Design Ideas and Infographic Presentation in Architecture

ARC3441

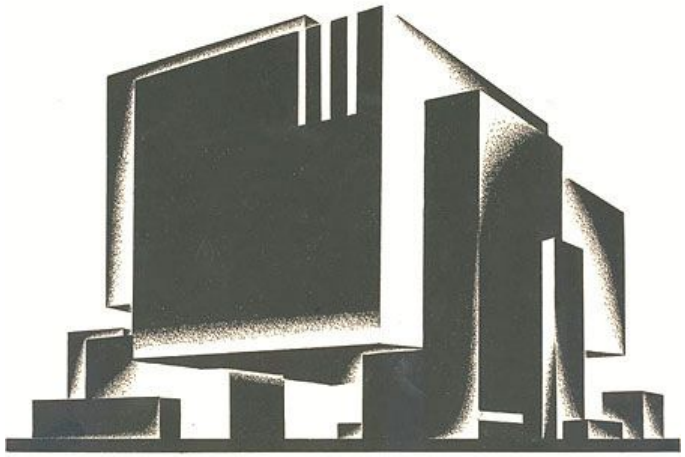
02

What is graphics?

Visualisation

Creating images, diagrams, drawings in order to:

communicate both abstract and concrete ideas



Iakov Chermikov

Concepts

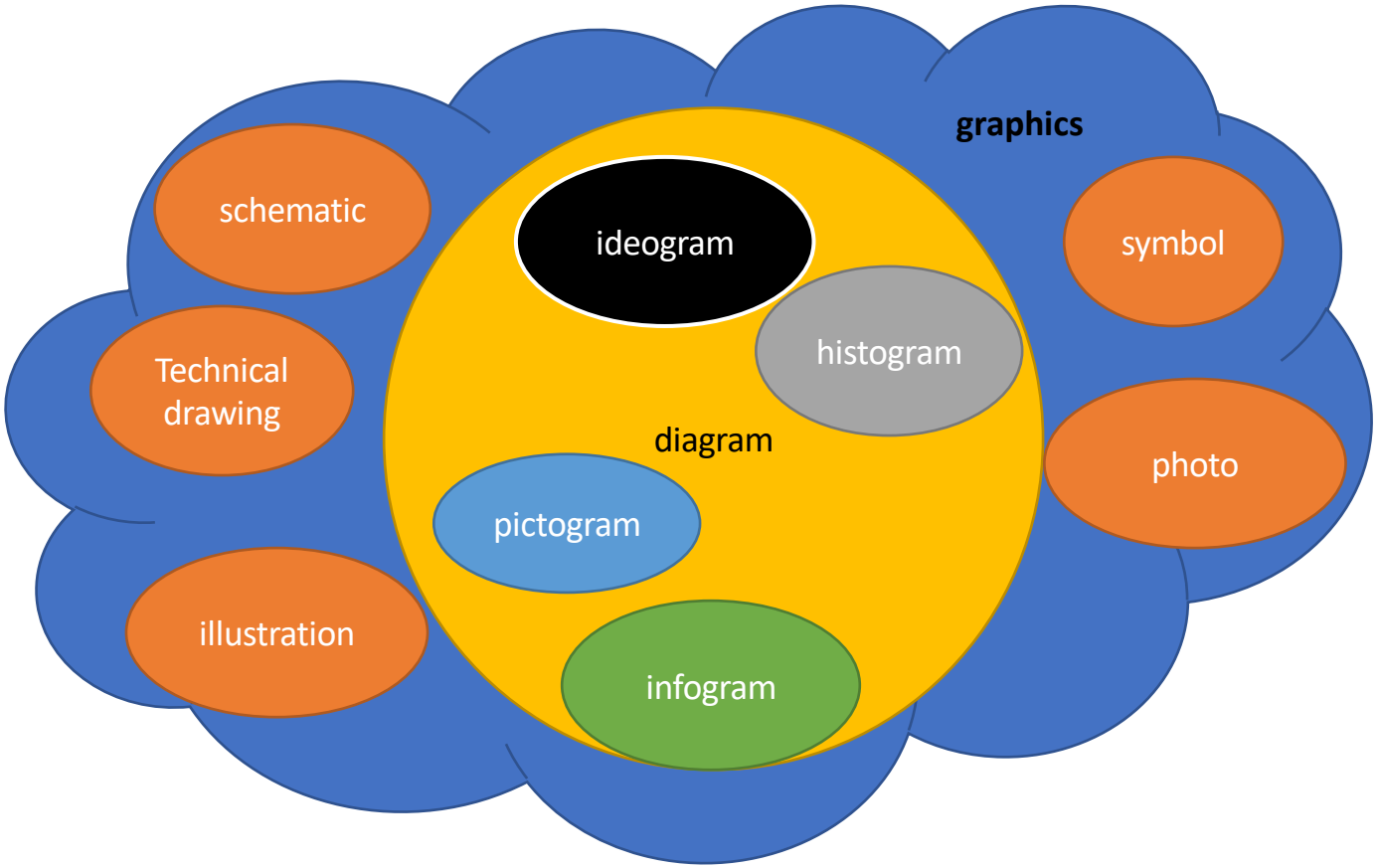
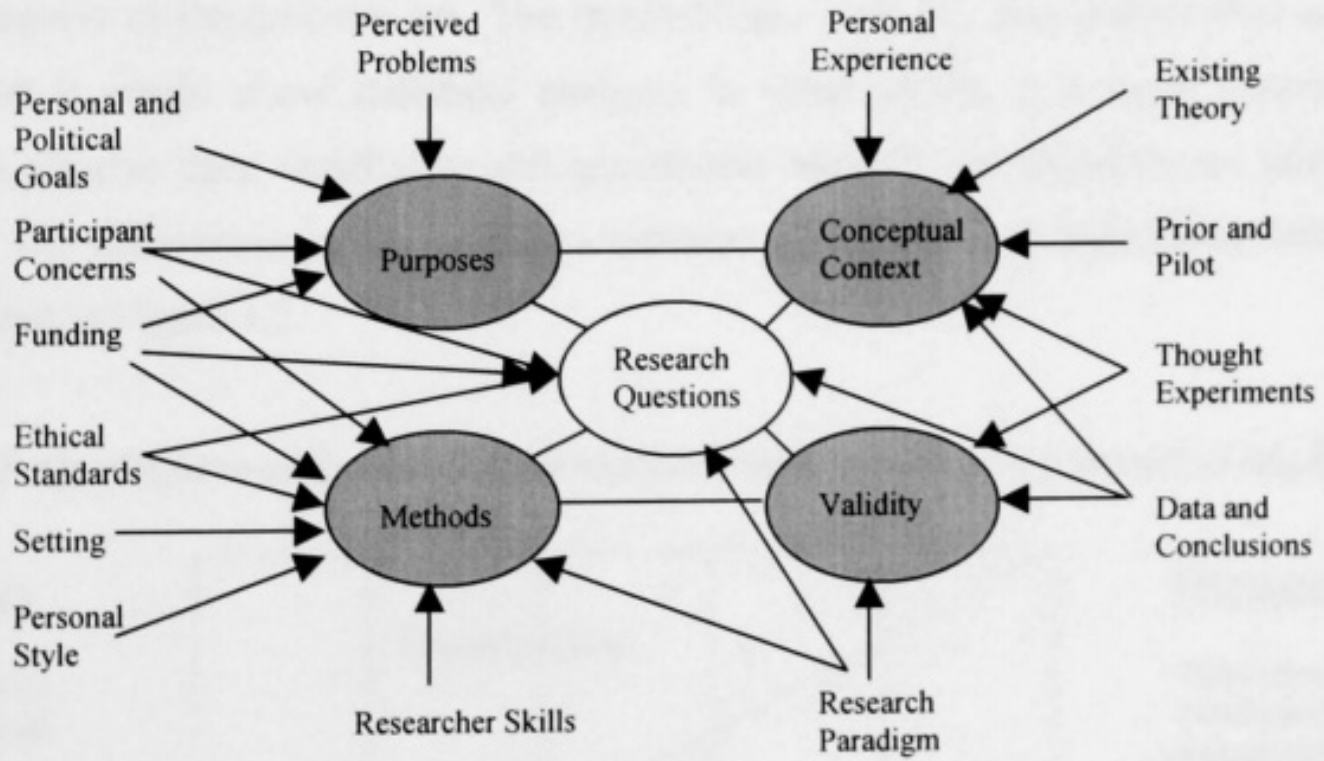

graphics
schematic
ideogram
symbol
Technical drawing
histogram
diagram
photo
pictogram
illustration
infogram

Figure 1. 1 Contextual factors influencing a research design (adopted from Maxwell, 1996, p. 7)

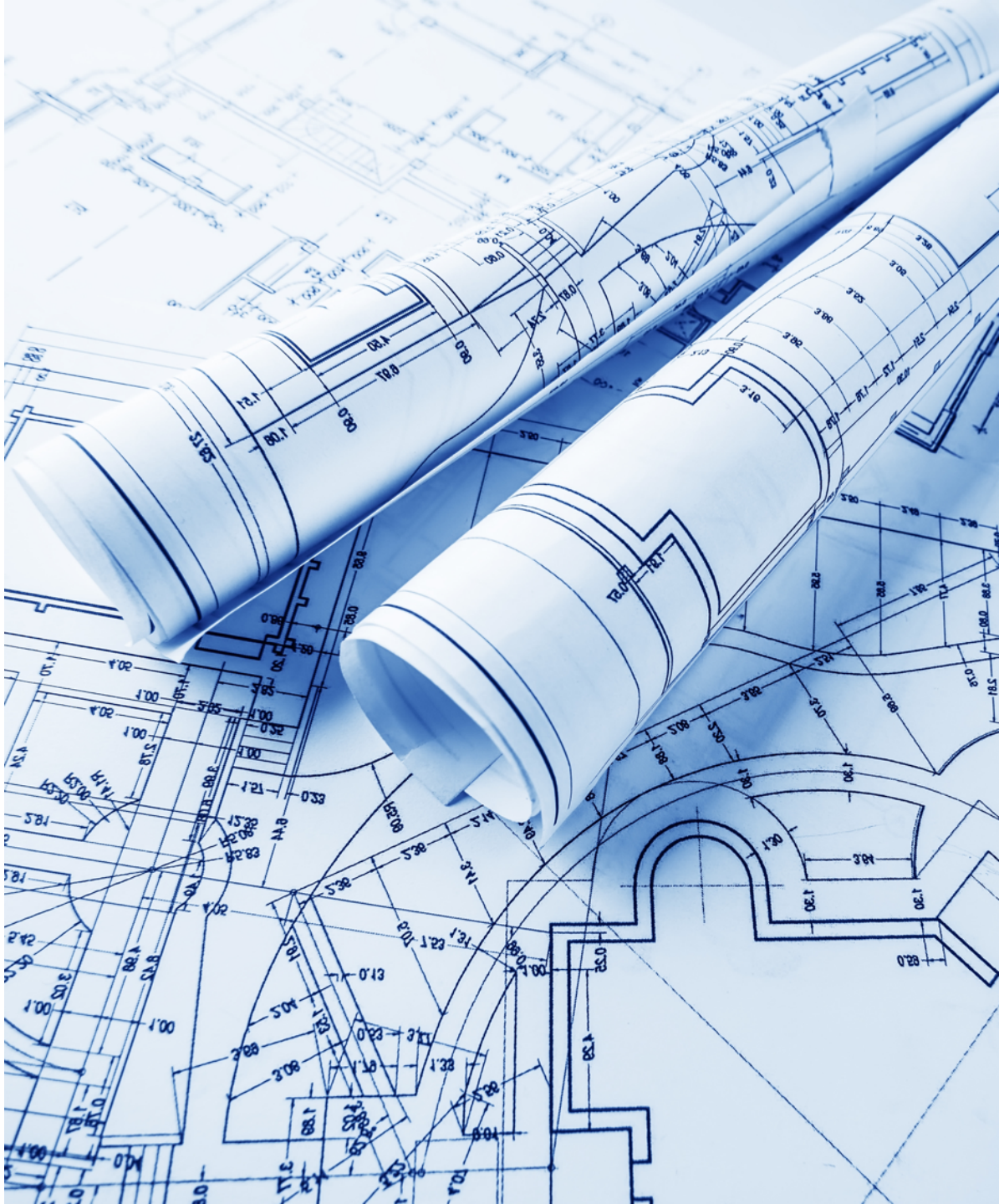


A schematic,

is a representation of
the elements of
a system using abstract,
graphic symbols rather
than realistic pictures.

Technical drawing,

is the act
and discipline of
composing drawing
that visually
communicate how
something functions or
is constructed.



An illustration

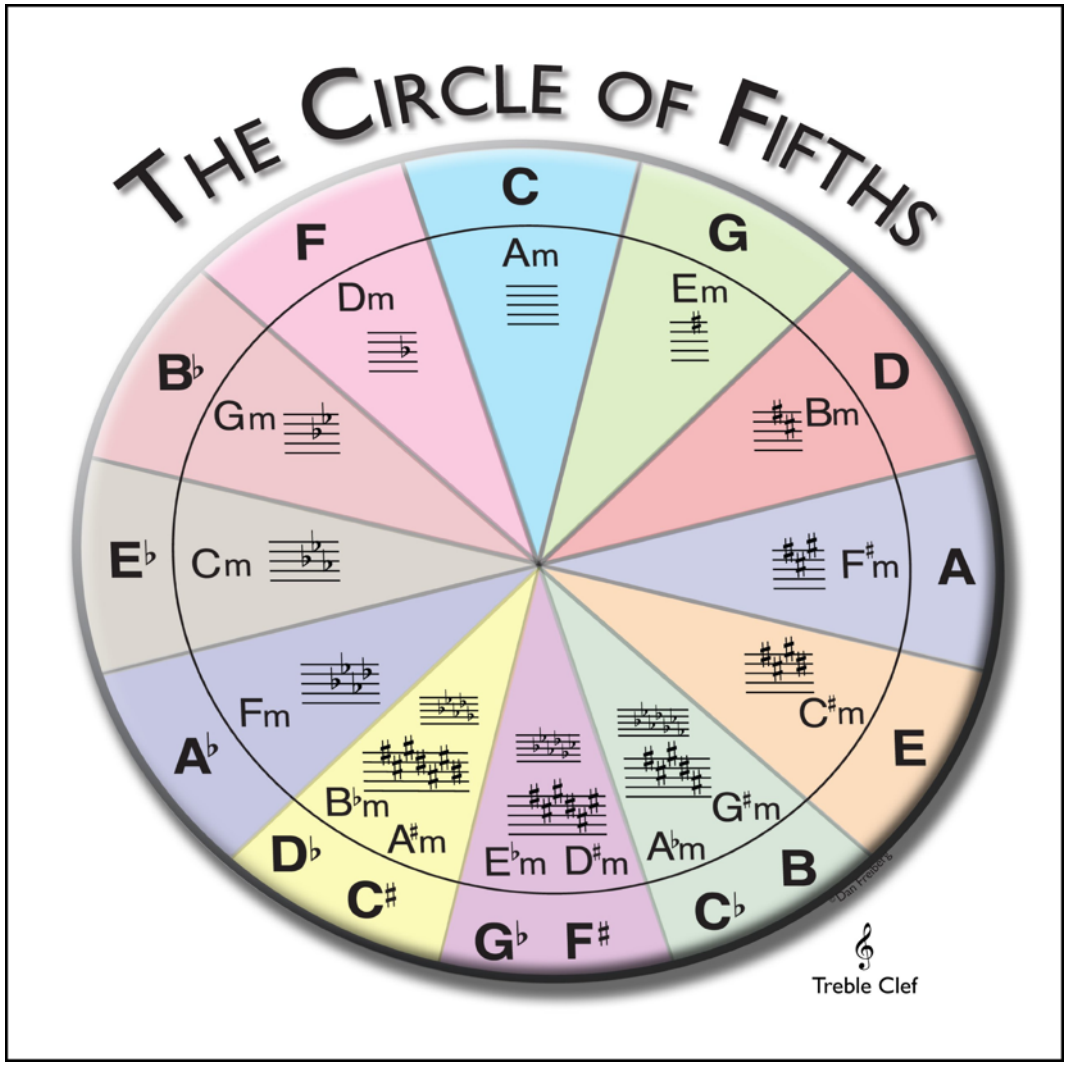
Is a visual representation that stresses subject more than form. The aim of an illustration is to elucidate or decorate a story, poem or piece of textual information

A symbol

- is a mark, sign, or word that indicates, signifies, or is understood as representing an idea, object, or relationship.

A diagram

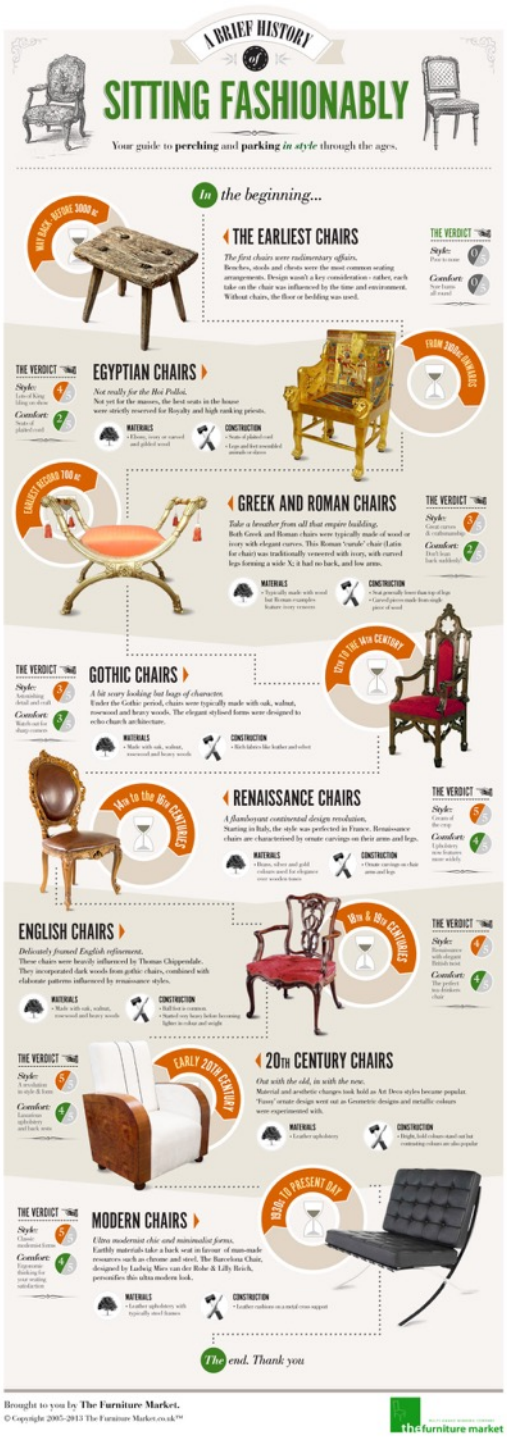
- is a simplified and structured visual representation of concepts, ideas, constructions, relations, statistical data, etc., used to visualize and clarify the topic.




Rio2016

SUCCESFUL PEOPLE

UNSUCCESFUL PEOPLE



OSCAR DRESSES

EVERY DRESS WORN BY BEST ACTRESS ACADEMY AWARD WINNERS

ACTRESSES WHO DIDN'T ATTEND TO ACCEPT THEIR AWARDS:

1934 – KATHARINE HEPBURN
1935 – CLAUDETTE COLBERT
1946 – JOAN CRAWFORD
1956 – ANNA MAGNANI
1957 – INGRID BERGMAN
1962 – SOPHIA LOREN
1963 – ANNE BANCROFT
1964 – PATRICIA NEAL
1967 – ELIZABETH TAYLOR
1968 – KATHARINE HEPBURN
1969 – KATHARINE HEPBURN
1970 – MAGGIE SMITH
1971 – GLENDA JACKSON
1974 – GLENDA JACKSON
1975 – ELLEN BURSTYN
1982 – KATHARINE HEPBURN

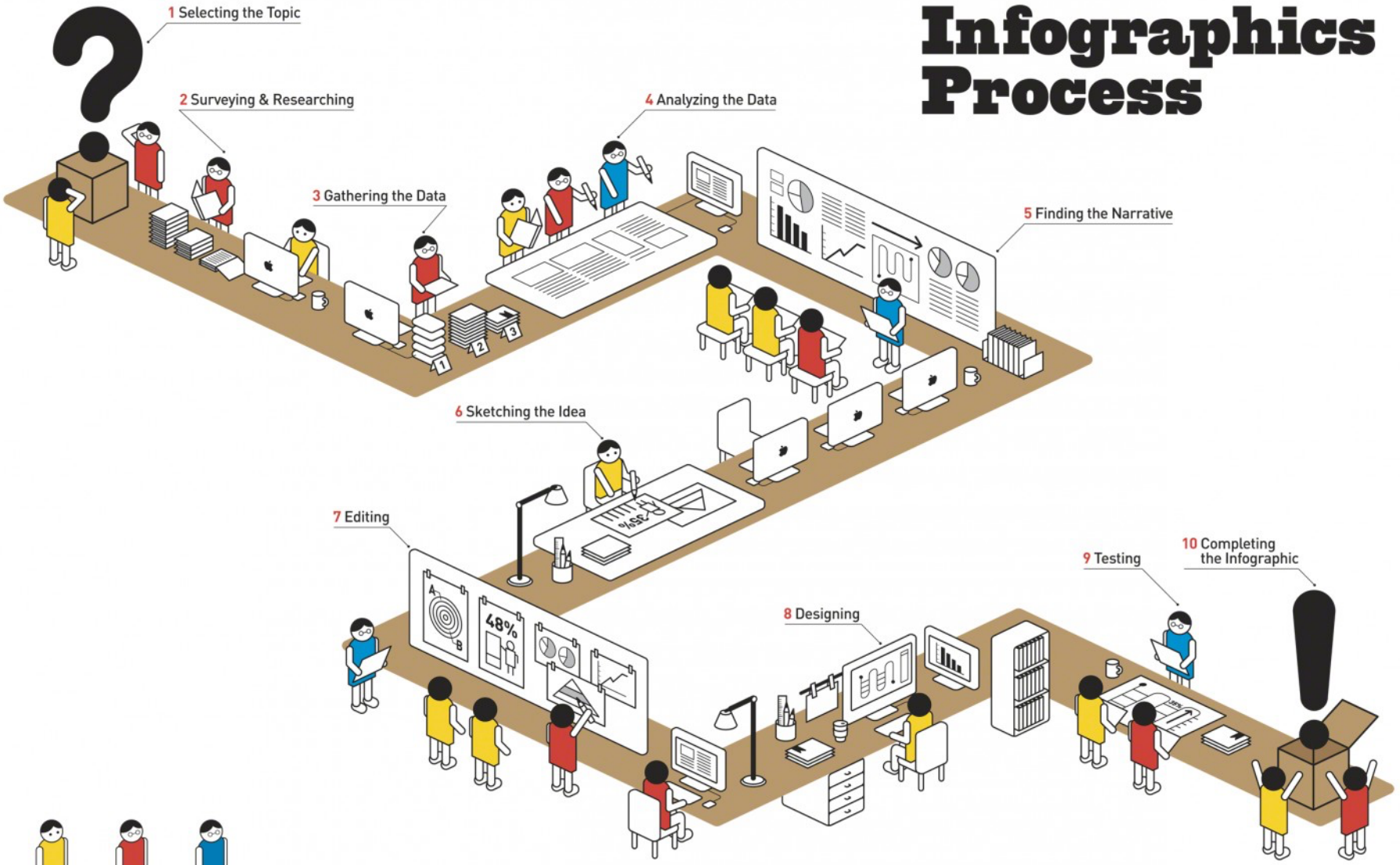
A BRIEF HISTORY OF 3D PRINTING

The inception of 3D printing can be traced back to 1976, when the inkjet printer was invented. In 1984, adaptations and advances on the inkjet concept morphed the technology from printing with ink to printing with materials. In the decades since, a variety of applications of 3D printing technology have been developed across several industries. The following is a brief history of the major milestones along the way.

PHOTO CREDITS

T.ROWE PRICE CONNECTIONS

Infographics Process



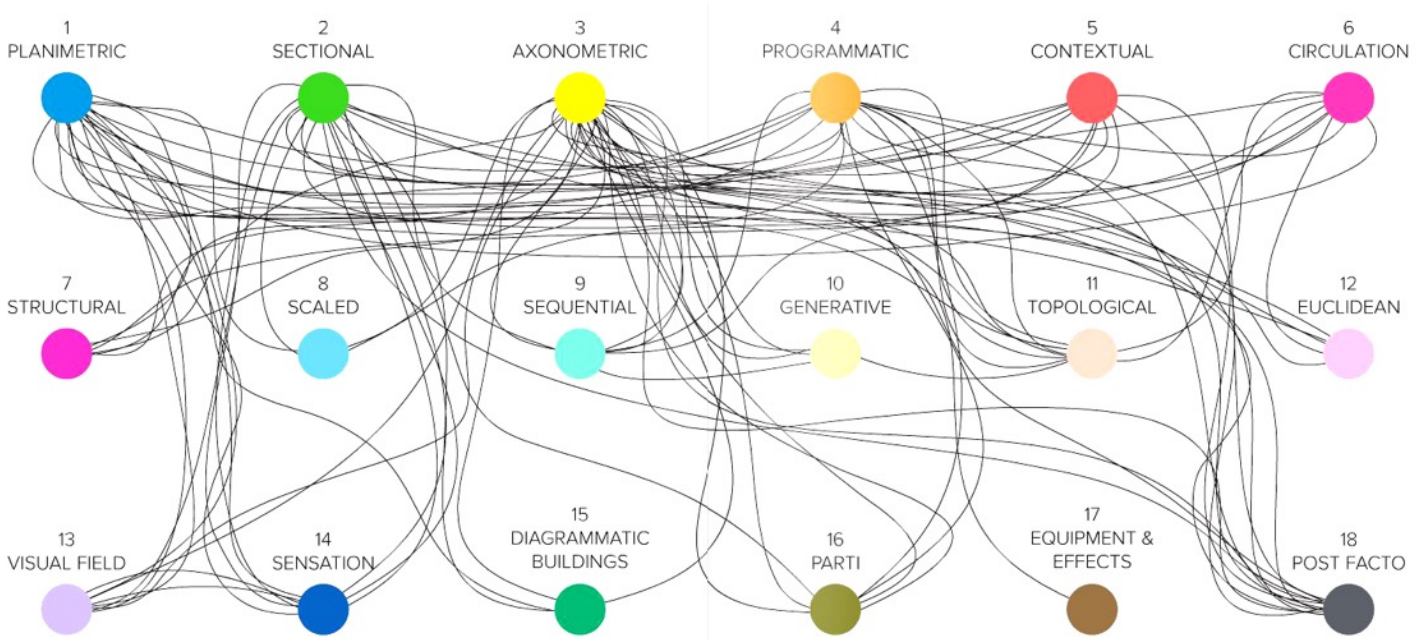
Infographics Lab 203 http://infographicslab203.com

Andrews Chaplin's classification

Architectural Diagrams

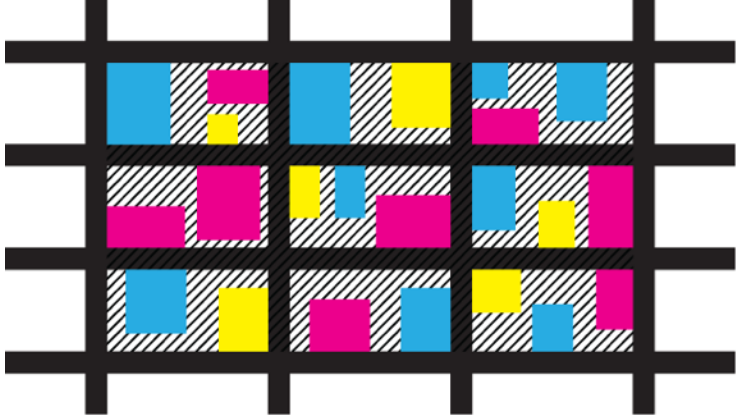
There are many types of diagrams.
Many other professions (music, math, business, etc) use diagrams to explain and clarify their visual thinking.
Diagrams focus on general information. They encourage the designer to explore alternatives.

- Planimetric
- Sectional
- Axonometric
- Programmatic
- Contextual
- Circulation
- Structural
- Scaled
- Sequential
- Generative
- Topological
- Euclidean
- Visual Field
- Sensation
- Diagrammatic Buildings
- Parti
- Equipment and Effects
- Post Facto



Planimetric diagrams

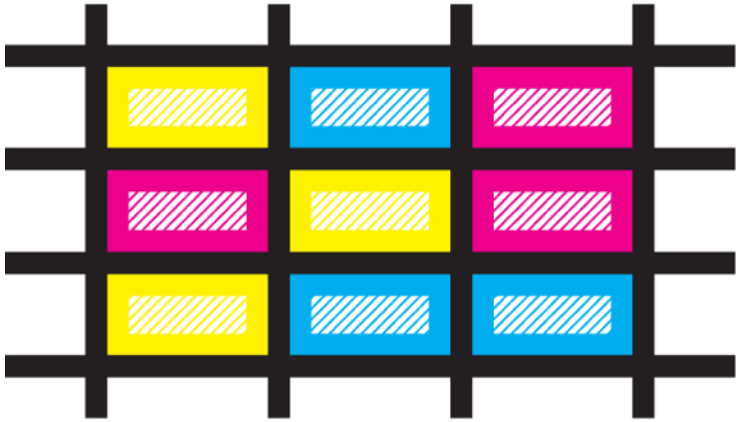
Planimetric diagrams represent concepts and spatial elements. They often relate the architectural form with program, spatial composition and layout.



EXISTING CONTEXT

Heterogeneous blocks

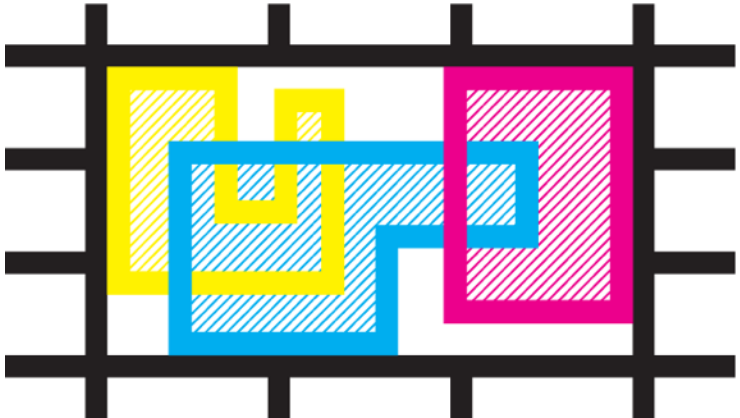
Homogeneous residual public space



PERIMETER BLOCKS

Homogeneous blocks

Heterogeneous semi-public spaces



PERIMETERS BLOCK

Heterogeneous block

Heterogeneous public and semi-public

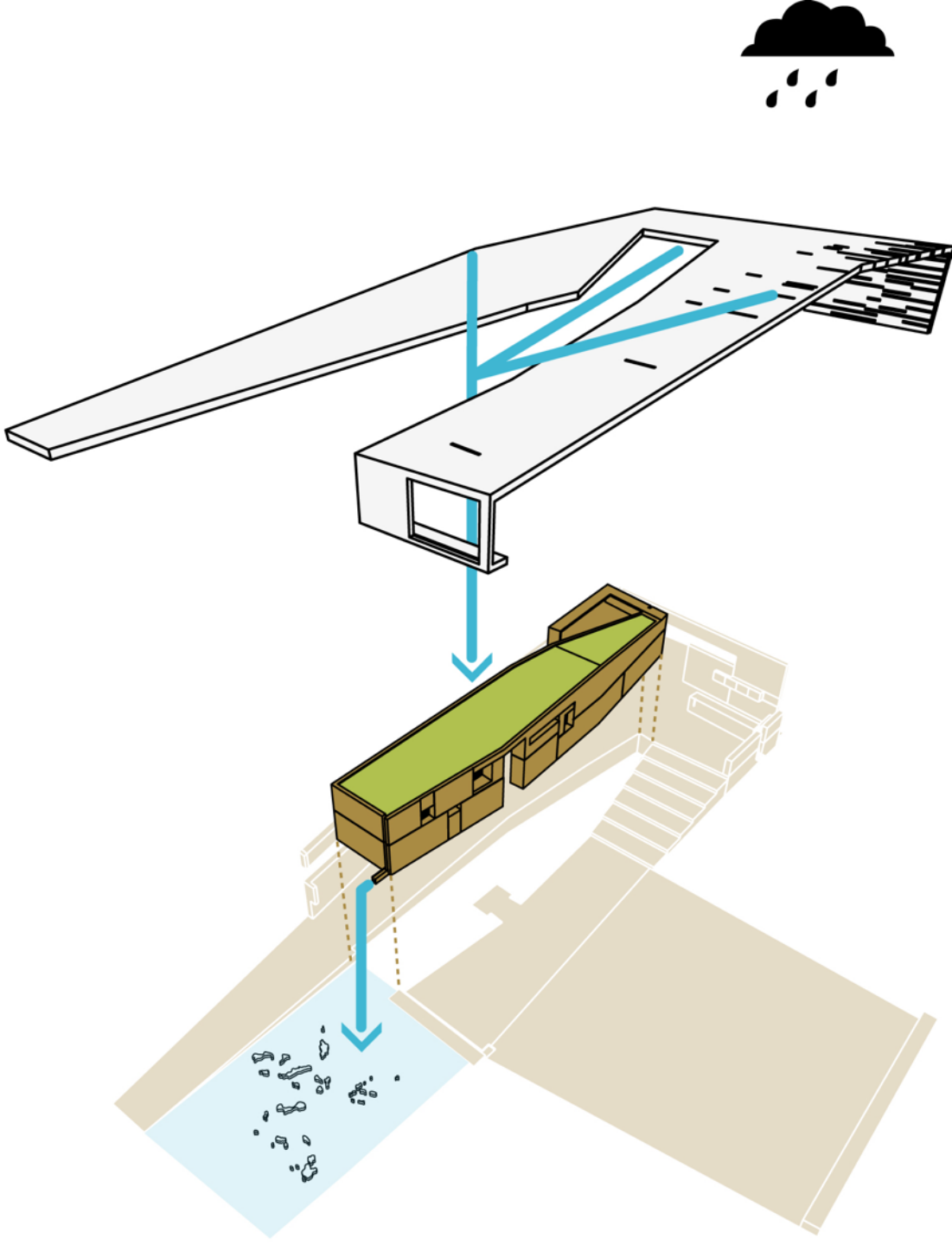
sectional diagrams

Sectional diagrams relate to architectural and spatial concepts using a vertical plane cut through an object to show the interiority and verticality of a design.

These diagrams often relate architectural form with program, invisible phenomenon such as light and wind, and relate elements to the human scale.

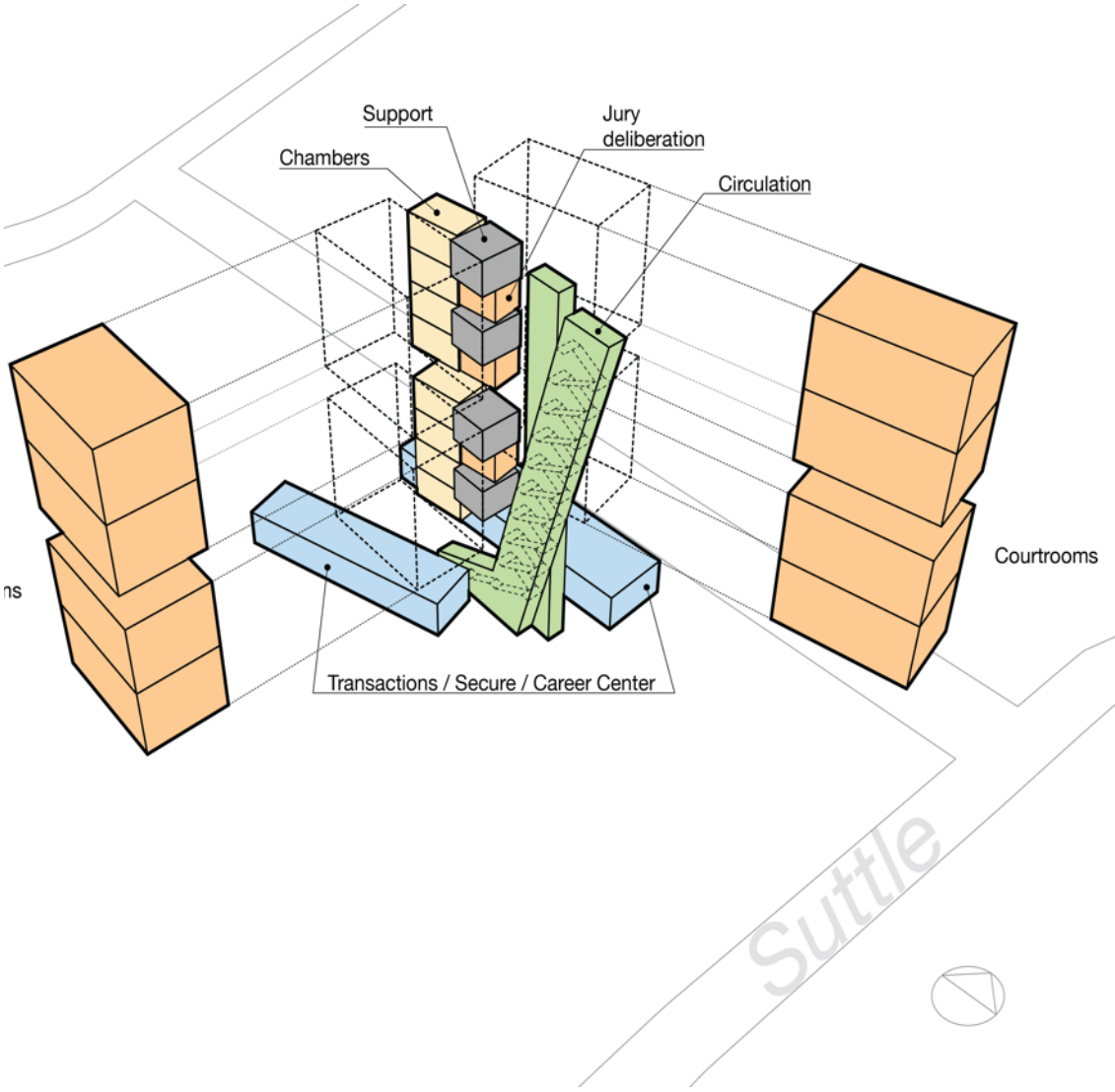
Axonometric diagrams

Axonometric diagrams relate to architectural or spatial concepts as seen from an exterior viewpoints in parallel projection. These diagrams are often used as descriptive tools to illustrate a design concept as a whole, whether it is an exploded view of individual elements or as a unified body representing the intended final outcome, although they can also be used as part of a sequence in a design process.



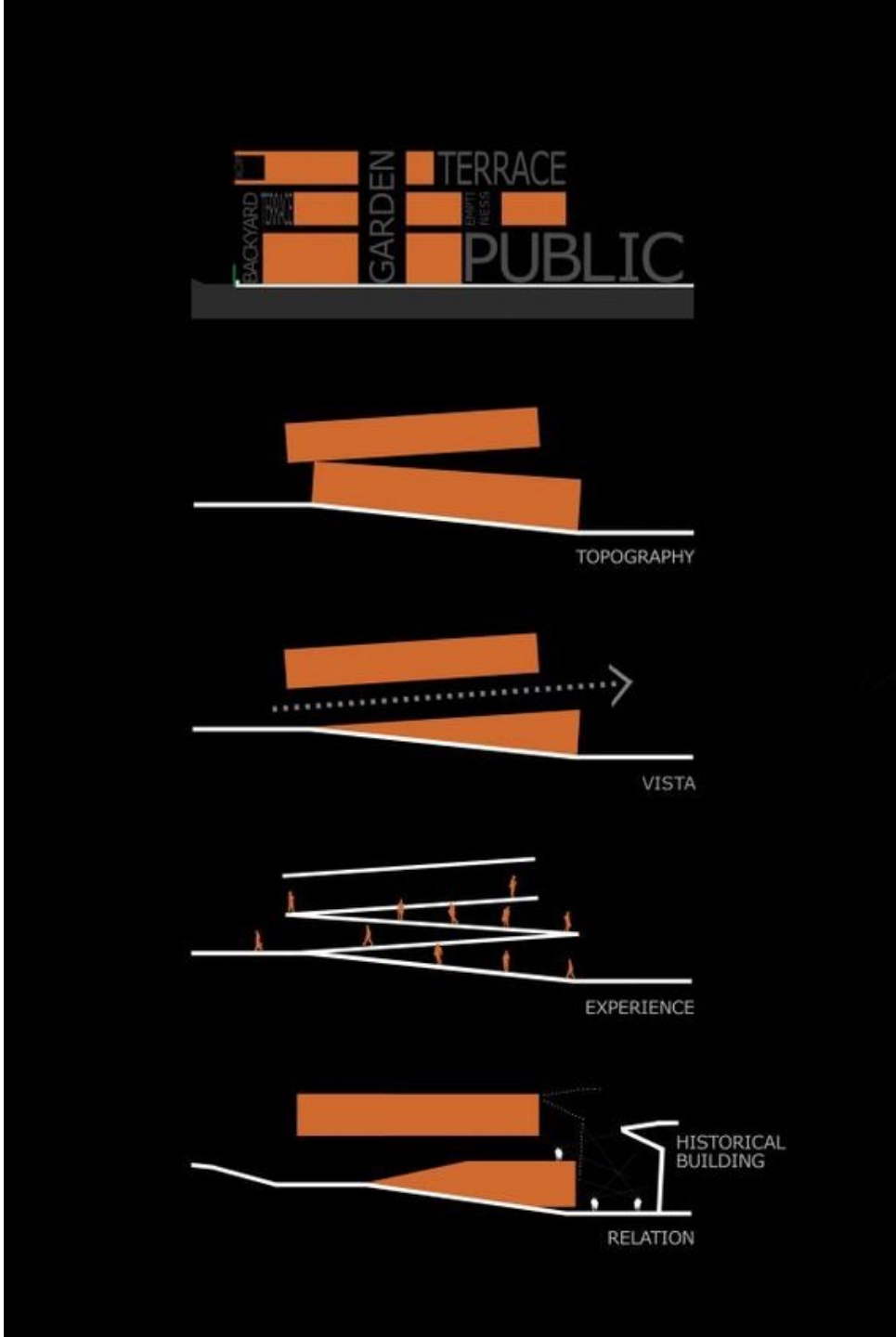
Programmatic diagrams

Programmatic diagrams relate to the layout of a building in terms of program and use, and are rare used to visualize how how program relate to the building form. These diagrams are usually Planimetric, sectional and axonometric diagrams, and relate the building form to the intended function of each area.



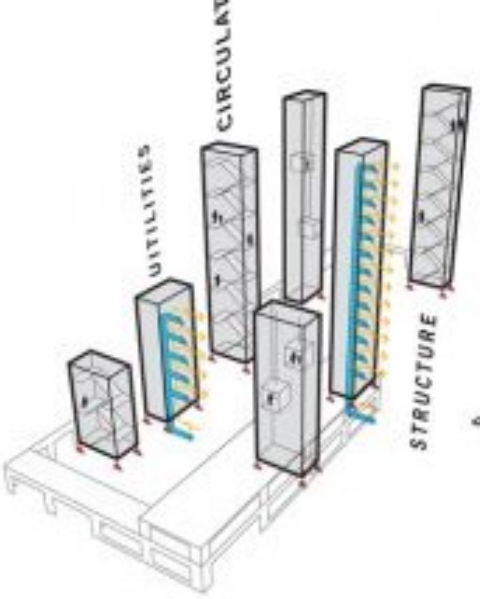
Contextual diagrams

Contextual diagrams relate a design concept to larger contextual aspects beyond itself. These diagrams frequently represent abstract notions, and so often contain less fine detail than other type of diagrams. Contextual diagrams range in scale from immediate surroundings to global conditions and activities.

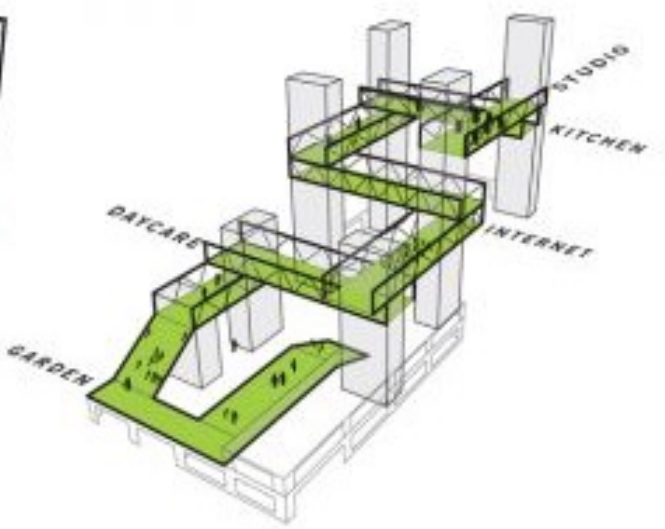


Circulation diagrams

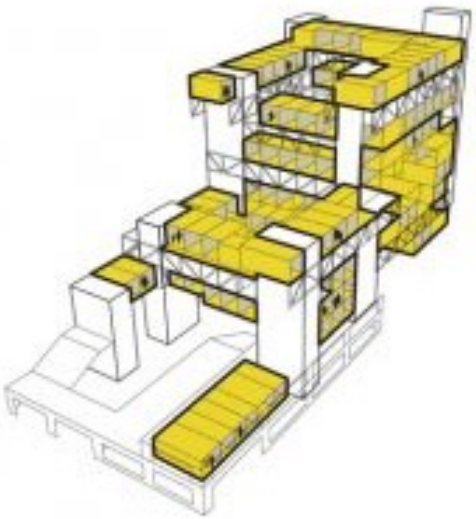
Circulation diagrams relate building form to the circulation aspects of a design concept. Circulation often included as an aspect in programmatic diagrams, though can often be represented in a more detailed manner when presented in diagrams focusing purely on circulation.



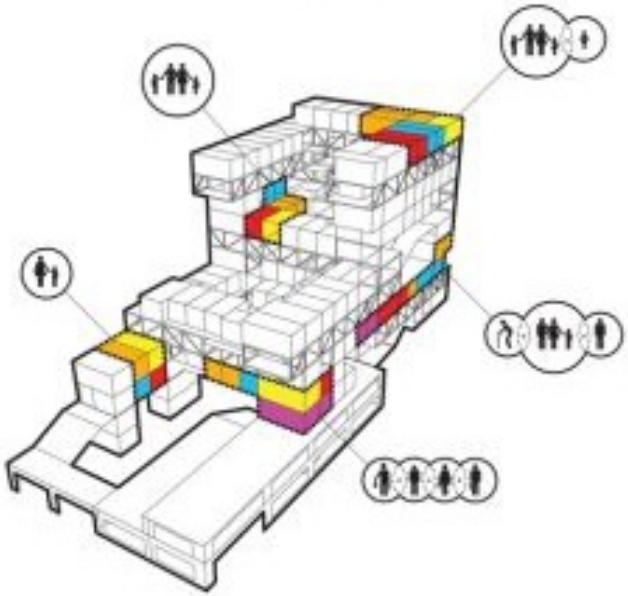
CONCRETE CORES



NETWORK OF COMMUNITY SPACES



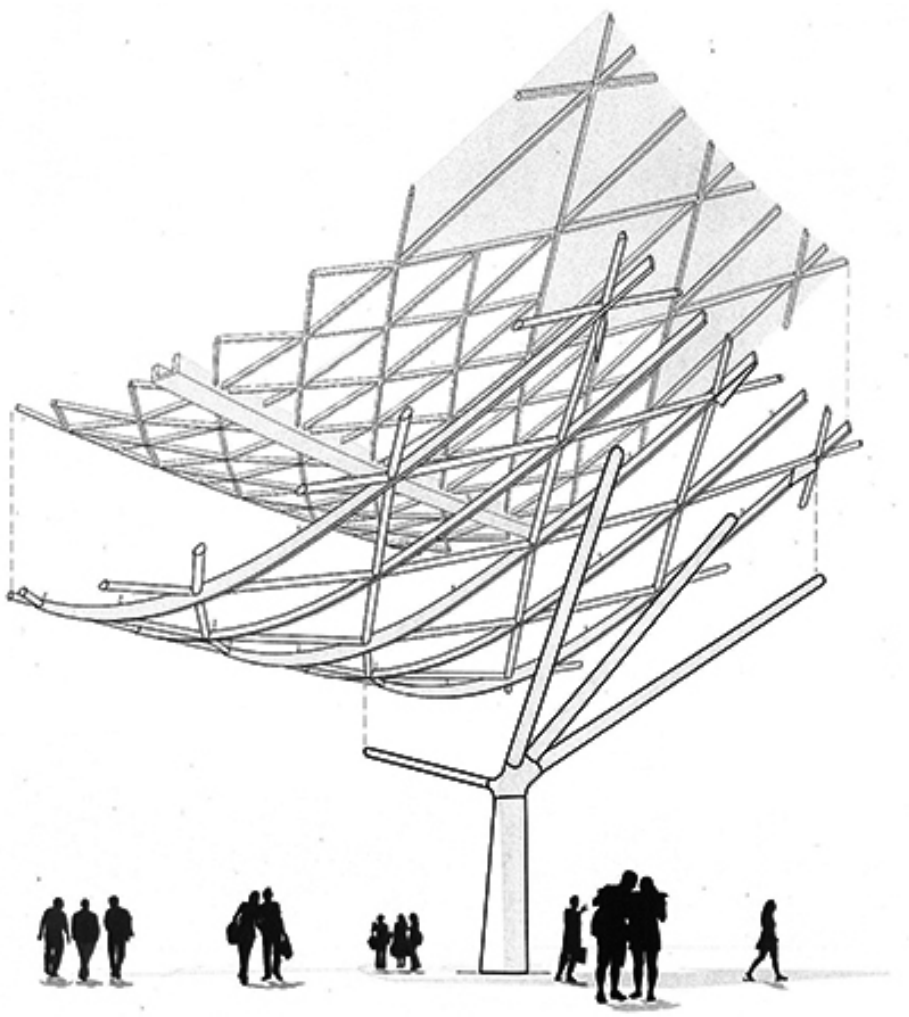
LIVE-AND-WORK UNITS



VERTICAL NEIGHBORHOODS

Structural diagrams

Structural diagrams relate building form to structural aspects of a design concept. Usually this is a Planimetric, sectional or axonometric diagram of the structural elements of a building illustrated in relation to the overall building form. Sometimes these diagrams also describes invisible phenomenon such as compression and tension through use of scale and color range.



Sequential diagrams

- Diagrams pertaining to a derivate sequence in a design process describe a sequence of steps in a design process. This is often presented as an equation of sorts, or as a numbered process ranging from two or more steps. These diagrams often make use of a background or setting that remains constant throughout the process, only changing one or two variables so as to be able to communicate the process more clearly.