Marika Fior

BIO
• I was born in the Veneto Region in 1983
• I am an urban planner. I am a researcher at Politecnico di Milano – Dipartment of Architecture and Urban Studies (DAStU)

SCHOOL
• PhD in Government and Territorial Design (2013 – Politecnico di Milano)
• Master Degree in Urban Planning and Policy Design (2008 – Politecnico di Milano)
• Bachelor's Degree in Urban and Spatial Planning (2006 – IUAV)

INSTITUTION
• Member of the National Institute of Urban Planning (INU)
• Member of the ANCSA Board (National Association for Historical-Artistic Centres)
• Member of the Commission of Landscape of the Lombardy Region

INTERESTS
• My interests are in urban planning; the preservation and enhancement of the historic city; the landscape design.

COURSE
• In this semester, my course will cover the Urban Design.
Main Bibliography for the Course

• Rafael Cuesta, Christine Sarris, Paola Signoretta, 1999, Urban Design - Method and Techniques (Urban Design), Architectural Press, Oxford
• Marco Facchinetti, 2011, Master Planning. The Adaptive City, Pitagora Editrice, Bologna
• Ali Madanipour, 1999, “Why are the design and development of public spaces significant for cities?” in Environmental Planning B: Planning and Design, vol. 26, pages 879-891
• Danilo Palazzo, 2008, Urban Design. Un processo per la partecipazione urbana, Mondadori, Milano
• Llewellyn-Davies Yeang, 2000, Urban Design Compendium
WHAT IS URBAN DESIGN?

LECTURE 1
Origins – From Civic Center to Public Places

• urban design

• 50s, civic design, town planning the grand design of civic centers or public buildings rather than the wider urban environment. Civic design focused on the siting and design of major civic buildings – city halls, opera houses and museum – and their relationship to open space.

• Harvard University in 1956 Sert and the first education programmes in Urban Design.

• “urban design” replace the more traditional and narrower term “civic design”.

• Evolving from an initial, predominantly aesthetic concern, urban design concern to make, or re-make, the public places that people can use and enjoy.
Modern Moviment Failure

- Modernist ideas satisfied a need for mass building but did not achieve the societal goals expected.

- Created new problems: the growth in car use had an unpredicted impact on urban development and urban form.

- There were 3 points to the criticism of the way urban design was carried out under the aegis of the Modernists. They were:
  1. that the models of people, human behavior and the way people experience the environment used by designers were simplistic (worker, inhabitants, etc);
  2. that the person–environment relationship was poorly understood and, as a consequence,
  3. the paradigms and theory on which many large-scale urban development projects were based were inadequate for their purpose.

- Urban design, as we know it today, has developed in response to the limitations of the philosophies and design paradigms, rationalist and empiricist, of the Modern Movement in architecture and city planning.
DEFINITIONS
Some Definition of Urban Design: Functional and Aesthetic Dimensions

- **Discipline ambiguous**: from the design of regional infrastructure to the particulars of street furniture.

- **Kevin Lynch** distinguish between:
  - “urban design”, which he considered to be **project-based** and limited to the primarily aesthetic arrangement of buildings and spaces;
  - and “city design”, by which he meant a larger, participatory, interdisciplinary and interconnected framework that dealt with **all the physical parts of the built environment to which the public had access**.

- Lynch’s larger definition had been assumed into “urban design” (physical design, **public policy and political action**). As a larger framework of spatial and functional design for whole communities, similar to “**townscape**” (Gordon Cullen), with **little thought for public participation**.
• Public realm of human settlements: “the art of making places for people”.

• Urban design therefore “involves the design of buildings, groups of buildings, spaces and landscapes in villages, towns and cities, and the establishment of frameworks and processes which facilitate successful development”.

• Urban design draws together the many strands of place-making – environmental responsibility, social equity and economic viability, for example – into the creation of places of beauty and distinct identity.

• In summary, urban design is about creating a vision for an area and then deploying the skills and resources to realise that vision.
Urban Design: No Definition but a Common Approach

- 2 problematic words:
  - **urban** describes the characteristics of towns or cities;
  - while **design** refers to such activities as sketching, planning, arranging, colouring and pattern-making.

- **Does it operate at level of streets, parks, squares and buildings, or at that of the structure of urban districts and town?**
- **Is it only concerned with the physical form of land and built structures, or does it include mental images and perceptions of the city?**
- **Is it just an expert’s exercise or does it involve the general public and decision makers?**

- Ali Madanipour (1996) identified 7 areas of ambiguity: Territorial/Local; Environment/Space; Space/Society; Product/Process; Architects/Planners; Public/Private; Science/Art

- From an international overview of the term, there is no an unique definition of urban design, but the objective is similar whatever the approach is: to ensure the wellbeing of the population in an economic, ecological and socially, sustainable environment.
Urban Design Today

- If we all agree that urban Design must **making place for people** > **Making better places than would otherwise be produced**.

- **4 themes are emphasized in this definition:**
  1. Urban design is for **people**
  2. The significance of **“place”**
  3. Urban design operates in the **“real word”** with its field of opportunity constrained by economic (market) and political (regulatory) forces;
  4. The importance of design as a **process**.

- **Definitely:**
  - The **tool used by a practitioner** may be principally a pencil or more likely nowadays some design software, a calculator or a word-processing package.
  - The **scale** of the work may encompass the **city as a whole, a neighborhood** or a **part of a street**.
  - The **client** might be a **government organization**, a **landowner** or a local **community**.
  - The **professional education** involved may be based on architecture, engineering, landscape design or town planning.
  - Urban design as a **process of problem solving**, in which, as any design process, **there are no “right” or “wrong” answers**, only “better” and “worse” answers, the quality of which may only be known in time. It is, thus, necessary to have a continually questioning and inquisitive approach to urban design rather than a dogmatic view.
GOALS
The Objectives of Urban Design: Efficiency and Responsibility

• **Generic objectives:** built environment should be efficient.

• One of the objectives of urban design is indeed **to ensure fiscal responsibility.**

• It should be designed to **encourage economic growth.**

• It should **provide a sense of historic continuity** to increase people’s self-images.

• **It should help sustain the moral and social order** of a society.

• The basic **urban design questions** are always **“What makes a good city?” “Who should decide?” “Once decisions are made, who should be responsible for implementing them?”**
Key Aspect of Urban Design

- **Place for People** – safe, comfortable, varied and attractive.

- **Enrich the Existing** – enrich the qualities of existing urban places.

- **Make Connections** – Places need to be easy to get to and be integrated physically and visually with their surrounding.

- **Work with the Landscape** – Creating a balance between the natural and man made environment.

- **Mix Uses and Forms** – Stimulating, enjoyable and convenient places meet a variety of demands from the widest possible range of users, amenities and social groups.

- **Manage the Investment** – For projects to be developed and well cared for they must be economically viable well-managed and maintained. This means understanding the market.

- **Design for Change** – New development needs to be flexible enough to respond to future changes.
CULTURAL COMPARISON
• Until about the mid-1960s, architect-planners were the professional mostly in charge of urban programmes.

• architects specializing in designing buildings
• planners in charge of policy and the control of development.
• Traffic engineers ensuring that traffic moved smoothly, safety and quickly.

• The impact of suburban development led to think about the public realm: the streets, the space in-between.

• The Urban Design Group was born in 1978 as a forum for people interested in improving the design of quality of places (collaboration between disciplines).

• It is only recently in the UK that urban design has been recognized as an important area of practice by the existing built environment professions.
• **Urban design** is understood as a necessary discipline offered by most architecture and planning firms.

• **Important to the future redevelopment of underutilized single-use districts**, (shopping malls, redundant military installations and industrial sites).

• **Innovative policies and guidelines are implemented as Form-Based Codes** (FBC) or place-based planning, which prioritizes sense of place over land use.

• FBCs **control the appearance of streetscapes and public spaces in concert with building types**.

• Rather than regulating places by single land use and related measurements, an FBC **analyses and plans for particular street types** (Main Street, neighborhood street, rural road), **public spaces** (green, square, plaza), **and civic and private buildings**, taking as a basis their character, **context and place**. (mixed use, walkable places).
Form-Based Code in USA
• The English expression “urban design” mean the physical form of a city. It is therefore associated with a conservative pre-modernist approach to the city.

• The word *urbanisme* is more frequently used, relates to both urban form and function (but the term can also be translated as *planning*).

• The expression *projet urbain*, or urban project, encompasses not just the formal aspects of a scheme but also its social, economic, technical and environmental characteristics. It also assumes a political commitment and participatory, interactive and iterative process in the preparation of the project which can modify the original brief during its implementation.

• The expression defines a product and a methodology rather than a profession, but as such indicates what the latter should be capable of.

• *Aménagement* is therefore a form of intentional or planned urbanization: as opposed to spontaneous or under-controlled development of sprawl. It translates better as planning than as urban design, though it does not correspond precisely to either.
The main French planning documents are the *Schéma de Cohérence Territoriale* (SCOT) equivalent to a British Structure Plan covering a large area over the medium to long term.

Then, the *Plan Local d’Urbanisme* (PLU) equivalent to a British Local Plan, usually, commissioned by one commune (municipality). It is regulatory, establishes land use rights.

To implement a projet urbain (urban projects), local authorities have the *Zone d’Aménagement Concerté* (ZAC) – comprehensive development area – that gives them control of the process.
The Clause Bois Badeau ZAC in Brétigny, 30 km south of Paris
The Clause Bois Badeau ZAC: general context (Brétigny)
The Clause Bois Badeau ZAC: masterplan (Brétigny)
• **Urban planning** is a profession that has two dimensions:
  • to “create” (design)
  • and to “manage” (planning) urban forms and functions.

• The German word that contains these two meanings is *Stadtplanung* (urban design + town planning) defines regional and place-specific regulations.

• *Stadtplanung* involves the spatial and architectural planning of the environment; the term is used to set policies to the management of urban environments.

• Urban planning incorporate activities of urban design and town planning, an academic field called *Städtebau* (Stadt [pl. Städte] = town, Bau = building/creating) which can be translated in “town creation”, corresponding to urban design.

• *Städtebau* deals with proportion, composition and the relationship between building and space.
Riedberg a new urban district for Frankfurt: zoning plan
Riedberg a new urban district for Frankfurt: master plan
• A precise definition of urban design does not exist in Italy.

• In early 1990s, emerged an approach that integrated infrastructure networks and public space, destinations and urban form.

• Until the end of 1980s, tools as Piani attuativi (Implementation Plans) of the PRG (General Plan) introduced by the first National Planning Law (1942), were the main regulatory references.

• A radical change occurred with the approval of new set of tools (Programmi Urbani Complessi) which allowed the spread of an approach to urban design practice similar to other countries.
• Precursor of urban design in Italy:
  
  • The **baroque transformation of Rome under Pope Sixtus V, religious power**;
  
  • During **XVI Century** an integrated approach was applied to **Sabbioneta** (Mantova) and **Palmanova** (Trieste) (**civic power**);
  
  • During **1930s** new town of **Aprilia, Littoria, Sabaudia** developed in a short time to reclaim the marshlands (**fascist regime power**).
  
• Since **1950s** until **1970s** the relationship between town planning and architecture found a new interesting field of development in the concept of the **neighborhood**. The heart of **public housing policies**.
The second, based in Rome (around Bruno Zevi) was a critique of the functionalism and rationalism (see Quartiere Ina-Casa Tiburtino, Roma 1950, Ludovico Quaroni).

Milan, QT8

Neighborhood design became the place for confrontation between two main tendencies.

One occurring mainly in the North of Italy, representing the legacy of the Modern Moviment (see Quartiere Triennale VIII – QT8, Milan 1947, Piero Bottoni).
• During the **50s** and **60s** there was a season of testing the national planning law that allowed the production of *implementation plans of the PRG*.

• During **70s**, the economy becomes a major factor for the city. **Change the production model from industrial to tertiary.** From this moment and for all the years **80s** and **90s** Italian urbanism is characterized by the season of complex programs.

• The **Complex Programs** are a “family” of *tools introduced in the Italian planning legislation aimed at the theme of urban regeneration*. 
The term **urban design** appears the middle ages to negotiate collective agreements on the use and design of the limited space available.

Nowadays, **urban design has no clear definition**, but until the **1980s**, it had been a technical discipline with an undisputed and respected status (**engineered society**).

Since **80s** urban design profession entered a period of identity crisis. **Profession changed from one of purely technical engineering into multidisciplinary research-based policymaking**.

Now “**spatial planning**” defined in **1965** is broader than the implementation of land use regulations.
Framework design for the area in Rotterdam South: “the Heart of the South” (Ahoy/Zuidplain)
• **Positive economic evolution** changes experienced by Spanish society. **Growth has modified the shape of Spanish cities.**

• **sprawl** and **recuperation of inner-city areas.**

• **Urban design in contemporary Spain** must be placed in this context of large schemes (**great projects**).

• **Barcelona** or **Bilbao**, with its **urban regeneration** are probably the **main contribution to Spanish prestige in the design of new public spaces.**

• **A specific urban design culture** (translated as **diseño urbano**) has not really developed in **Spain**. In Spain there is a **lack of specialization in urban studies.**

• **Urbanism is more an area of practice than a structured field of knowledge.**
The Guggenheim Museum (completed 1997) and the Abandoibarra master plan, Bilbao, Spain: a building as a catalyst for development
• Urban life is divided “on the street”

• In this context, the prominence of architects engaged in urban design work generates a particular approach to the design of public spaces.

• Purely aesthetic approach to the layouts of both new and existing public spaces.

• Currently, 3 factors influence urban design practice in Spain:
  1. A new interest in landscape architecture,
  2. The research for more sustainable urbanism,
  3. The constraints created by the economic crisis that ended decades of urban growth.
Two main tools of Spanish urban planning are:

- the *Plan General*, equivalent to a city’s framework plan

- The *Plan Parcial*, equivalent to the development plan or urban project (and to a masterplan in the British context)

- The Plan Parcial is only about architecture and the urban project is seen as architecture at a large scale.

Ponferrada: Plan General 2007. Defining the new development areas
Ponferrada: initial analysis of the Plan Parcial (Sector de Suelo Urbanizable Delimitado)
Ponferrada: Plan Parcial for the Youth Park: dwelling in brown public buildings
NEW URBANISM
• Radical town planning principles vs conservative aesthetic style.

• These principles focus on the concept and design of the neighborhood as an essential building block for towns and cities.

• New Urbanism forms the most visible bridge between British and American urban thinking.
A Return to Urbanity?

• From the mid-90s - resurgence of cities, population increases in the centres of cities.

• Mumford
  • first migration of pioneers setting the continent,
  • second migrations from farms to factory towns,
  • third migrations to the great metropolitan centres,
  • fourth migration would radically decentralise the functions of the great metropolis and spread population throughout whole region.

• Fishman in 2005, contends that we are witnessing the beginning of a “fifth migration”, where suburbanisation is now finally declining and inner cities are being revitalized

• In Western Europe, constant economic growth (until late 2007), cheap credit and high demand for new housing, coupled with urban containment policies, has also been decisive in directing investment towards urban areas and away from the edge of city expansion.
Disappointment of the Suburbs and Concern about Climate Change

- Desire for greater urbanity is a cultural choice, deriving from dissatisfaction with suburbia.

- There has been a renewed desire for urban living:
  - for time-thickened places (nearby places);
  - for places with high densities of social interaction;
  - for cultural centrality;
  - and for ready access to cultural and recreational amenities (theatres, museum, cafes, restaurants, bar);
  - but also relatively ready access to natural landscapes.

- The spatial dimension of cultural desires for increased urbanity encompasses concerns diminishing supplies of oil and climate change.

- Car dependence exists where urban form and transport options are such that choices are limited to care use.
The Movement

- **New Urbanism** is movement was formalized (1993) by the creation of the Congress for New Urbanism (CNU).

- Late 1980s and early 1990s, a large number of experts were frustrated with prevailing development patterns, which focused more on building dispersed housing; meanwhile, urban renewal was destroying the fabric of historic neighborhoods.

- New Urbanists believe that well-designed cities, towns, neighborhoods, and public places help create community: healthy places for people and businesses to thrive and prosper.

- New Urbanists have been responsible for creating and popularizing many now-common development patterns and strategies, including mixed-use development, transit-oriented development, traditional neighborhood design, integrating design standards into affordable housing, and designing complete and beautiful streets.
What Movement do

• **Great walkable, urban places**—buildings, blocks, and neighborhoods—in small towns or big cities, are powerful economic and social engines, improving community health and resilience while promoting sustainability and equity.

• To reform stands for the **revitalization of streets** (transportation).

• To rehabilitate deteriorated and isolated public housing facilities (equity).

• Encouraging more physical activity (health).

• Protect open space from development (environment).
AREA: Preferably 160 acres, min. 40, max. 200
POPULATION: As necessary to support critical mass of walk-to destinations.

ACCOMPANYING TEXT ON PAGE 126

A Sustainable neighborhood (Building Blocks of a Sustainable Corridor)
New Urbanism Projects

- The built legacy of sprawl, though, is staggering: Millions of acres of failing car-centric development still sit on the land, sapping municipal budgets and depreciating in value. **Sprawl Retrofit** works to repair and retrofit sprawling developments into the vibrant, high-performing walkable places that are growing in popularity.
All the uses, but separated use, excess parking, hostile frontages – not walkable
New Urbanism Projects

- In the XX Century, the American era of highway-building created sprawling freeways that cut huge swaths through our cities.
- Cities look for ways to increase their revenues, replacing freeways with surface streets has gained recognition as both a practical alternative to rebuilding expensive highways and as a means to restore and revitalize communities. Portland, San Francisco, Milwaukee have successfully replaced urban highways with boulevards and surface streets, saving billions of dollars in infrastructure costs, increasing real estate values on adjacent land, and restoring urban neighborhoods.
When **Boston** opened the **Central Artery highway in 1959**, it effectively serviced an estimated 75,000 vehicles daily. The construction of the highway displaced 20,000 residents during construction and cut off Boston’s North End and Waterfront neighborhoods from its downtown. By the 1990s, the Artery became congested for more than 10 hours a day. A drastic change was needed.

Undertaken in the mid-1990s, Boston’s plan to remediate the congested Central Artery—nicknamed locally the **Distressway**. This ambitious project included replacing the six-lane highway with an eight-to-ten lane underground expressway beneath the existing road, two-bridge crossing above the Charles River. Upon completion of the underground expressway, the former, elevated **expressway was demolished and replaced with open space and urban infill development**.
Madrid, Manzanares River Banks
Why does New Urbanism start up?

- **New Urbanism in the UK** is partly due the clear message contained in the **1999 report by the Urban Task Force**

- In this report, was cited **American Smart Growth** and **New Urbanist ideas** (**new housing, schools, workplaces, recreation and retail development on existing brownfield and greyfield sites, rather than extending new building into green belt sites around the edges of British cities**).

- There could be no clearer example of the distinctions made below between New Urbanism as a set of urban design principles versus a nostalgic aesthetic style.

- **New Urbanism was forged in the early 1990s** as a reformist and utopian movement, **pursuing agendas of social and environmental improvement** and armed with typologies of urbanism authenticated by several centuries of human use.
New Urbanism’s Dilemmas

• New Urbanism it is the only type of urbanism in America that evinces any interest in issues of sustainability.
  1. compact development
  2. passionate historicism

• Particular, in Britain, New Urbanism tends to be misunderstood as historicist or nostalgic architecture.

• It is very common the tendency for New Urbanism to be misrepresented as a style of traditional aesthetics rather than a radical and challenging set of urban design and planning principles.

• The Truman Show (Calthorpe, 2005).
Belmar
Lakewood, CO
Highlands Garden Village
Denver, CO

Source: CNU
Mashpee Commons
Mashpee, MA

Source: Duany, Plater-Zyberk, and Co.
The Nature of Urban Design

- **City, or town, planning** tends to look at urban design as the **distribution of land uses in relationship to transportation systems**.

- **Landscape architecture** tends to look at urban design as **the design of the horizontal plane between buildings**: streets, parks and squares.

- **Architecture**, in contrast, tends to consider urban design to be **the design of buildings in context and/or the design of building complexes**.

- The nature of **urban design** as a **professional activity**.

- The argument is that urban design **deals with enhancing the qualities of the public realm of cities and with the role of conflicting public and private interests in shaping it**.

- **Urban design deals with the creation of the physical public realm of human settlements within the public realm of decision-making**.
Relationship between Town Planning and Urban Design

• Urban design and city planning overlap when these plans deal with visions for the three-dimensional city.

• If the goal of planning is to create a land use (two-dimensional master plan), understanding their three-dimensional implications.

• Comprehensive planning: the quality of the built environment is peripheral.

• Urban design concerns within city planning reflect the state of public policies. Public Policies have a direct impact on the form and general ambience of the places.
New Town Planning and Urban Design

- In the **design of new towns**, master plan presents a vision.

- The whole process of city planning can be seen as moving from the **precinct level** to the **city level**, and then to the **regional level**. As decisions and their effects are so interwoven at each scale.

- It is possible to see **urban design as the mediator between planning and architecture** and neither one nor the other, although it encompasses both.

The organization of Columbia, Maryland. The conceptual layout of the city
Relationship between Landscape Architecture and Urban Design

- The landscape quality of open spaces is crucial to the experiencing of cities and perceptions of their quality.

- The design of streets, squares, parks and other public spaces is often referred to as urban design by landscape architects.

- Historically, the buildings that frame many of the best-loved plazas in Europe have been built up piece-by-piece over a long period of time.

- More and more city administrations recognize the importance of open-space design in creating positive images of their cities.

- We have learnt much about their design from examining those that are regarded as lovely, and are well used. We need to learn as much from those that are deserted, and those that have decayed rapidly (e.g. Piazza d’Italia in New Orleans). In these cases it is often not the design itself that was the problem but the surroundings.
Some Notes on Detailing the Environment

• The quality of the **detailing**, as displays and as behavior settings, **makes a major contribution to our feelings about places**.

• **By detailing is meant the small-scale patterns**: making an environment barrier free, the grates, the paving, the steps and staircases, and the seating designs...

• The **quality of the detailing depends on how the elements are handled**, their composition, patterns, colors, the precision of the workmanship and what they offer in terms of human activities. Of particular importance are **paving patterns**, the nature of **illumination**, the design of **street furnishings** and the nature of the **signage**.
Oak Park Center Mall, Oak Park, Illinois, USA: a mall built and demolished (1967, 1989)

(a) A sketch of Lake Street pedestrianized
(b) The master plan for returning Lake Street to vehicular traffic
(c) A cross-section of Lake Street as proposed in the master plan
(d) A view of the Mall in 1988
The borderline between large, multi-building architectural schemes and urban design is often fuzzy.

When urban design is considered to be a high architectural art the concern in design is often reduced to how to express in geometrical forms and materials.

There are 4 situations in which the design of individual buildings seem as urban design.

1. When buildings pay some respect to their built contexts: street alignments, ground floor uses and designs, and overall massing (i.e. they have the same “texture” as their surroundings).

2. When a building acts as a catalyst for urban development.

3. When the facilities that are traditionally in a neighborhood or city are incorporated into a single multi-use building.

4. When there are a number of buildings in a complex (large-scale architectural projects).