



Larbi Ben M' hidi University – Oum El Bouaghi-
Department of Urban Technics Management
Module: WORKSHOP 1
1st year license

II-URBAN COMPOSITION

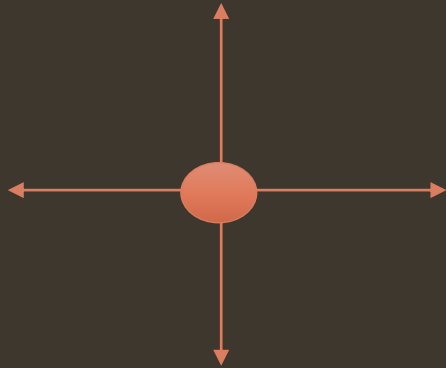
Professor: Melouah.L



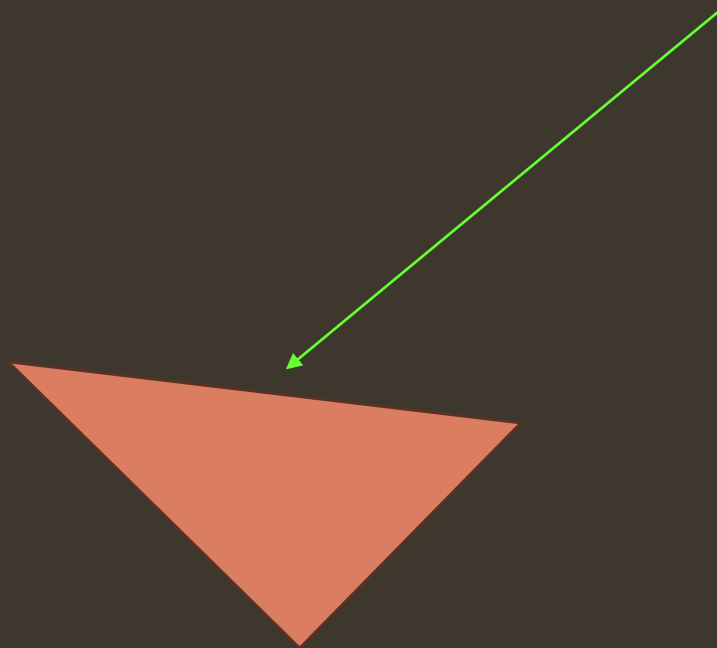
REVIEW SESSION:



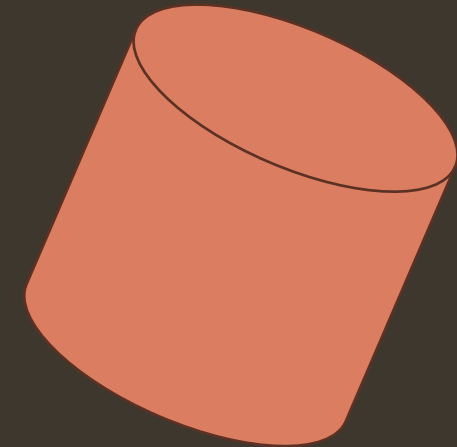
THE LINE: The extension of the point defines the line whose properties are: length, width and position.



THE POINT: Primary element generating the form. It designates its position in space

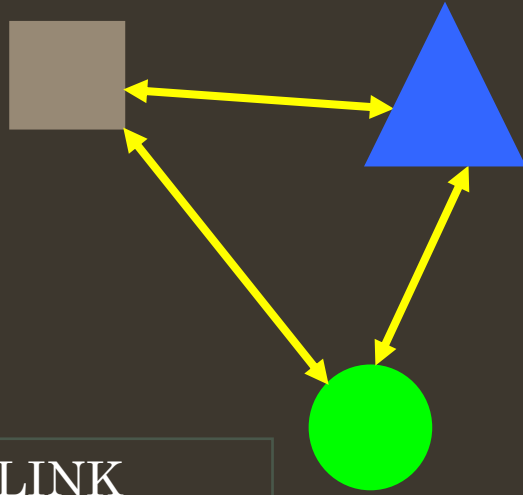


THE SHAPE: Forms of objects which have boundary lines, angles and surfaces.

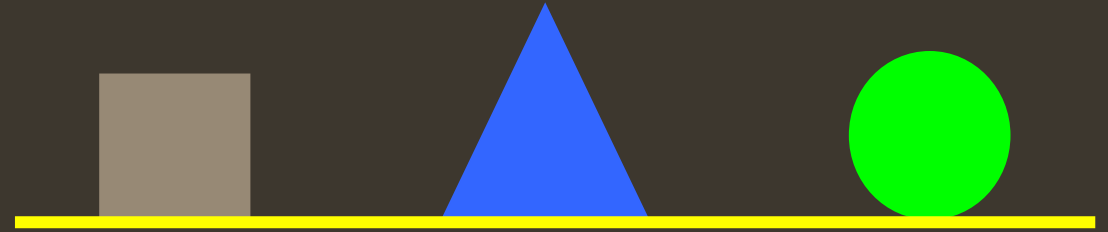


FORMS: Boundary lines, perimeter and volume

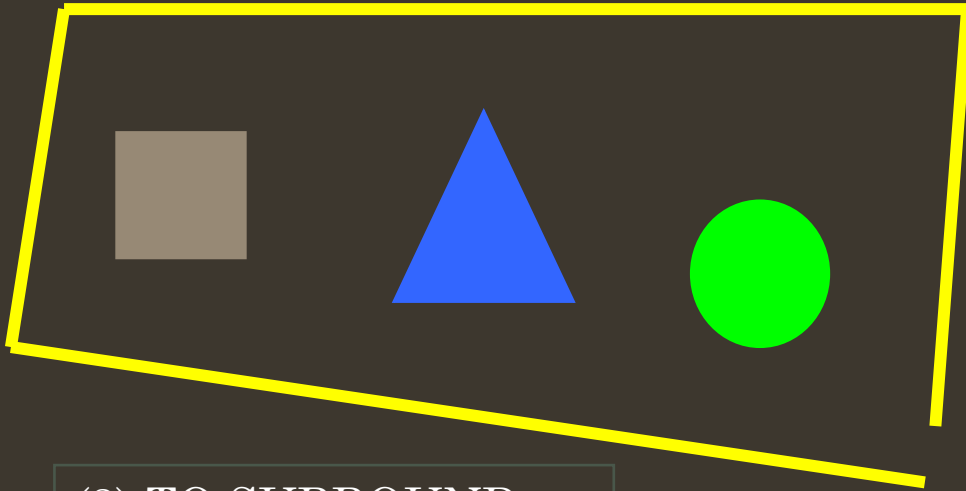
THE LINE CAN BE USED :



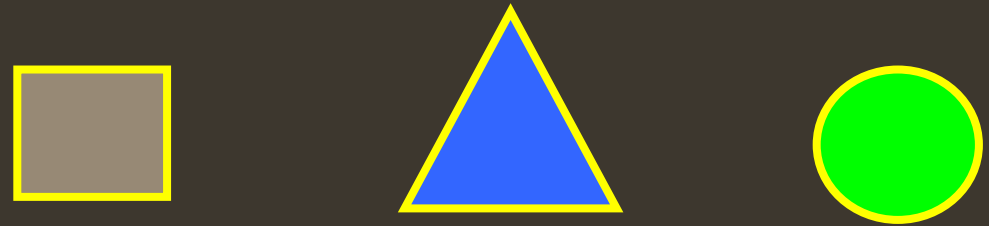
(1) TO LINK



(2) TO SUPPORT

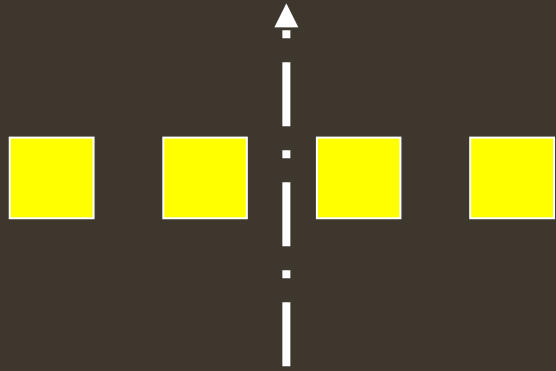


(3) TO SURROUND

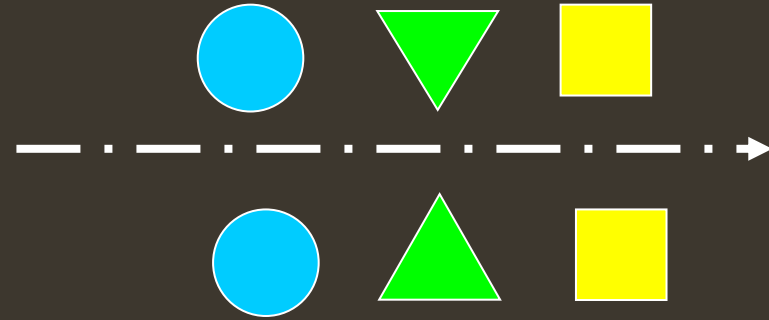


(4) AS AN OUTLINE

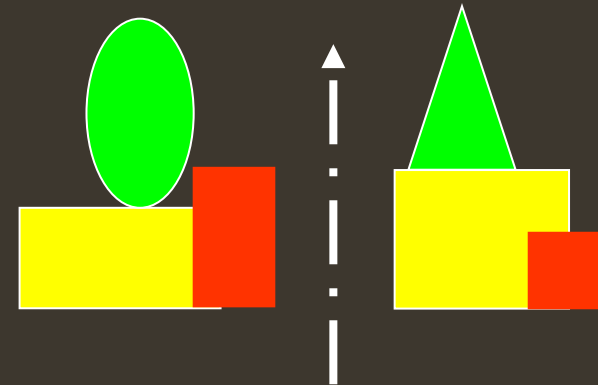
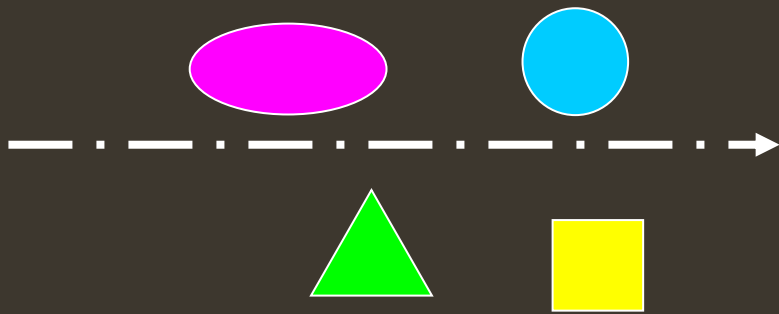
■ Regular organization



an axis of symmetry



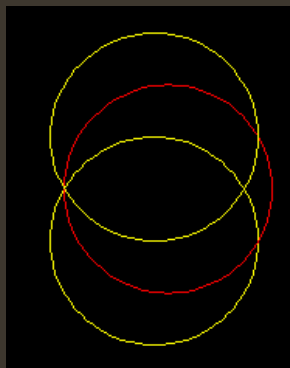
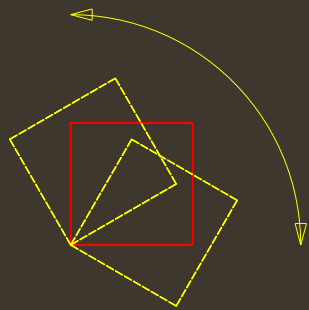
■ Irregular organization



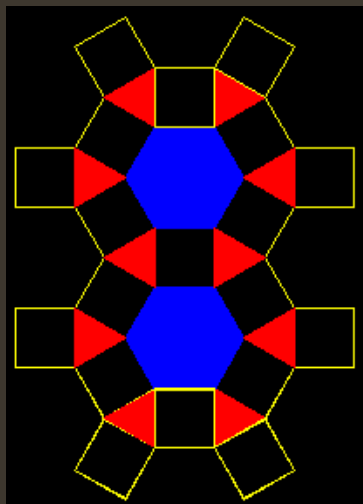
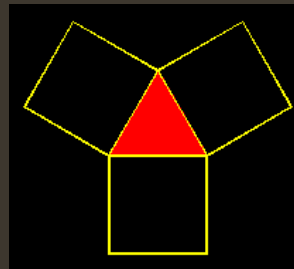
An axis of balance

05 Ways to compose plane geometric shapes

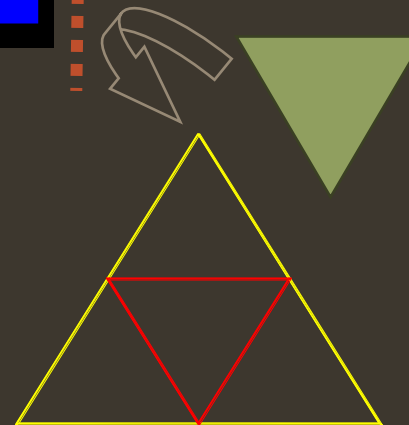
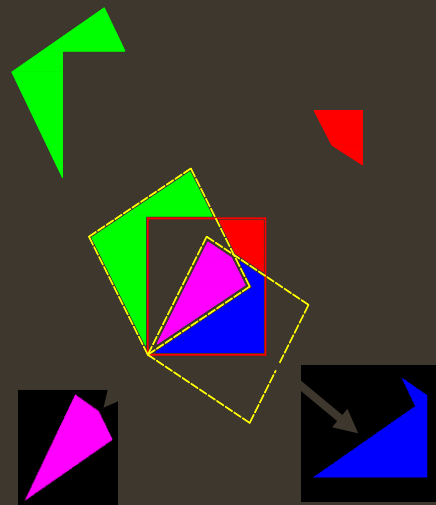
Rotation



Addition



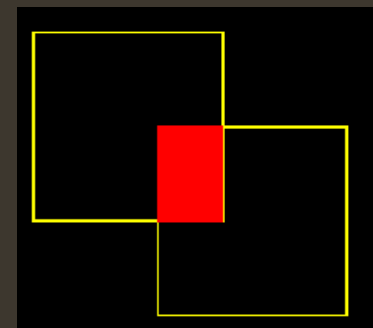
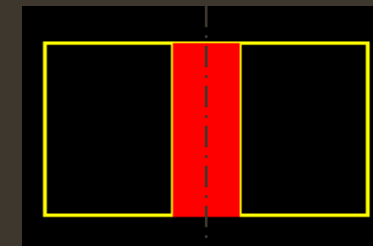
Soustraction



Interpenetration

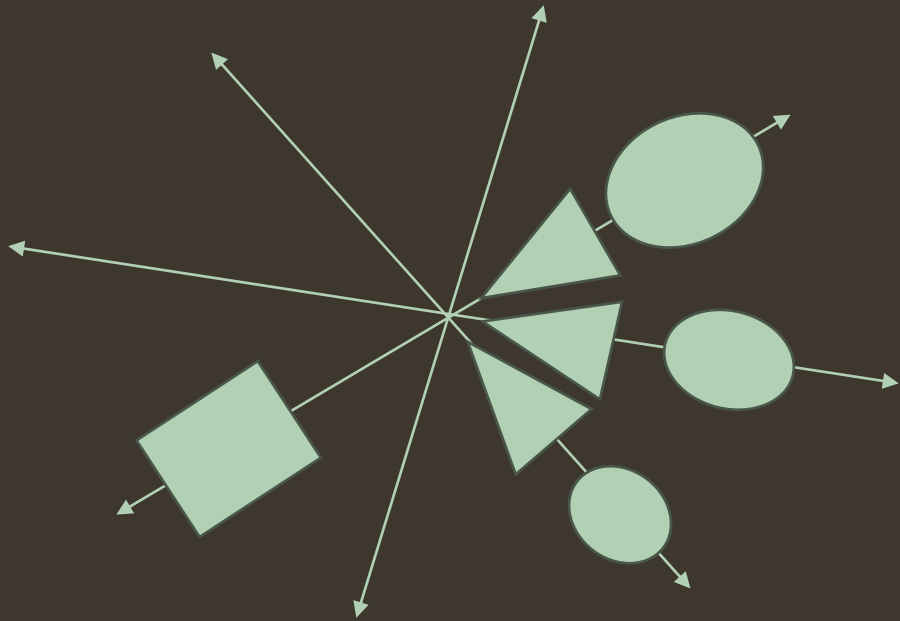


Intersection

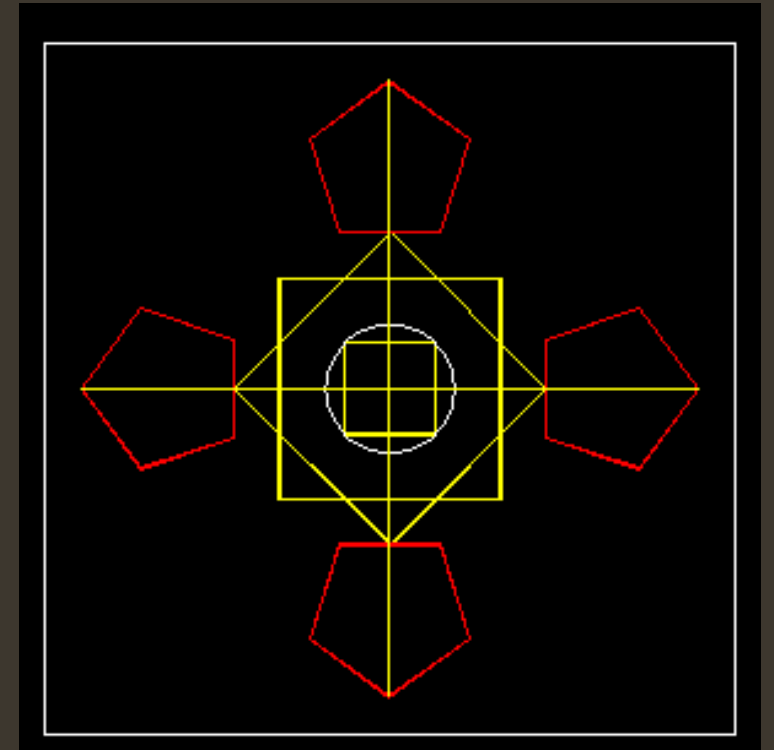


Principles of organization of the plane geometric form

Radial organization



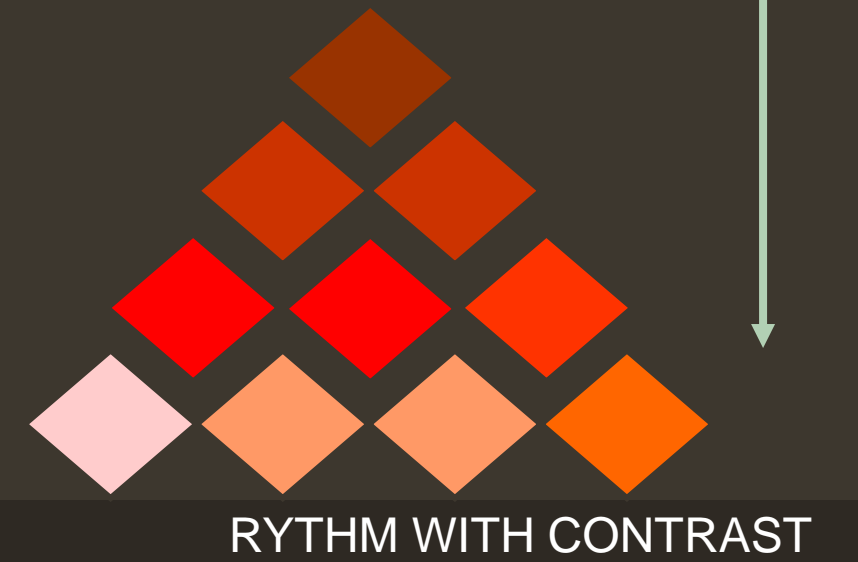
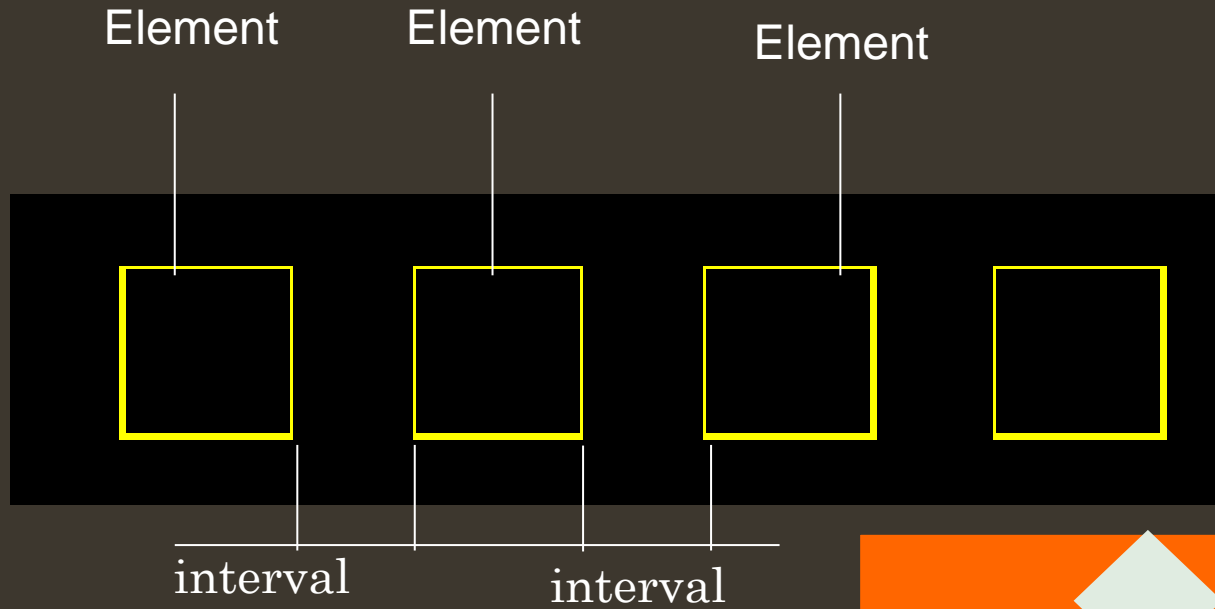
Centralized organization



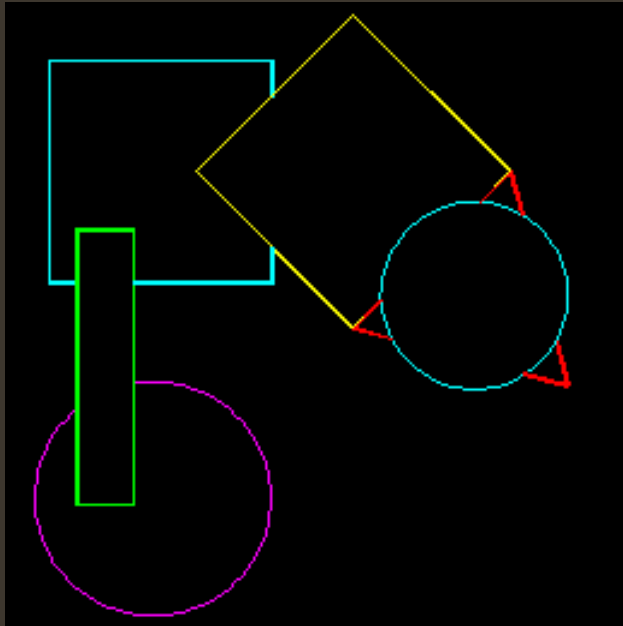
A central form around which secondary forms are organized

Linear organization

Simple rhythm / Is a repetition of elements (3 at least) with an interval



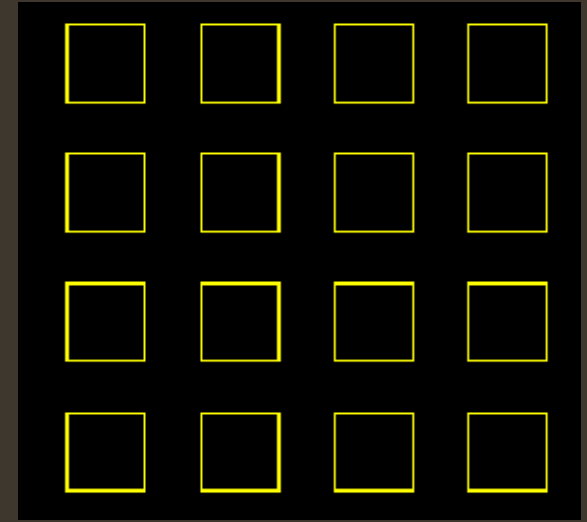
L'organisation imbriquée



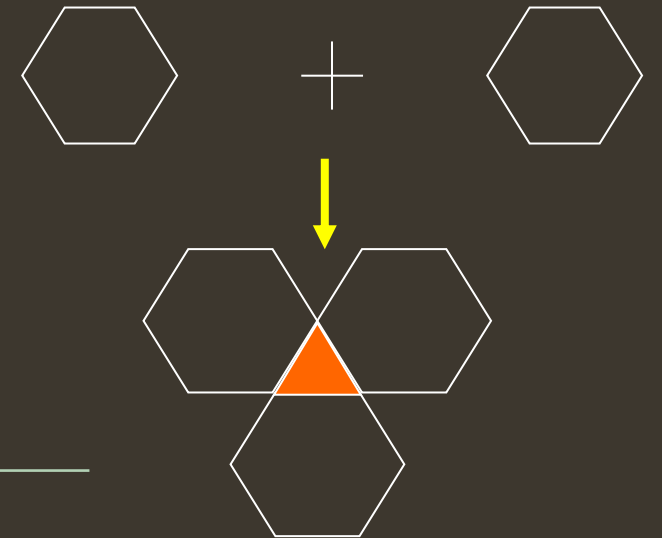
Formes regroupées selon les relations qui existent entre elles (addition, interpénétration, soustraction...)

L'organisation modulaire

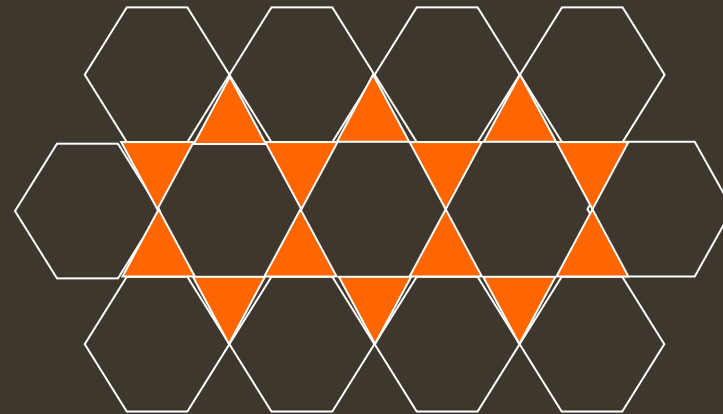
"Shapes organized according to a chosen modular system."



Hexagon



Framework



"Shapes organized according to a chosen modular system."

II-URBAN COMPOSITION

- **Definition 01:**

Urban composition is a mental operation that takes shape.

- **Definition 02:**

- The urban composition is a drawn representation of what should be achieved.

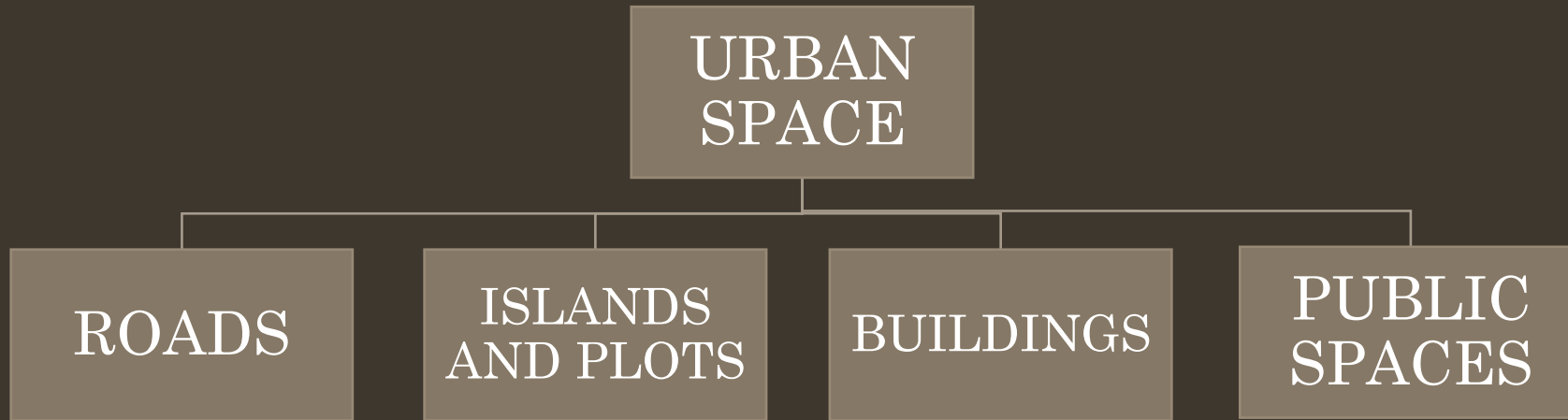
- **Definition 03:**

- Urban composition has a role in defining the organization of the space of the city or district to be developed.

- **Definition 04:**

- By urban composition we mean any whole which maintains relationships between the parts which constitute the whole which they form.





THE QUESTION IS:



How to give form to these elements so that they achieve this unity, showing that each of them has a relationship with the whole?

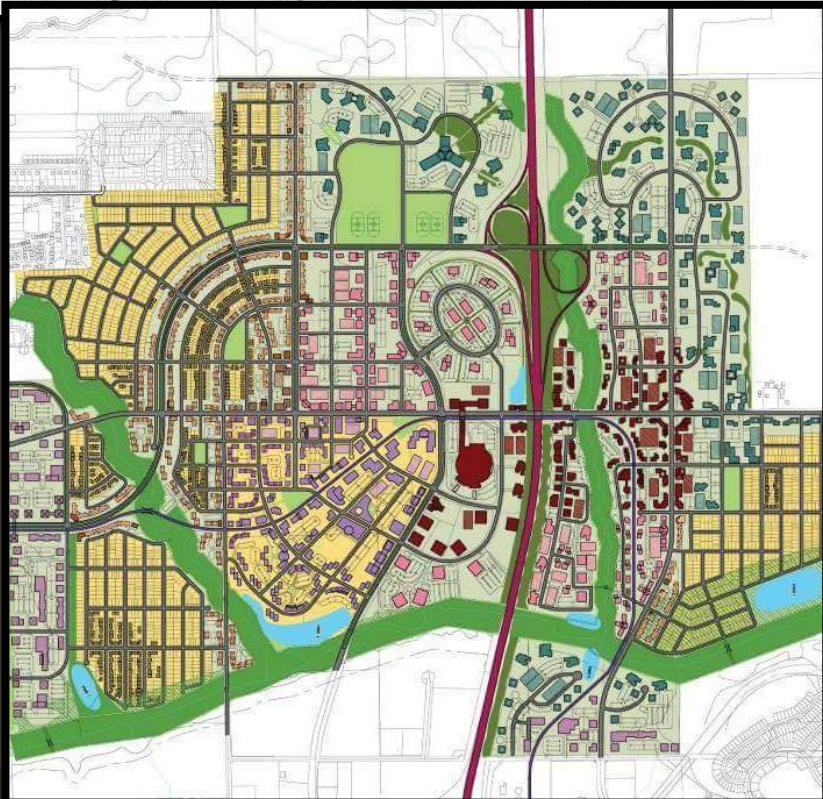
A relationship such that **one of them cannot be subtracted without the existence of the whole being compromised.**



EXAMPLE 01



EXAMPLE 02

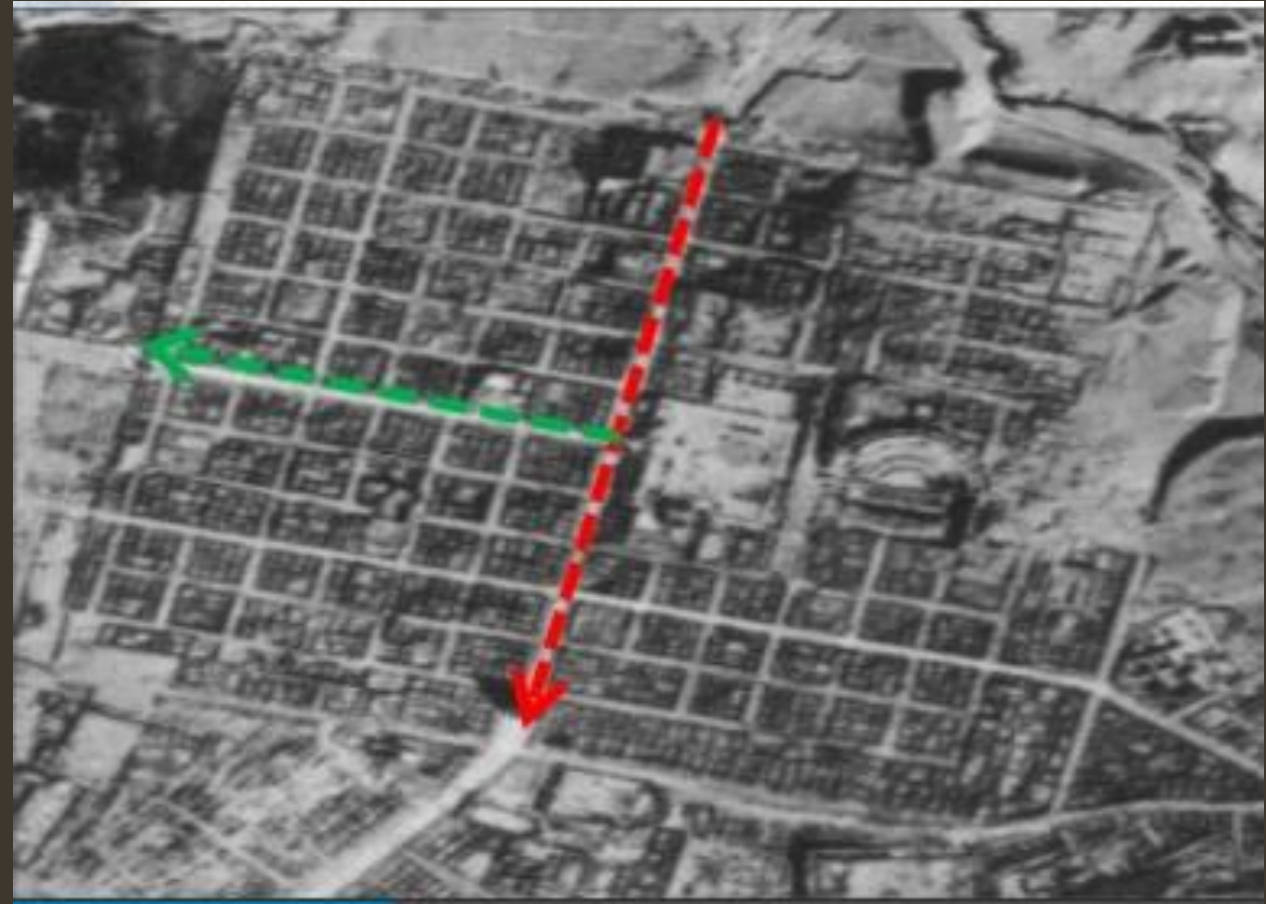


EXAMPLE 03

The Instruments of Urban Composition

1- The layout (le tracé) :

It's a line aimed at organizing the distribution of space, in principle. The layout is then realized or not.

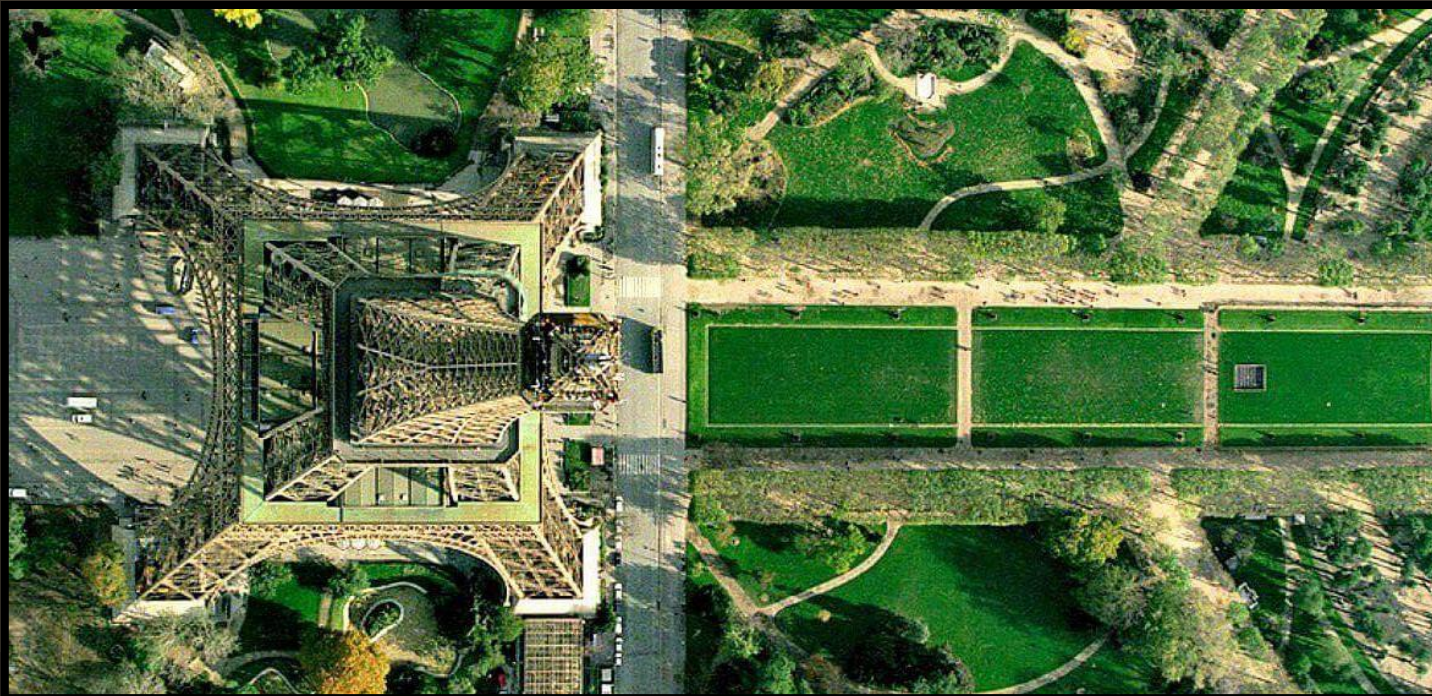


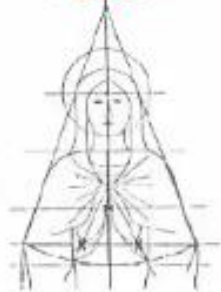
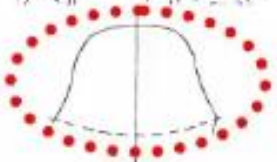
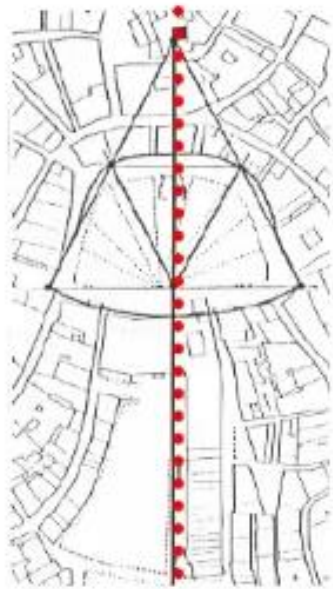
1-Virtual layouts:

Are those which are used to construct the composition but which are not necessarily materialized in the functionalization and creation of the composition even if they are fundamental at the composition level.

2-Concrete layouts:

The concretization layout is generally expressed in road routes or possibly in visual axes (boulevards, avenues, streets, etc.)

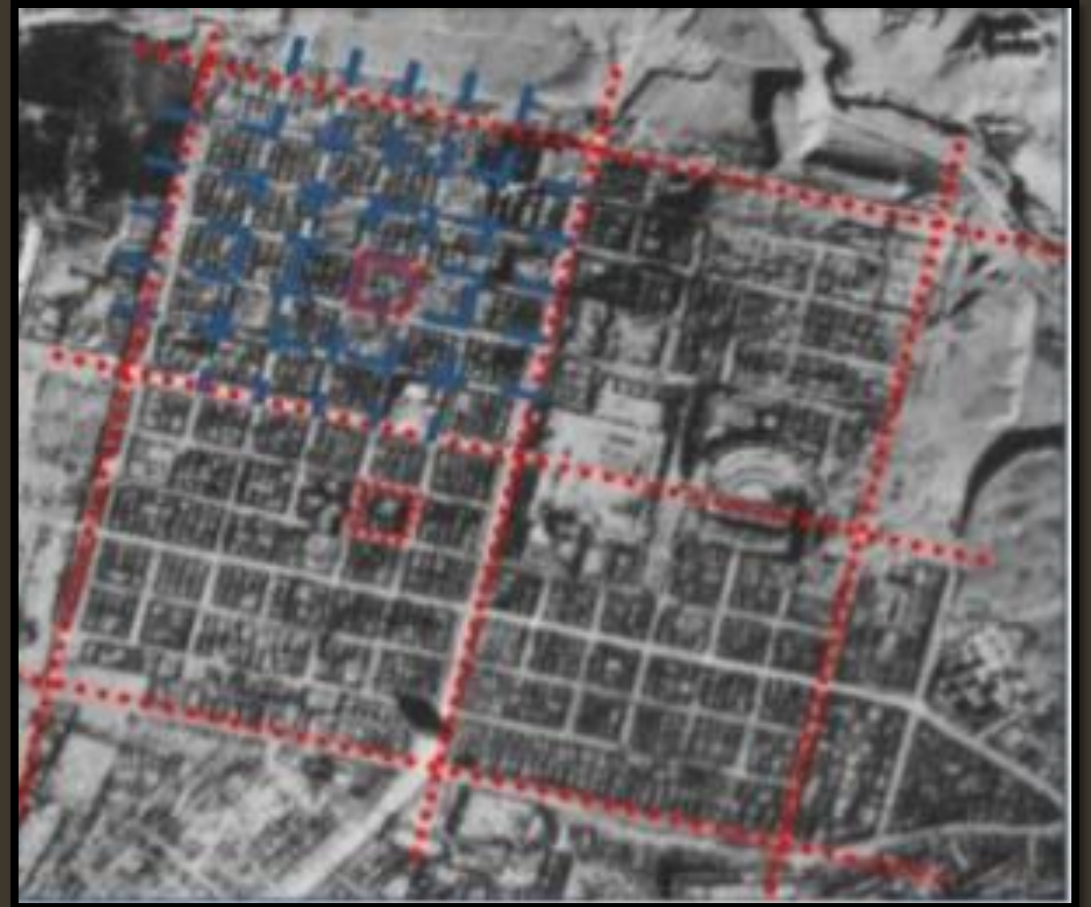




2-Cutting:

If the layout produces lines that connect, the division produces lines that separate, Sector, Island, plot.

Open island Assembly of autonomous building, not identical, are not at the same height, taking into account light, alignment with the street.



3-TRACES OF OCCUPATIONS

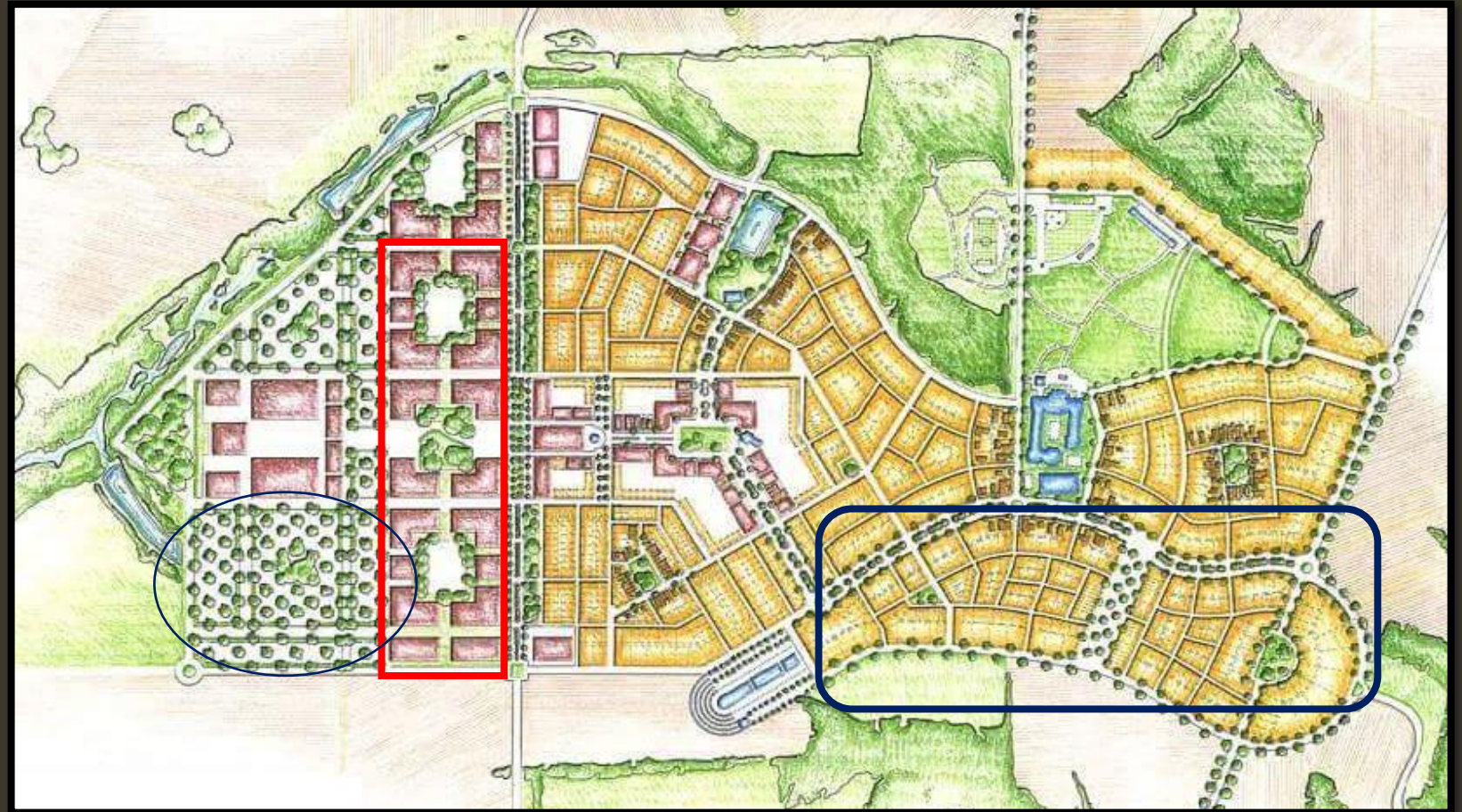
Occupations appear in the form of their traces on the ground: traces of built spaces, traces of free spaces, plant spaces.



The laws of urban composition

Contrast:

The parts of a composition must be different from each other (full and empty, vertical and horizontal, openings, vegetation, etc.),



The laws of urban composition

Symmetry: Method of distribution in space of similar elements.



The laws of urban composition

The balance:

- Existence of dimensional relationships of the components.
- Distribution of lines, masses, solids and voids, harmonious arrangement, Green space Building circulation



The laws of urban composition

The Scale: The relationship between the object and the environment

Proportions: The proportions are generally established according to ratios geometric.

The materials: The external identity of the object. The materials are evocative of eras of architectural history and urban styles so they are not neutral from the point of view of the Composition.

Relations entre composition géométrique et composition urbaine

- La composition géométrique et la composition urbaine sont étroitement liées. **La géométrie est le langage fondamental de la composition urbaine et joue un rôle crucial dans l'organisation et l'agencement des éléments d'une ville.**
- Voici quelques exemples de relations entre les deux concepts:

1. Formes géométriques des éléments urbains:

- Bâtiments: Les bâtiments peuvent avoir des formes géométriques simples (carrés, rectangles, triangles) ou plus complexes (polygones, courbes). **La forme d'un bâtiment peut influencer son implantation sur le terrain, son orientation et son impact visuel sur l'environnement urbain.**
- Espaces publics: Les espaces publics, tels que les places et les parcs, peuvent également être aménagés selon des formes géométriques. Par exemple, une place peut être conçue comme un carré ou un cercle, tandis qu'un parc peut avoir une forme plus libre et organique.
- Réseau viaire: Le réseau viaire est souvent organisé selon un plan géométrique, avec des rues rectilignes ou curvilignes qui se croisent à des angles précis.

2. Proportion et harmonie:

- **La composition urbaine recherche l'harmonie et l'équilibre entre les différents éléments de la ville. La géométrie peut être utilisée pour créer des proportions harmonieuses entre les bâtiments, les espaces publics et les infrastructures.**

3. Rythme et séquence:

- **La géométrie peut également être utilisée pour créer un rythme et une séquence dans la composition urbaine. Par exemple, une rangée de bâtiments de hauteurs différentes peut créer un effet visuel rythmique le long d'une rue.**

4. Points focaux et repères:

- **Des formes géométriques peuvent être utilisées pour créer des points focaux et des repères dans la ville. Par exemple, un monument ou une tour peuvent être utilisés pour marquer l'entrée d'une ville ou d'un quartier.**

5. lisibilité et structure:

La géométrie peut contribuer à la lisibilité et à la structure de la ville. Un plan urbain clair et géométrique permet aux habitants et aux visiteurs de s'orienter facilement et de comprendre la logique de l'organisation urbaine.

En conclusion, la composition géométrique est un outil essentiel pour la composition urbaine. Elle permet de créer des villes ordonnées, harmonieuses et lisibles.

Exemples concrets:

Le plan en damier de nombreuses villes américaines: Ce plan est basé sur une grille géométrique simple et permet une organisation rationnelle de l'espace urbain.

Les villes radiales, comme Paris: Ces villes sont organisées autour d'un point central, souvent un monument important, à partir duquel rayonnent des avenues rectilignes.

De nombreux bâtiments modernes et contemporains utilisent des formes géométriques simples et pures pour créer une esthétique épurée et élégante.

What we need to know about our site to be able to design it well!

- The area of the site.
- The nature of the soil
- The topography of the site
- The natural characteristics of the site: sunny, shaded areas, areas exposed to the wind, etc.

- The neighboring function(s)
 - Should we open or avoid opening in relation to neighboring spaces?!
 - Are there things to hide?!

- Space users.
 - The operating hours of the space.
 - The tools and objects that will be used there

- Define the different access points (main, secondary, mechanical, pedestrian, etc.)
- Define needs or deal with gaps identified on site.
- Do a zoning to determine the different zones, their functions and the relationships they have with each other.
- Take into consideration the needs and wishes of the project owner.

Elements which influence the site development operation

A

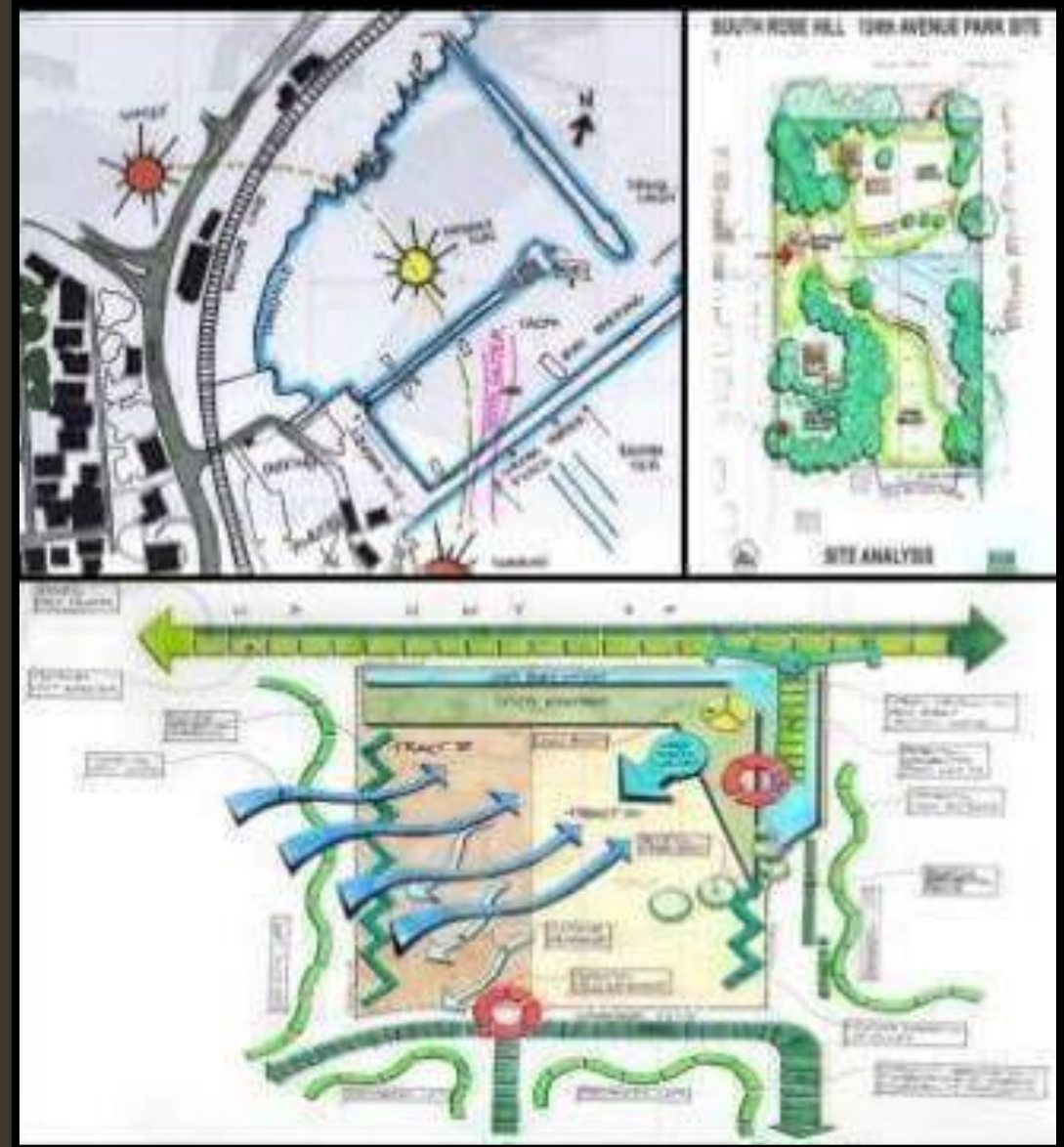
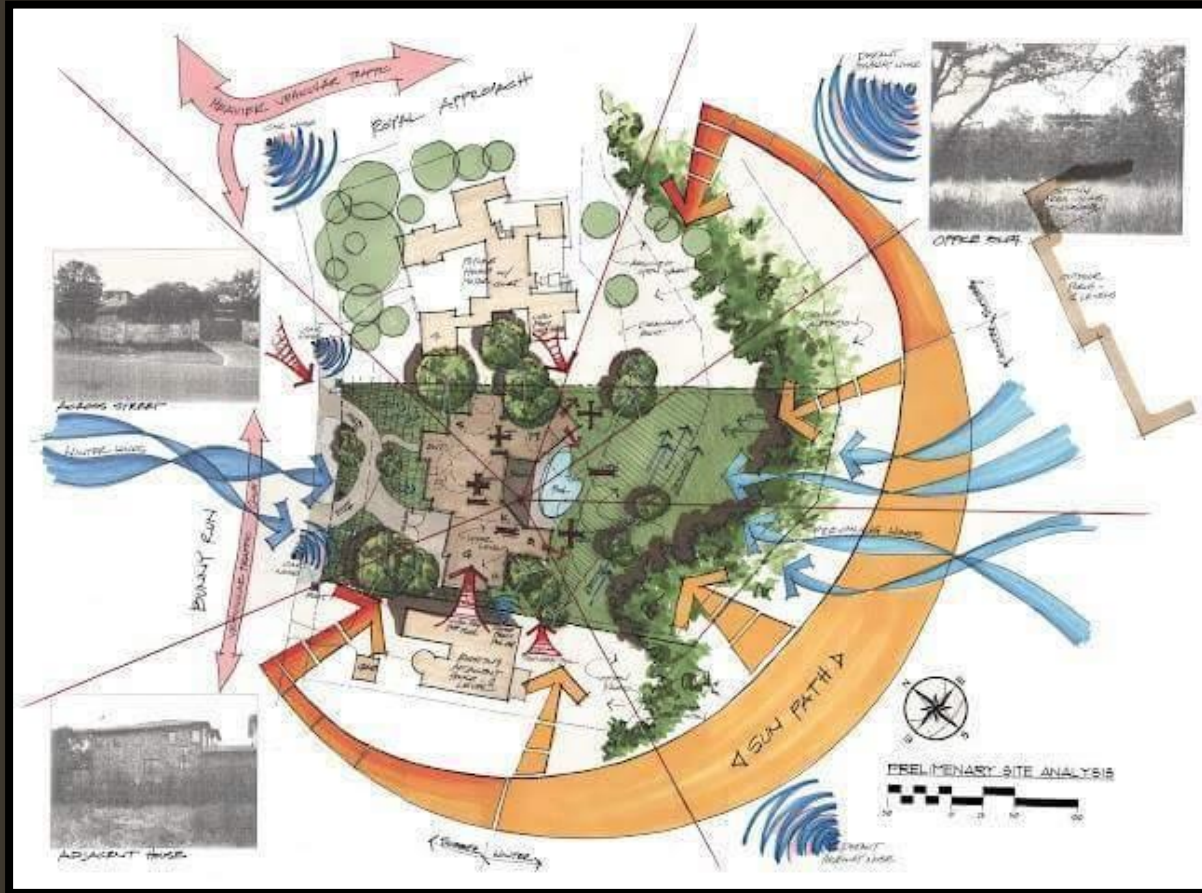
-Natural setting:

- Temperature and lighting coefficient (daylight factor)
- Wind direction and speed.
- Humidity level.
- The topography of the site.
- The site in its environment

B

-Physical setting

- Architectural style of neighboring buildings
- The social, cultural dimension, and the degree of citizenship.
- The economic dimension: (production costs, availability of materials, labor, etc.)
- The requirements of the project owner.



THE PRINCIPLE OF THE OVERALL PROJECT

- To achieve this, we define the exact role of the different spaces, of connection, centrality, representativeness, or even monumentality.

