in: Carmona et al., 2003) cite five essential functions:

1- Comfort

2- Relaxation

3- Passive engagement: observing an animation, a fountain, etc.

4- Active engagement: sociability, social interactions caused by in-person activities.

5- Discovery: festivals, events, etc.

Figure 16. Carteleon City & Space City

3.5.2 Social use of public space

For example, the place:

Wythe (in: Carmona et al., 2003) notes that the most frequented place has the following characteristics:

- A good location

- The streets must be an integral part of the square space

- The square must be at the same level as the streets

- Spatial features must be integrated or explicit, e.g. seating (steps, low wall, benches)

3.5.3 Movement

Movement in public space is central to the urban experience. It is an important factor

of production of life and activity.

For pedestrians, the connection between spaces is important. An enriched public space is

generally integrated into the movement's network system.

Figure 17. Pedestrian street in Toulouse

3.5.4 Configuration and boundaries of public spaces

Understanding the movement and route system is essential, therefore streets and places are connected (Hillier, 1996).

The use of public space is also considered in terms of center and boundaries. Alexander et al. (1987) state that a public space "without a 'center' can remain empty."

Analyzing the design of space and its boundaries is therefore essential. Alexander et al. argue that the life of public space unfolds around its boundaries. If boundaries lack activity, the space may not feel alive. Some authors suggest that boundaries be considered as a layer, a support upon which people can contemplate the space.

The functional dimension of urban public spaces analyzes how their design promotes or hinders social, economic, and cultural activities such as commerce, events, and everyday interactions, taking into account concrete elements such as shade, seating, and accessibility. A high-quality public space is dynamic, multifunctional, and conducive to public use and social interaction.

Today, cities are seeking to revitalize these spaces, threatened by their gradual disappearance and a loss of social connection (friendship, trust, tolerance). In a context where urban life is increasingly perceived as a commodity, public spaces are often transformed into attractive "destinations," shaped by territorial marketing and consumerism. This evolution raises critical issues: increasing privatization, the commodification of public life, and the erosion of the urban tradition of squares as places for democratic encounter.

Understanding the historical use of public spaces—how their functions and perceptions have evolved under the influence of socio-political forces—is essential, especially in rapidly developing cities, where these spaces are increasingly commercialized and removed from the public domain. common.

3.6 Time dimension: short-term and long-term perspectives

3.6.1 Short time

Understanding the use of public space requires an understanding of the effects of day and night cycles, seasons, activity cycles, changes and continuities over time.

- Elements that highlight the changing seasons add temporal legibility to urban spaces.

- Also, temporalities combined with the sensory experience create the atmospheres of public space (Bassand And

al., 2001)

- The variations over time to which public spaces are subjected:

- temporalities that nourish territorial practices and the organization of social, leisure and religious life, both in daily life and according to "seasonal temporalities",

- or even ritual festivals specific to the Muslim calendar (such as Ramadan), which interact with the "territories of the urban" (Depaule, 1984) and give them meaning.

Figure 18. Esplanade Charles De Gaulle in Montpellier: Getes and festivals

3.6.2 The long term: History

History provides three main categories of information:

- the origins of space, geographical justification, of its form and of apparent distortions between it and current forms.

- The stages that marked the formation of the space and the functional and/or usage changes.

- The analysis of plans and maps makes it possible to date the opening of avenues, streets, and squares through which traffic flows and which exert a structuring influence on the surrounding urban fabric. (Bertrand, Listowski, 1984)

 Examples: Piazza Dante, Catania: evolution

Example : Esplanade Charles-De-Gaulle, Montpellier: festivals and celebrations and the effects of the seasons
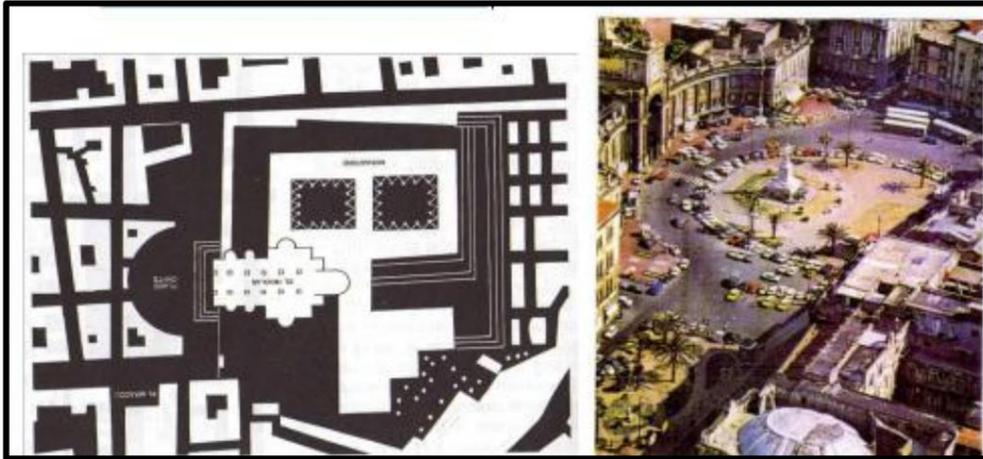
Figure 19. Place in the 17th century and in 1950 (In order)

The temporality of urban public spaces, often overlooked in design, unfolds on two scales: short-term (daily rhythms of use, alternation or competition of activities) and long-term (seasonality, social changes, sustainability). However, many designs respond only to immediate needs, without flexibility or adaptation to fluctuations in use, leading to the disaffection and obsolescence of the space. Furthermore, design tends to dissociate users from the place, focusing on external attractions rather than the organic appropriation of the space. A temporally sensitive approach that integrates creativity, adaptability, and the link between place and practices is therefore essential to ensure the sustainability and vitality of public spaces.

Conclusion

It is through public spaces that city dwellers become aware of their coexistence and their place in the world. This underscores the importance of public spaces. The urban and architectural form of public spaces gives meaning to the urban environment, by virtue of the fact that they involve mobility, public uses, sociability, and identity. (Levy, 1997).

4. THE STREET: URBAN PUBLIC SPACES IN CONTINUOUS FABRIC (by R. Allain, 2004)

4.1 The street: definition

The street is a public thoroughfare bordered on both sides by buildings (or fences), a public space that allows movement within the city. Rejected by the Modern Movement, this form is still threatened by the demands of the automobile. In Europe, it was revived in the 1980s and became an important element in urban planning. The cross-section of urban streets becomes a tool for sharing space among users: cars, pedestrians, bicycles, public transport, etc.

Urban roads do not only serve the automobile, but they must be thought of as a landscape, as a space of (social) urbanity and therefore a space to be shared.

4.2 The street: a spatial system

The street's enduring presence stems from its cumulative advantages, which form a cohesive system. Its various dimensions overlap and interact. Consequently, its constituent elements (land parcels, buildings, profiles, roadway, sidewalks, facades, etc.) influence one another.

A change in one function (in one dimension) has repercussions on all other elements. This complex reality can only be understood holistically. It is a system.
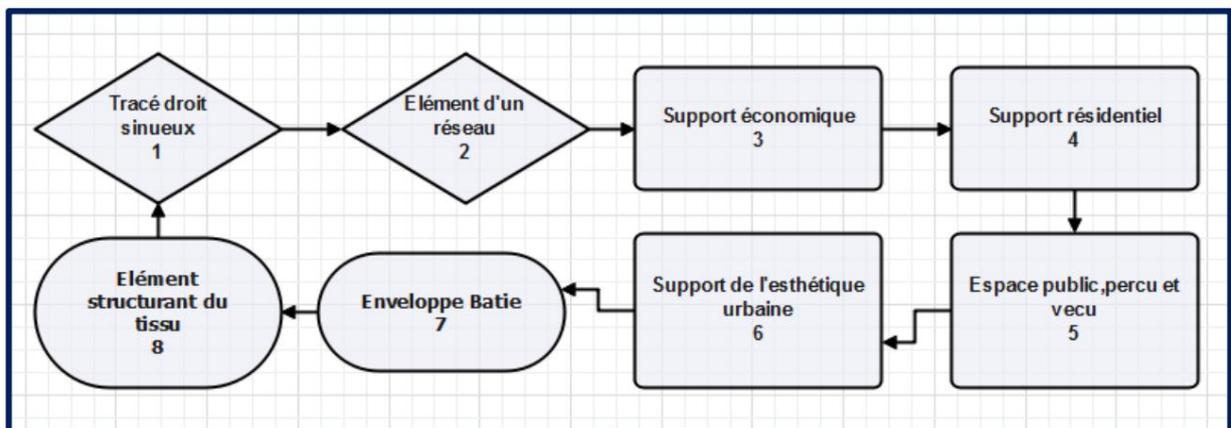

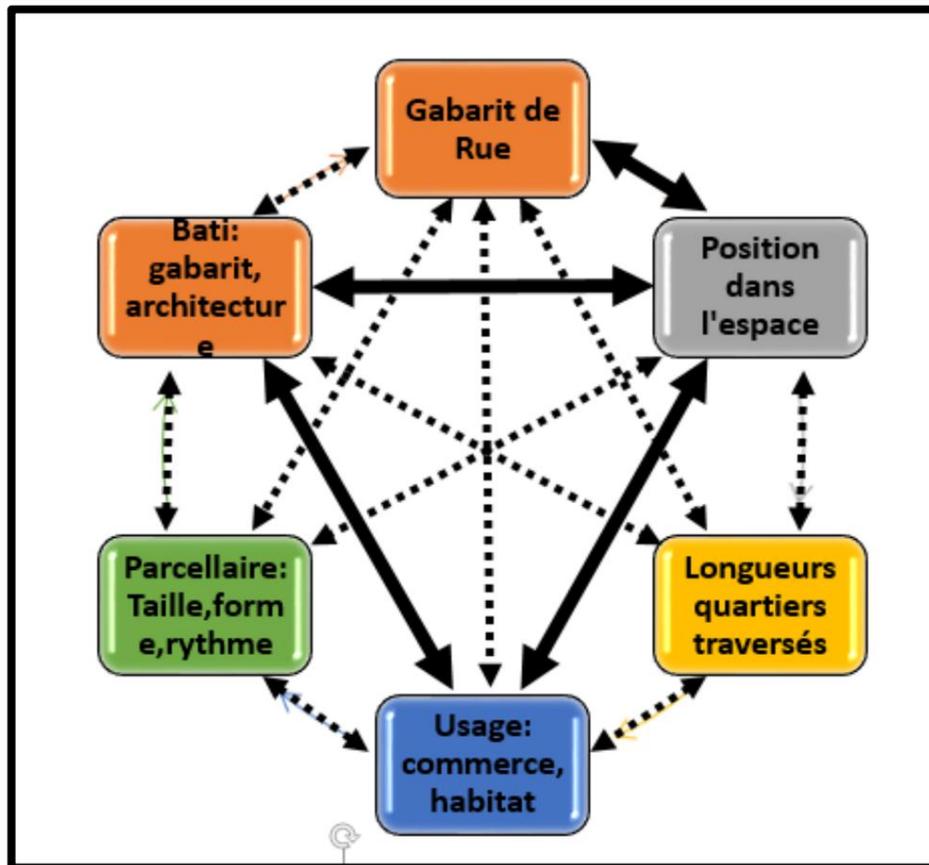**Figure 20. The functions of the Street system**

Figure 21. The street system

4.3 Street characteristics

-<u>The position and the route</u> :

A street's position within the network and its status (primary, secondary, tertiary) influence its width, its suitability for traffic flow, its occupancy patterns, its usage, and the pleasantness of walking along it. The street's alignment in relation to the slope (topology) is a determining factor in its shape.

<u>Cross-sectional profile</u> :

It depends on its width and its ratio to the height of the building. The dimensions are also determined by alignment, setbacks, and architectural rules.

<u>The width :</u>

Shaped by use. The legally established width standards are decisive.

<u>Alignment:</u>

The boundary separating the public road from private properties. This boundary is defined by the needs of traffic flow, hygiene, and aesthetics. It can be modified to widen or regularize the street, or to allow for taller buildings. Adverse effects include deterioration of buildings affected by alignment restrictions, setbacks creating blank gable ends, and neglected sections of the road with unclear land ownership and questionable aesthetic appeal.

The surrounding structure :

The double urban façade. A single façade, particularly facing a park or a waterfront. The nature of the building façade depends on the floor area ratio (FAR), the setback, the alignment, and aesthetic and regulatory considerations.

The prospect :

The ratio between the height of the facades and the width of the street is a factor in the street's coherence. This setback can vary depending on the location within the city and applicable regulations. In Paris, building heights do not exceed seven stories (R+7).

The road-sidewalk relationship :

The road-to-sidewalk ratio is generally 2/5. Initially favoring pedestrians, it was later taken over by the tramway. The reduction of sidewalks is exacerbated by the rise of automobiles. Today, a change is underway to force cars to slow down and to reclaim public space.
In the avenues, the use of service roads makes it possible to separate local traffic and through traffic.

Longitudinal profile and elevation :

The longitudinal profile, represented by its elevation, depends on the length, alignment, successive heights, ridge line, and alternating building boundaries. The rhythm of the facades is determined by the plot divisions.

Public-private transitions :

They enrich the typology of urban facades. The arcades create an interpenetration between street and building. The railings and walls offer glimpses of private or semi-private gardens or trees.
Porches, steps, and walkways in front of the entrance doors of houses (Victorian houses in London, brownstones in New York). The impoverishment of the decoration of modern buildings means that walking in the modern street has lost its appeal.

The relationship between its two banks :

The two facing urban facades, in terms of height, can be almost symmetrical or have very different elevations and rooflines (ridge lines). Theoretically, the rules mentioned above encourage homogeneity and balance. Applying different rules can lead to the opposite effect, resulting in incoherence and an imbalance in scale. The regulated height of the south bank is sometimes much lower than that of the north bank to avoid shadows. The question of architectural harmony between the two banks is also rarely addressed in planning, as they are often treated independently of each other.

The crossroads :

Corner buildings are often treated with a more monumental style. Their forms are diverse: rounded corners, turrets, or chamfered edges, as in Barcelona. The layout of the buildings is regulated for reasons of urban design and functionality. Unfortunately, this style has been diminished by the proliferation of roundabouts, which are very anti-urban.

The plant :

It also contributes to the street's profile and shape. Rows of trees lend homogenization to otherwise haphazard urban facades, creating a sense of order and providing a primary aesthetic element. They reinforce the order of boulevards and avenues. These are often linear gardens (where buildings become secondary, e.g., the Avenue des Champs-Élysées).

Street furniture :

An ephemeral and ever-changing, yet essential element of the streetscape, it encompasses all the functional and/or decorative public and private objects placed in public spaces: bollards, shop signs, tree grates, columns, kiosks, lampposts, public benches… but also subway entrances, mailboxes, telephone booths, bus shelters, advertising panels, and works of art (statues). The excessive and pervasive "decoration" of numerous electrical and telephone cables remains a characteristic of cities in the developing world. In the streets, we must limit the proliferation of signage and its integration into the landscape.
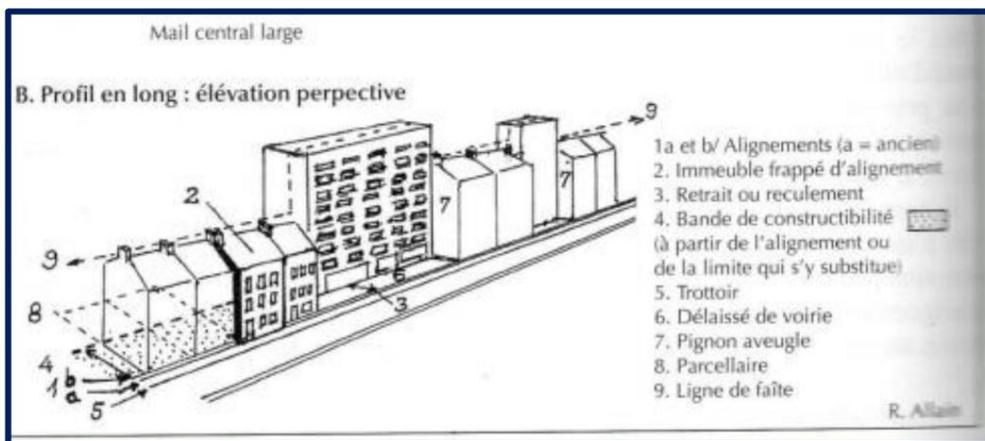
Figure 22. Street Profile

4.4 Types of streets

Streets are distinguished by their length, size, and activity. A street's characteristics vary according to its hierarchical position, the size of the city, local culture, and urban context. This is why any typology encounters the difficulty of establishing absolute dimensions. For example, in Old Cairo (streets are 6 meters wide), Barcelona (streets are 20 meters wide), and Haussmannian Paris (streets are 18 to 24 meters wide).

A basic typology is needed (Mangin and Panerai (1999): 4 to 6 categories). Including the peripheries, we can distinguish 9 main types.

Table 2. Types and characteristics of streets

Types of streets: Ordinary alleyways and streets make up the		The main streets are 12 to
Features and dimensions	bulk of the city's network. The narrow lanes (alleys or passages) of 1 to 6 meters are often the legacy of a "pedestrian city". Ordinary streets measuring 6 to 8 meters contribute to local access. From 9 to 12 meters, they can be considered wide. The height of the facades rarely exceeds 4 to 5 levels due to technical requirements for lighting and ventilation. ᴬⁿᵈ to	25 meters wide with parking on both sides within the city walls. They widen in the peri-urban area (40-meter boulevard). Their degraded versions have proliferated on the periphery (wider, disconnection between road and building).

4.5 Street variations: Several variations

Bridge streets : featuring buildings and shops (common in 18th and 19th century cities, e.g. Ponte Vecchio in Florence, the Rialto in Venice, Pultney Bridge in Bath…)

Urban staircases : these replace alleyways on steep slopes (rue de Gênes, rue d'Oran, rue d'Alger, rue Montmartre, Paris). These streets are accompanied or replaced by escalators, funiculars, etc.

The covered passage : also called a gallery or arcade, it is an alley covered by a glass roof, lined with two rows of shops, connecting two lively streets.

Skyways : elevated walkways connecting adjacent buildings (department stores in the 19th century). A system very common in downtown North American cities (1960s).

Underground streets —pedestrian and commercial galleries in tunnels—appear in cities with a population of one million or more when they are equipped with a subway system. In addition to technical and land-related reasons (high land prices), there are specific contextual factors, particularly climatic ones (frigid winters, very hot summers).
For example, in Montreal, the "off-season city" system (designed by V. Ponte) extends over 30 kilometers, connecting two train stations and ten subway stations.
This system can be found in American cities, Tokyo, and in Paris with Les Halles (around the metro-RER station).

Canal streets : the roadway is sometimes replaced by a waterway, with or without quays.
Venice, Bruges, Saint Petersburg, Amsterdam. Very narrow (Venice canal) or very wide (Grand Canal).

The quayside street : bordering a significant waterfront, it often only has one bank with buildings.
Paris, its development took place mainly under the Second Empire (expansion and monumental treatment), gradually evolving into planted promenades in the cities of the South (South of the France) and diversified from the late 19th century onwards in seaside towns (promenade des

English in Nice, the Croisette in Cannes). Port activities meant that the quays separated the city from its river and its sea. With the growth of the automobile, the quays were often transformed into highways. Those of Bordeaux, Barcelona, Genoa, and so many other cities have recently regained their urban status.

The boulevard : (initially) often tangential to the city center. Its considerable width (24 to 50 meters) and its layout resulted from the placement of the old ramparts. These were often planted with trees and served as promenades. Their destruction in the 17th and 19th centuries confirmed its transformation into a major public space. Orderly buildings, shops, cafes, and theaters gradually took root, resulting in a very open U-shaped profile with service roads (parallel lanes to the main roadway, used for parking, cyclists, and pedestrians). The Parisian boulevard model fascinated and spread throughout the world. The boulevard became a ring road, but its functional character as a highway stripped it of any urban feel.

The avenue : it is initially outside the city. It is a tree-lined path leading to
a castle. It is only gradually that it is integrated into the urban fabric. Rectilinear, monumental, often very wide, it frequently connects monuments to form grand perspectives and converging lines. They are further structured by vegetation (several rows of trees, e.g., the trident).

Avenue types : the boulevard (modeled after the Corso in Florence (Marie de Medici)) takes various forms depending on the city: Cours Mirabeau (Aix-en-Provence), Allée Paul-Riquet in Béziers. The mall (The Mall in London), esplanades, the Spanish Rambla… The use of the terms boulevard and avenue became more common after the 19th century. They now serve only to distinguish wider urban thoroughfares.

The degenerate forms of the street : The strip, the parway, the ring road, the bypass are essentially linked to the function of automobile traffic, therefore often devoid of built facades.

Variant: Alleys and streets	Urban staircases, covered	passage Algiers,	Boulevards	Avenue
Example: Alleyway in a city center History (the medina of Constantine)	Oran, Rue Passage Clauzel d'Arzew and Rue Montmartre Constantine (photo)...	(connects Rue de Gênes, Rue Pélissier), Paris passage, (photo)...	of Strasbourg (photo) Maata, Stalingrad, Seguin Oran…	Avenue Loubet, Oran, Cours Mirabeau Aix-en-Provence, Rambla Barcelona, Madrid (photo),
		Boulevards Maata, Stalingrad, Seguin Oran (photo) … Avenue Loubet, Oran (photo), Cours Mirabeau, Aix-en-Provence, Rambla, Barcelona…		

Table 3. Street variants: Presented by R. Allain (2004) and illustrated by Author (2025)

Bridge-street variant.	Underground street	Amsterdam	Quayside	Skyways
Examples: Ponte Vecchio in Florence, Rialto, Pulteney Venice, bridge (photo)... in Bath	in Montreal, Paris (Les Halles around the metro-RER station), Istanbul (photo),...	**canal street .** Venice, very narrow street: Rii or very wide: Grand Canal.	**street ,** Quays of the Seine, of Lyon, of Bordeaux (photo)...	A system widely used in the downtown areas of North American cities (1960)

4.6 Current street design and layout

The roadway is not the street. Thinking of the street as a public space requires reasoned reflection on the relationship between built volumes and open spaces. Everywhere, the street faces the challenge of reconciling urbanity with functional and economic efficiency. Contemporary urban planning is more concerned with the articulation of elements and how spaces are experienced. The primary challenge is the sharing of space through actions:

-minor (widening of sidewalks and elimination of parking spaces)

- radical (total pedestrianization) or partial (mixed streets, developments related to the tramway).

Shared pedestrianization (street or semi-pedestrianized areas) is the most preferred option.

Table 4 Type of pedestrian layout

Rues ou plateaux piétonniers *Pedestrian Malls, P. Precincts* Sol naturel ou dalles	Absence totale de véhicules, mobilier urbain omniprésent dans l'espace.
Semi-piétonniers Semi-Malls	Non matérialisé ou discrètement (pavage). Trottoirs élargis.
Plateaux partagés avec voies réservées (couloirs de bus, tramways). *Transitways.*	Matérialisées (trottoir bas, revêtement différent).
Piétonnisation temporaire.	Fermeture temporaire de la rue à la circulation Sans modification morphologique.
Systèmes mixtes : contrôle automatisé (voitures et véhicules de livraison).	Fermeture par plots rétractables Trottoirs élargis, calepinage de qualité.
Systèmes séparatifs (*skywalks*).	Galeries piétonnes surélévées et climatisées.

Cross-section profile : a tool for sharing urban roads. CERTU Guide (CERTU - Centre for Studies on Networks, Transport, Urban Planning and Public Works in France)

II. URBAN PROJECT

II.1 UNDERSTANDING THE URBAN PROJECT

Introduction

The concept of an urban project extends far beyond a simple spatial dimension. According to Ariella Masboungi, it is a play between strategy and design, involving an evolving approach and raising governance issues. It is both a school of thought and a culture of urban action (Avitabile), which explains its sometimes excessive use. Ingallina (2013) emphasizes the semantic ambiguity linked to the dual meaning of "project" (intentional process) and "

"Urban" (a multidimensional field): architects often see it as a large-scale design exercise, while social scientists integrate social, political, and economic dimensions. This plurality of interpretations fuels ongoing debates about its scales of intervention, its methods, and the nature of its content.

This represents a shift from a rigid, definitive plan to a forward-looking, evolving project, responding to the growing uncertainties of the current urban context. Urban projects are now conceived as adaptable strategies, integrating the dimensions of time, participation, risks, and opportunities. This strategic approach allows for long-term flexibility, making temporality a central element of the project itself, not only as a framework but also as a tool for ensuring coherence between vision and implementation (Avitabile, 2005; Masboungi, 2008; Pinson, 2009).

Patricia Ingallina writes in her book The Urban Project (2013, p. 20) that:

" The *concept of an urban project has a global scope.* […] but is rather part of a broader economic, social, and cultural purpose, and involves a competition of skills; it can then be divided between a general economic, social, and cultural perspective and spatial choices:

The organization of the urban fabric, public spaces, and landscape within the existing city, as well as the construction and allocation of buildings, are all part of the urban project. The concept also encompasses a range of techniques (planning, construction, and environmental expertise) which only have meaning if they are supported by a comprehensive political legitimacy.

II.1.1 Definition:

The urban project is an intentional, forward-looking and evolving approach aimed at transforming urban space by integrating spatial, social, economic and political dimensions.

II.1.2 Project ÿ Plan

Plan: rigid, centralized, with a fixed horizon (e.g., land use plan).

Project: flexible, participatory, adaptable to uncertainties and changes (e.g., revisable PDAU).

II.1.3 A dual dimension:

Drawing : the form, the concrete layout (public spaces, buildings…).

Purpose : the strategy, the objectives (social cohesion, ecological transition, attractiveness…).

II.1.4 Temporality

The urban project is part of a long-term logic, with stages, readjustments and evaluations; duration becomes a lever of governance.

II.1.5 Governance & Participation

It is based on multi-stakeholder cooperation: local authorities, residents, developers, associations.
Participation is not only consultative, but an integral part of the project.

II.1. 6 Variable Scales

Can be applied at different levels: neighborhood, city, metropolis, territory (e.g., urban renewal project, metropolitan green network).

II.1. 7 Current Issues

-Ecological transition (climate resilience)

-Spatial and social justice (Equity)

-Reversibility of the modifications

II.2 THE SPATIAL DIMENSION OF THE URBAN PROJECT:

II.2.1 Operative Heart

The spatial dimension is the physical translation of the urban project: organization of buildings, public spaces, traffic, and uses.

II.2.2 Intervention Scales

Micro : island, square, street (e.g., pedestrian redevelopment)

Meso: district, (e.g., redevelopment of a brownfield site)

Macro : metropolis, green/blue network (e.g., ecological corridors)

II.2.3 Structuring of space

- Hierarchization of spaces (centralities, polarities)

-Connections (pedestrian walkways, cycle paths, transport)

-Urban morphology (density, mixed-use development, porosity, open/closed blocks)

II.2.4 Quality of spaces

-Accessibility and universality

-Conviviality, identity, and ownership by the inhabitants

-Landscape and ecological integration (vegetation, permeability)

II.2.5 Support for diversity

-Spatial design allows (or does not allow) functional (housing/work/commerce) and social (diversified housing, shared facilities) mix.

II.2.6 Resilience Instrument

-Spatial arrangements adapted to risks (floods, heat islands): floodable squares, green roofs, buffer spaces.

II.2.7 Limitations to avoid

-Reducing the urban project to a simple image or model

-Disconnect between spatial form and social/environmental issues.

Some examples of urban projects

1. At the metropolitan/regional level

1-Grand Paris Express (France): Automated metro project + recomposition of territories around stations (new centers, housing, activities).

Strong strategic and spatial dimension.

Figure 23. Photo of the Grand Paris Express (https://www.youtube.com/watch?v=rol84iNohC8)

2-Copenhagen: Finger Plan (updated)

-Urban organization in a "finger" pattern along railway lines, with green spaces between the fingers. An example of sustainable and structural long-term planning.

Figure 24. Copenhagen Finger Plan (https://www.axensio.fr/explorations/finger-plan/

2. At the city level

HafenCity (Hamburg, Germany)

-Port redevelopment with requirements for resilience (raising of the ground, green roofs) and functional diversity.

Pilot project in ecological transition.

Figure 25.Hamburg Havencity(https://www.gettyimages.fr/bot-wall?

3. At the local/operational level

1-Redevelopment of the banks of the Seine in Paris (right bank pedestrianized)

-Reappropriation of public space, priority to non-motorized uses.

Figure 26. Redevelopment of the banks of the Seine in Paris (https://www.google.com/search?q=-Remodeling of the banks of the Seine in Paris

2- Urban project for the transformation of a suburban neighborhood (Chilly-Mazarin, France): all the Process

- The context: a low-density suburban housing estate

Figure 27. Chilly-Mazarin, France (Kettaf Fadila Courtyard)

A successful urban project combines form (spatial) + purpose (strategy) + process (participation, temporality) ……… never one without the others.

III. THE THREE LEVELS OF READING (ESSENTIAL IN ANALYSIS)

Before composing, analyze according to the grid (Layout–Plot–Building):

Layout : road network (geometry, hierarchy, continuity/disruption)

Plot : subdivision of the land (size, shape, shared boundaries, access)

Building : location, dimensions, typology, materials

III.1 DESIGN TOOLS (TO BE INTEGRATED INTO YOUR PROJECTS)

Tool	Function	Example of use
Template **regulatory + contextual**	Control height, retraction, implantation	Respect the *PLU and the* building envelope visual of the neighborhood (e.g., not (exceed by 1 floor)
Typical street section	Road width, sidewalks, parking, tree, furniture , defines the atmosphere	Designing *the space between* buildings
Figure / Background	Managing built form (figure) vs. space (background): Avoiding breaks brutal	Enclosed space = background (empty) framed by figure (structure), to overturn to create a courtyard central

III.2 COMMON MISTAKES (TO BE ABSOLUTELY AVOIDED)

ÿ Designing the building in isolation, without its island ÿ island "pierced" without internal logic.

ÿ Neglecting the ground floor: blank walls = death of public space.

ÿ Apply a random style unrelated to the site (e.g., bow windows on an industrial wasteland).

ÿ Confusing density and compactness: a project can be dense and still breathe (courtyards, shared gardens, setbacks).

ÿ Forget the ground: paving, levels, drainage, vegetation ÿ make up 50% of the urban experience.

III.3 SOME ESSENTIAL REFERENCES

Author	Work	Contribution
Camillo Sitte	*The Art of Building cities (1889)*	Place as space asymmetrical, lived experience, non-geometric
Kevin Lynch	*The Image of the City (1960)*	Paths, junctions, districts, landmarks, boundaries ÿ readability mental
Rob Krier	*Urban spaces (1975)*	Typology of squares/streets/blocks ÿ formal grammar
Aldo Rossi	*The Architecture of the city (1966)*	"Urban facts" (monuments) as fixed points in the time
Jan Gehl	*Life Between Buildings*	Observe actual usage ÿ designing with the human body

KEY POINTS TO REMEMBER (PROJECT CHECKLIST)

Before submitting an urban project, make sure you have considered the following:

- ÿ The street section (not just the site plan)
- ÿ The ground floor (use, opening, materials)
- ÿ The transition between scales (building ÿ block ÿ neighborhood)
- ÿ Porosity (access, crossings, views)
- ÿ Empty space (square, courtyard, garden) as an active compositional element

-In architecture, we design a building.

-In urban composition, we draw the relationship.

-Your project is not in the city: it becomes the city.

Always overlay an old aerial photo with a current one, then analyze the morphological evolution and compose in critical continuity…