

Design Ideas and Infographic Presentation in Architecture

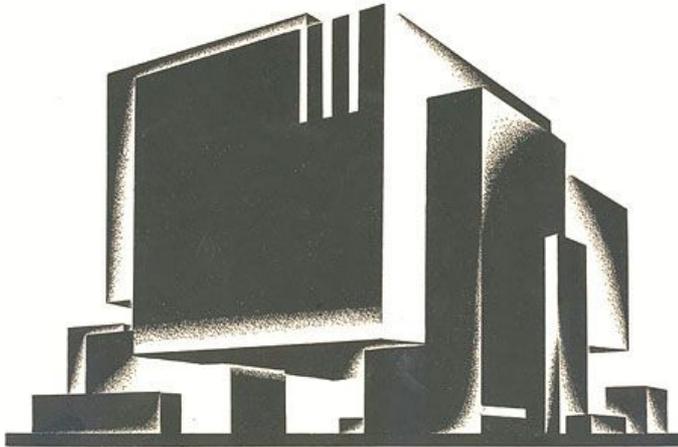
ARC3441

What is graphics?

Visualisation

Creating images, diagrams, drawings in order to:

communicate both abstract and concrete ideas



Iakov Chermikov

Concepts

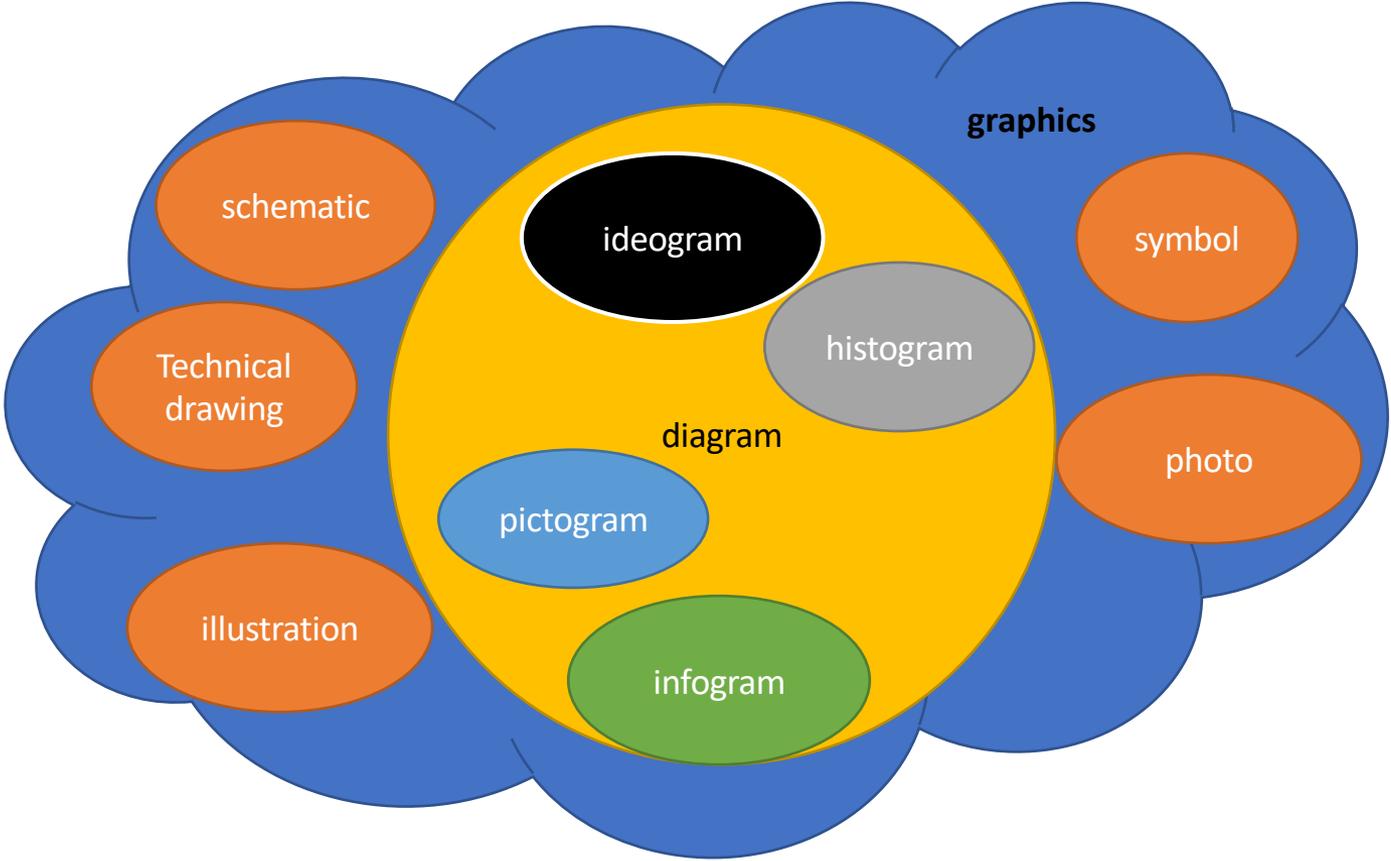
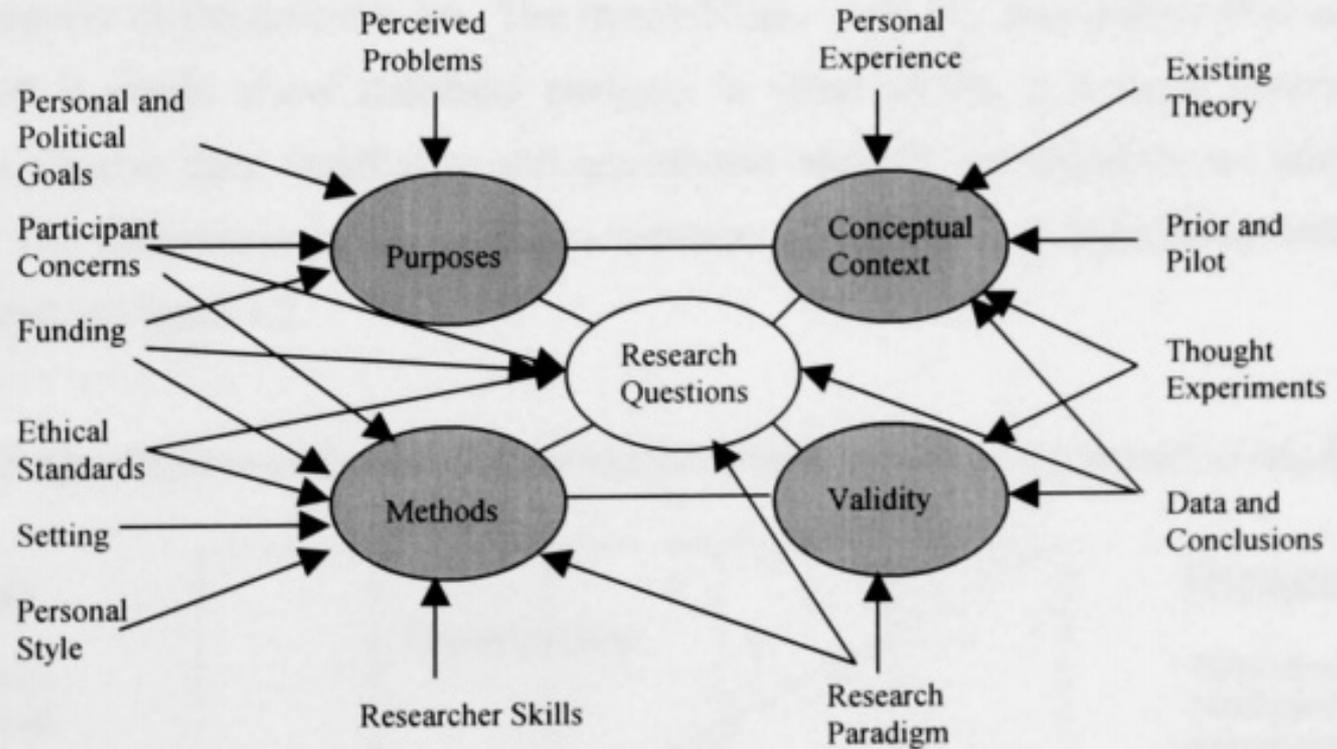


Figure 1. 1 Contextual factors influencing a research design (adopted from Maxwell, 1996, p. 7)



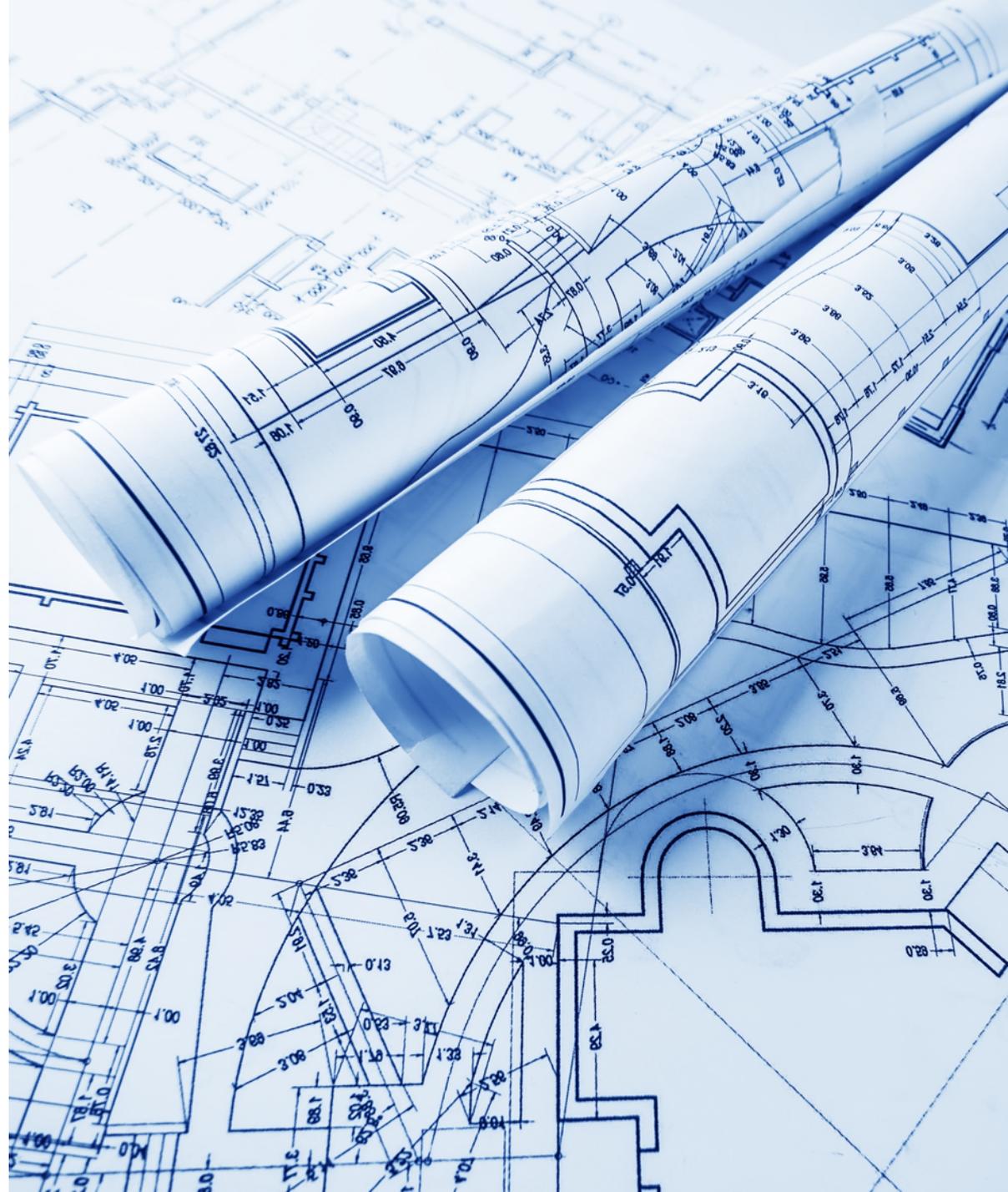
A schematic,

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



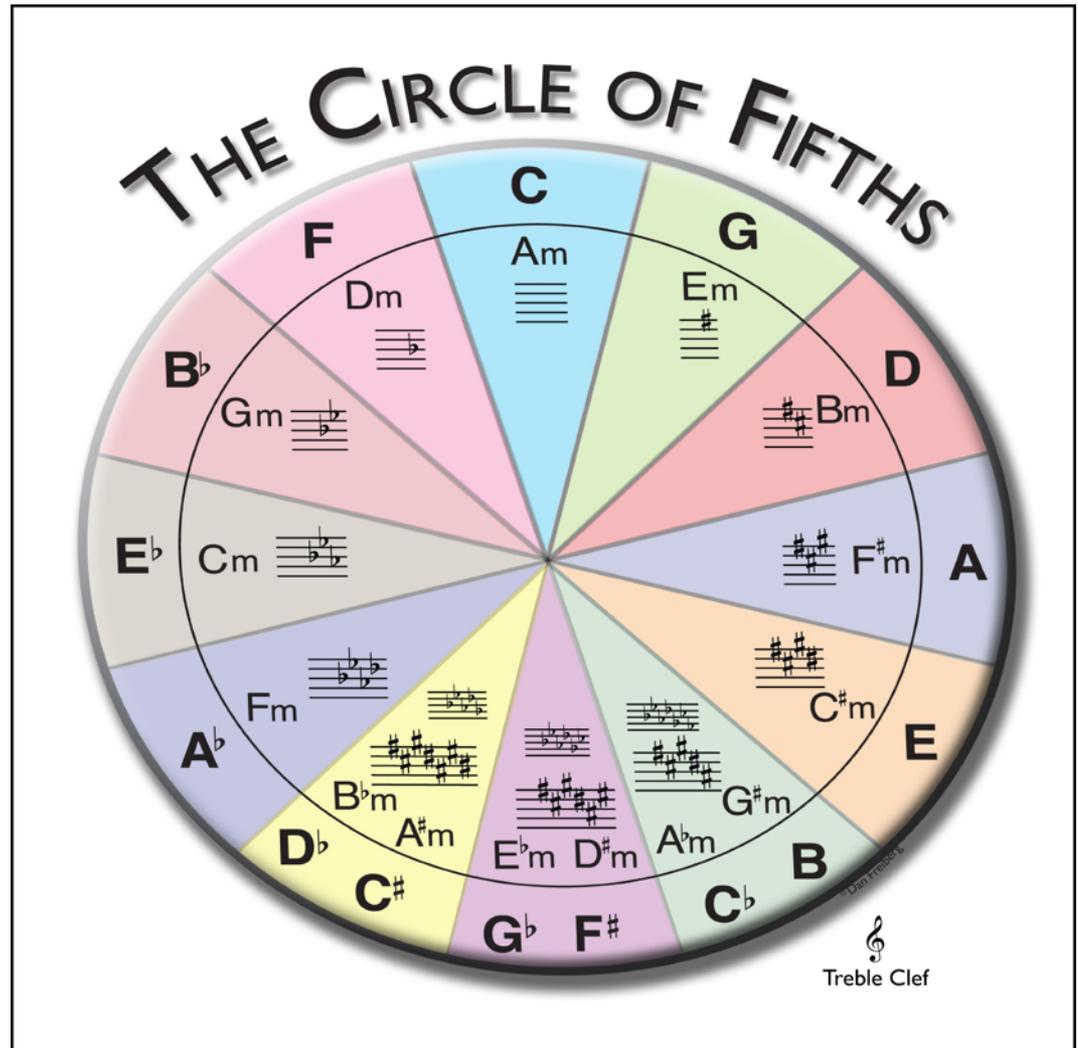
A symbol

- 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.





SUCCESSFUL PEOPLE

UNSUCCESSFUL PEOPLE



A BRIEF HISTORY OF SITTING FASHIONABLY

Your guide to perching and parking in style through the ages.

In the beginning...

THE EARLIEST CHAIRS
The first chairs were rudimentary affairs. Benches, stools and chests were the most common seating arrangements. Design wasn't a key consideration - rather, each table or chest was influenced by the time and environment. Without chairs, the floor or bedding was used.

EGYPTIAN CHAIRS
Not really for the Mass Public. Not set for the masses, the best seats in the house were strictly reserved for royalty and high ranking priests.

GREEK AND ROMAN CHAIRS
Take a breather from all that empire building. Both Greek and Roman chairs were typically made of wood or ivory with elegant curves. The Roman "sella" chair (Latin for chair) was traditionally covered with ivory, with curved legs forming a wide X; it had no back, and low arms.

GOthic CHAIRS
A far more lasting for legs of elephants. Unlike the Gothic period, chairs were typically made of oak, walnut, rosewood and heavy woods. The elegant stylized forms were designed to reflect the architecture.

RENAISSANCE CHAIRS
A glamorous continental design revolution. Starting in Italy, the style was perfected in France. Renaissance chairs are characterized by ornate carvings on their arms and legs.

ENGLISH CHAIRS
Delicately framed English refinement. These chairs were heavily influenced by Thomas Chippendale. Their ornate dark woods from pine, chestnut, combined with delicate patterns influenced by furniture styles.

20th CENTURY CHAIRS
Out with the old, in with the new. Material and aesthetic changes took hold in Art Deco as less became proper. These chairs were heavily influenced by the Bauhaus movement, designed by Ludwig Mies van der Rohe & Lilly Reich, providing the ultra-modern look.

MODERN CHAIRS
Ultra modernist chic and minimalist forms. Earthly materials like a brick were in favor of man-made materials such as chrome and steel. The Barcelona Chair, designed by Ludwig Mies van der Rohe & Lilly Reich, provides the ultra-modern look.

THE end. Thank you

A BRIEF HISTORY OF EYEGLASSES

54-68AD FIRST WRITTEN RECORD
The first written record of eyeglasses is found in the Roman poet Juvenal's Satires, where he describes a man wearing a pair of glasses made of lead.

1286 INVENTION OF EYEGLASSES
The first eyeglasses are made in Pisa, Italy.

1300 "EYEGLASSES"
A term for eyeglasses is used for the first time.

1352 CAUGHT ON CANVAS
The earliest eyeglasses were made of wood or ivory with elegant curves. The Roman "sella" chair (Latin for chair) was traditionally covered with ivory, with curved legs forming a wide X; it had no back, and low arms.

1403 GLASSES APPLIE
The first eyeglasses are made in Pisa, Italy.

1600 A PORTRAIT OF FRANCISCO
The first eyeglasses are made in Pisa, Italy.

1604 JOHANNES KEPLER
The first eyeglasses are made in Pisa, Italy.

1727 OVER THE EAR
The first eyeglasses are made in Pisa, Italy.

1797 FOUR LENS SPECS
The first eyeglasses are made in Pisa, Italy.

1825 ASTIGMATISM
The first eyeglasses are made in Pisa, Italy.

1830 MONOCLES
The first eyeglasses are made in Pisa, Italy.

1914 WORN BY THE MASSES
The first eyeglasses are made in Pisa, Italy.

1929 FIRST MASS PRODUCED GLASSES
The first eyeglasses are made in Pisa, Italy.

1936 POLARIZED SUNGLASSES
The first eyeglasses are made in Pisa, Italy.

1950 3D GLASSES
The first eyeglasses are made in Pisa, Italy.

1953 VARIOFOCAL LENSES
The first eyeglasses are made in Pisa, Italy.

1960 REACTOLITE
The first eyeglasses are made in Pisa, Italy.

2004 MP3 GLASSES
The first eyeglasses are made in Pisa, Italy.

2014 GOOGLE GLASS
The first eyeglasses are made in Pisa, Italy.

OSCAR DRESSES

EVERY DRESS WORN BY BEST ACTRESS ACADEMY AWARD WINNERS

1929 JANET GAYNOR "The Sign of the Cross"	1930 MARY PICKFORD "The Sign of the Cross"	1931 MARIE DRESSLER Unknown	1932 HELEN HAYES Unknown	1936 BETTE DAVIS Unknown	1937 LUISE RAINER Unknown	1938 LUISE RAINER Unknown	1939 BETTE DAVIS Unknown			
1940 VIVLEN LEIGH Unknown	1941 GINGER ROGERS Unknown	1942 JOAN FONTAINE Unknown	1943 GREER GARSON Unknown	1944 JENNIFER JONES Unknown	1945 INGRID BERGMAN Unknown	1947 OLIVIA DE HAVILLAND Unknown	1948 LORETTA YOUNG Unknown			
1949 JANE WYMAN Unknown	1950 OLIVIA DE HAVILLAND Unknown	1953 SHIRLEY BOOTH Unknown	1954 AUDREY HEPBURN "Roman Holiday"	1955 GRACE KELLY "L'Étranger"	1958 JOANNE WOODWARD Unknown	1959 SUSAN HAYWARD Unknown	1960 SIBYLLA SIGMUND Unknown			
1961 ELIZABETH TAYLOR Unknown	1965 JULIE ANDREWS Unknown	1966 JULIE CHRISTIE Unknown	1969 BARBARA STRISAND "Annie Hall"	1972 JANE FONDA "Yves Saint Laurent"	1973 LEZA MINNELLI "Moulin Rouge"	1976 LOUISE FLETCHER Unknown	1977 FAYE DUNAWAY Unknown			
1978 DIANE KEATON Unknown	1979 JANE FONDA Unknown	1980 SALLY FIELD Unknown	1981 SISSY SPACEK Unknown	1983 MERYL STREEP Unknown	1984 SHIRLEY MAELAINE Unknown	1985 SALLY FIELD "Holly Hobb"	1986 GERALDINE PAGE "Gail Coppe-Hacht"			
1987 MARLEE MATLIN "Thelma & Louise"	1988 CHER "Beverly Hills Cop"	1989 JODIE FOSTER "The Accused"	1990 JESSICA TANDY "Dances with Wolves"	1991 KATHY BATES Unknown	1992 JODIE FOSTER "Annie"	1994 EMMA THOMPSON "Genie"	1994 HOLLY HUNTER "The Piano"			
1995 JESSICA LANGE "Cruel Intentions"	1996 SUSAN SARANDON "Dorothy"	1997 FRANCES MCCORMACK "Richard Tyler"	1998 HELEN HUNT "Tom Ford for Gucci"	1999 GWYNETH PALTROW "Ralph Lauren"	2000 HILARY SWANK "Hollywood Duke"	2001 JULIA ROBERTS Unknown	2002 HALLE BERRY "Die Another Day"			
2003 NICOLE KIDMAN "Jean Paul Gaultier"	2004 CHARLIZE THERON "Gucci"	2005 HILARY SWANK "Lucky"	2006 REESE WITHERSPOON "Mean Girls"	2007 HELEN MIRREN "The Last Days of Disco"	2008 MARION COTILLARD "Jean Paul Gaultier"	2009 KATE WINSLET "Yves Saint Laurent"	2010 SANDRA BULLOCK "Martha"			
2011 NATALIE PORTMAN "Black Swan"	2012 MERYL STREEP "Lovers"	2013 JENNIFER LAWRENCE "Winter's Bone"	ACTRESSES WHO DIDN'T ATTEND TO ACCEPT THEIR AWARDS:							
1934 - KATHARINE HEPBURN					1937 - INGRID BERGMAN		1947 - ELIZABETH TAYLOR		1971 - GLENDA JACKSON	
1935 - CLAUDETTE COLBERT					1938 - SOPHIA LORÉN		1948 - KATHARINE HEPBURN		1974 - GLENDA JACKSON	
1946 - JANE CRAWFORD					1949 - KATHARINE HEPBURN		1967 - ELLEN BASTIDY		1975 - ELLEN BASTIDY	
1956 - ANNA NIKANIN					1964 - PATRICIA NEAL		1970 - MARGIE SIMK		1982 - KATHARINE HEPBURN	

A BRIEF HISTORY OF 3D PRINTING

3D printing is a process of creating three-dimensional objects from a digital file. It is a form of additive manufacturing, where material is added layer by layer to create a physical object from a digital file.

1984 THE BIRTH OF 3D PRINTING
The first 3D printer was developed by Charles Hull, who created the stereolithography (SL) process. This process uses a laser to cure a liquid resin layer by layer, creating a solid object.

1986 HOW 3D PRINTING WORKS
The process of 3D printing involves creating a digital file of an object, which is then sliced into thin layers. These layers are printed one by one, with each layer being added to the previous one. The final object is then finished and polished.

1990s THE BUILDING BLOCKS OF 3D PRINTING
The 1990s saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2000s ENGINEERED ORGANS BRING NEW ADVANCES TO MEDICINE
The 2000s saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2008 3D PRINTING NO KIDNEY
The 2008 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2010s OPEN SOURCE COLLABORATION WITH 3D PRINTING
The 2010s saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2012 3D PRINTING LEADS TO MASS CUSTOMIZATION IN MANUFACTURING
The 2012 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2013 THE FIRST SELF-REPLICATING PRINTER
The 2013 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2014 THE FIRST 3D-CREATION SERVICE LAUNCHES
The 2014 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2015 THE FIRST MAJOR BREAKTHROUGH FOR PROSTHETICS
The 2015 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2016 THE FIRST 3D-BIO PRINTERS ENTER THE MARKETPLACE
The 2016 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2017 FROM CELLS TO BLOOD VESSEL
The 2017 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2018 THE WORLD'S FIRST 3D-PRINTED ROBOTIC ARM
The 2018 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

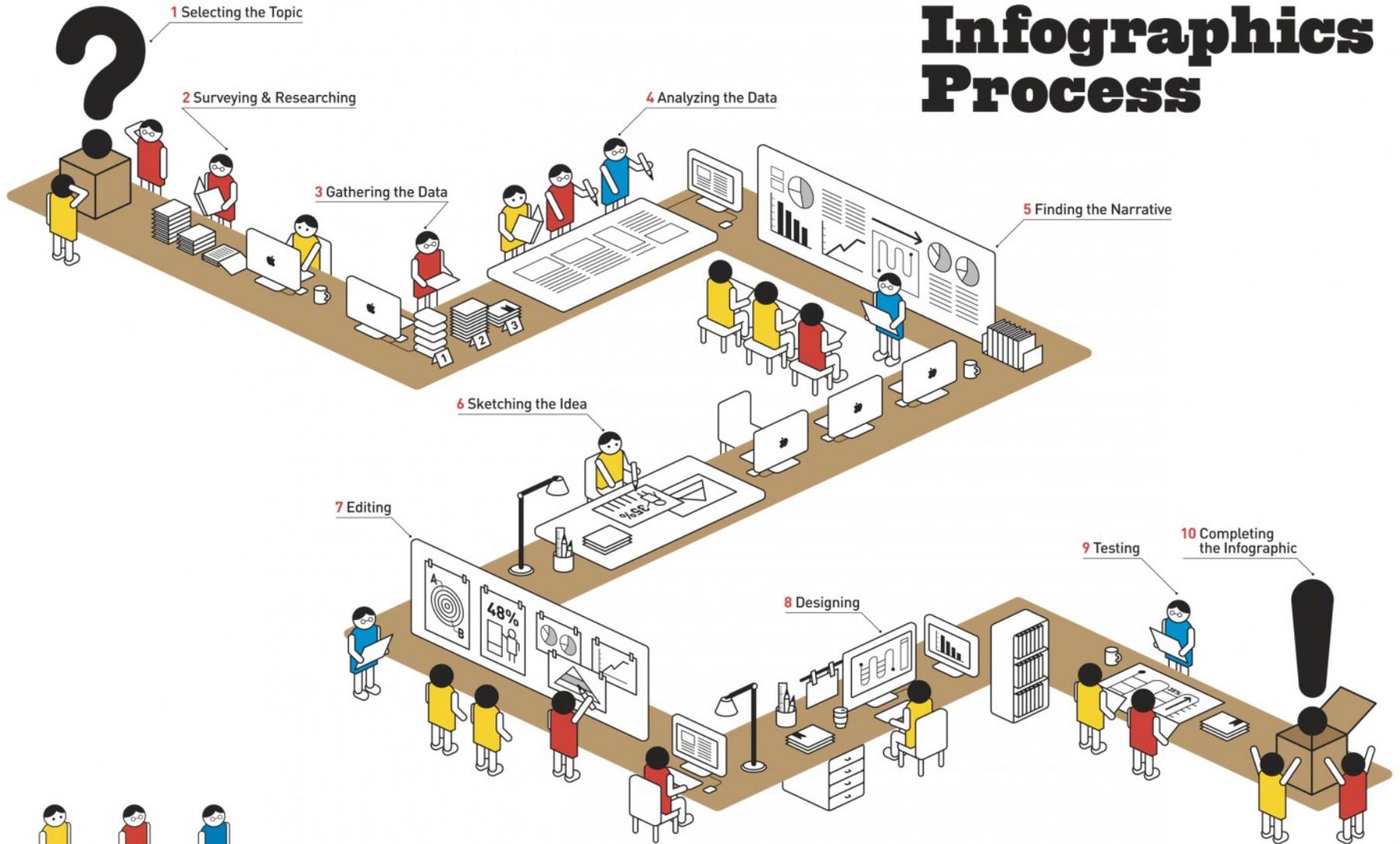
2019 THE WORLD'S FIRST 3D-PRINTED CAR
The 2019 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2020 3D PRINTING IN GOLD
The 2020 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

2021 3D-PRINTED PROSTHETIC LIMB IS IMPLANTED
The 2021 saw the development of several key technologies that made 3D printing more practical and accessible. These included the development of the fused filament fabrication (FFF) process, which uses a heated filament of plastic to create an object, and the development of the selective laser sintering (SLS) process, which uses a laser to sinter powdered material into a solid object.

TOWNE PRICE CONNECTIONS

Infographics Process



 Designer
 Editor
 Data Analyst

Andrews Chaplin's classification

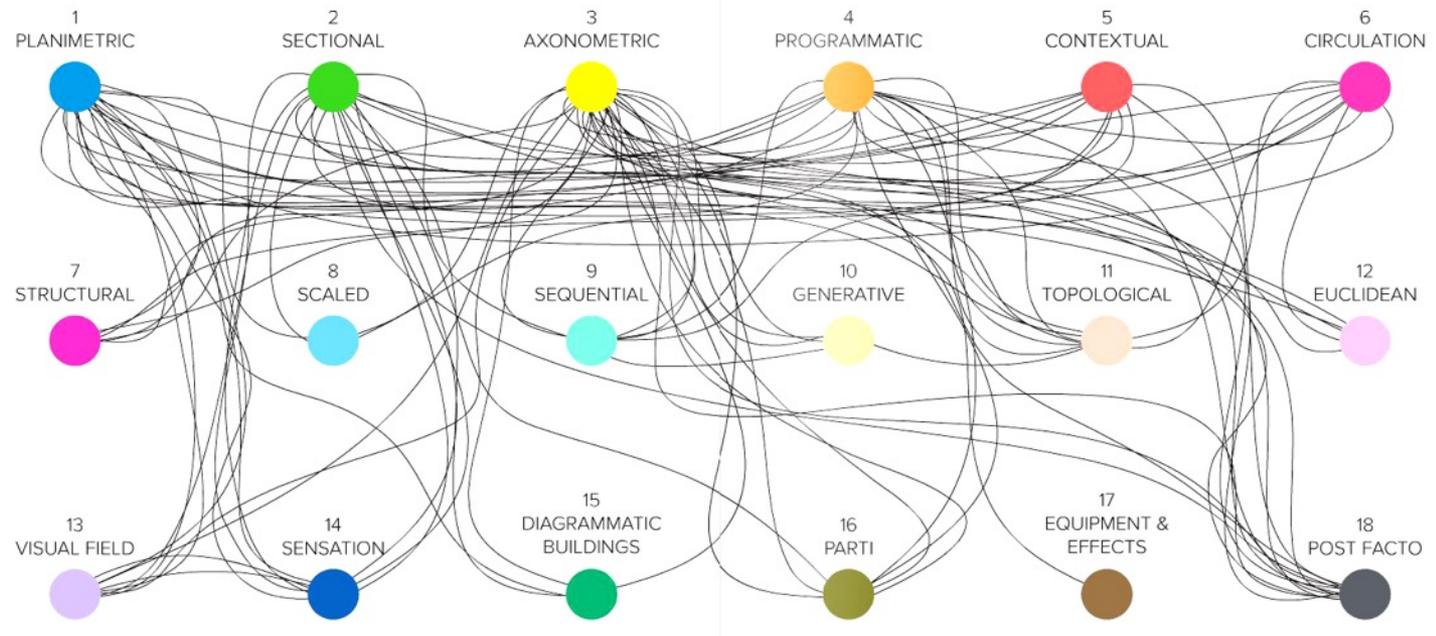
Architectural Diagrams

There are many types of diagrams.

Many other professions (music, math, business, etc) use diagrams to explain and clarify their visual thinking.

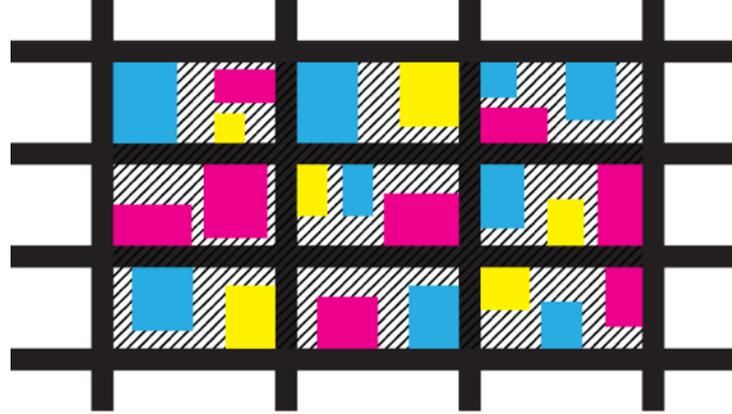
Diagrams focus on general information. They encourage the designer to explore alternatives.

- 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

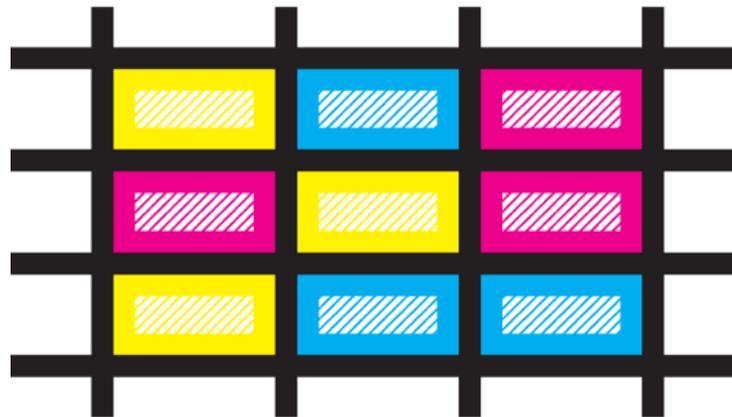
Planimetric diagrams represent concepts and spatial elements. They often relate the architectural form with program, spatial composition and layout.



EXISTING CONTEXT

Heterogeneous blocks

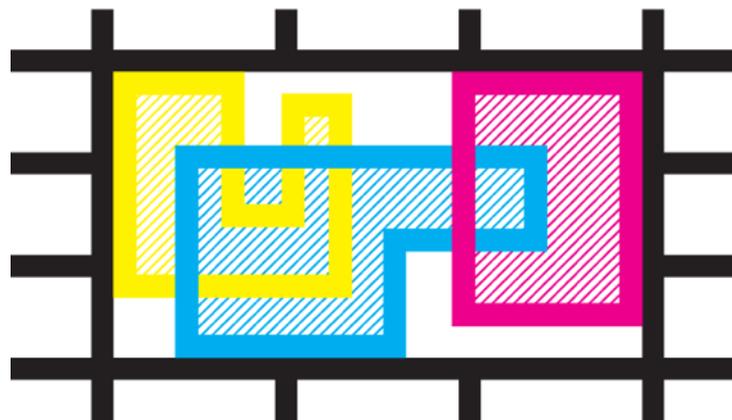
Homogeneous residual public space



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.

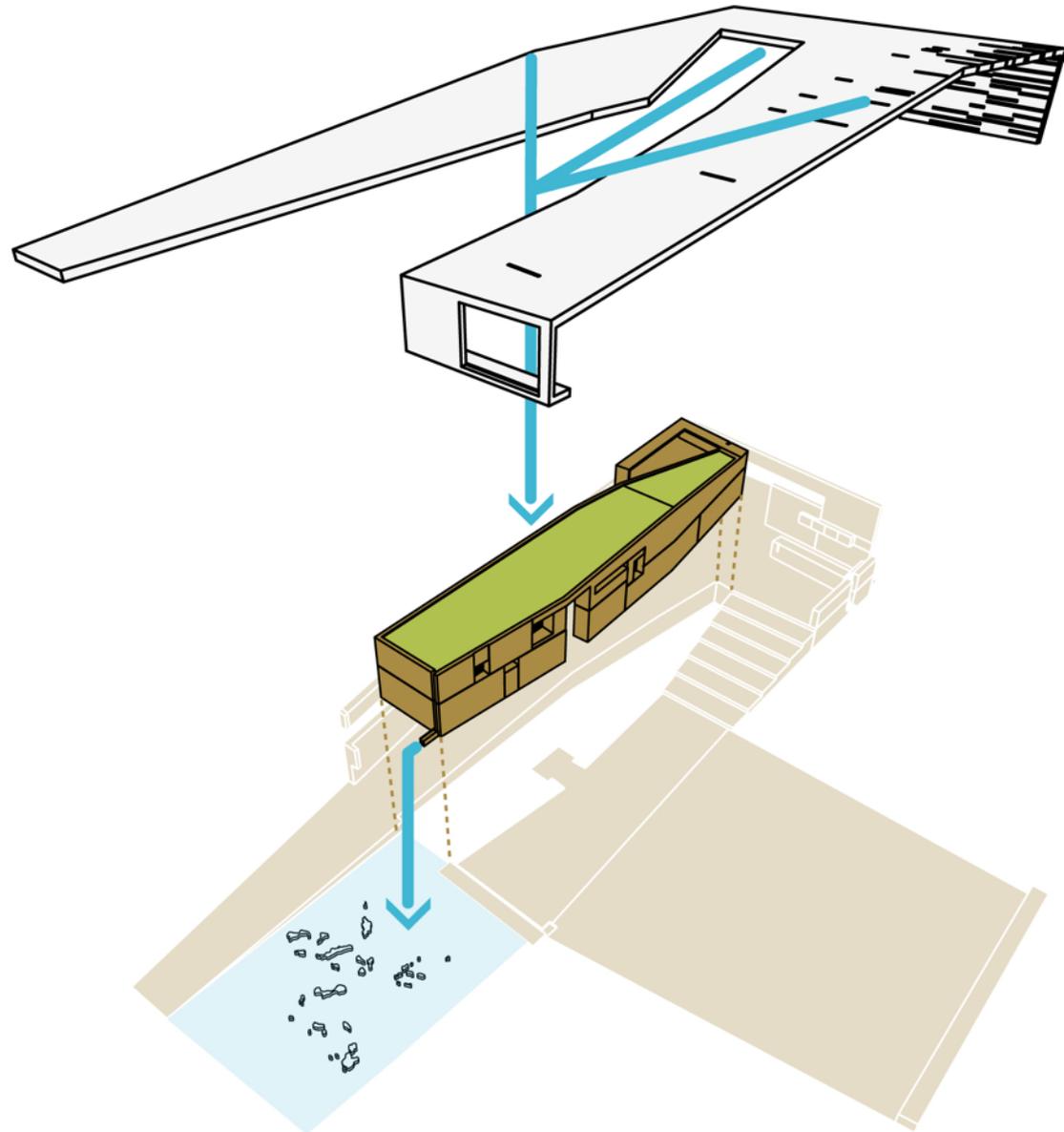
These diagrams often relate architectural form with program, invisible phenomenon such as light and wind, and relate elements to the human scale.





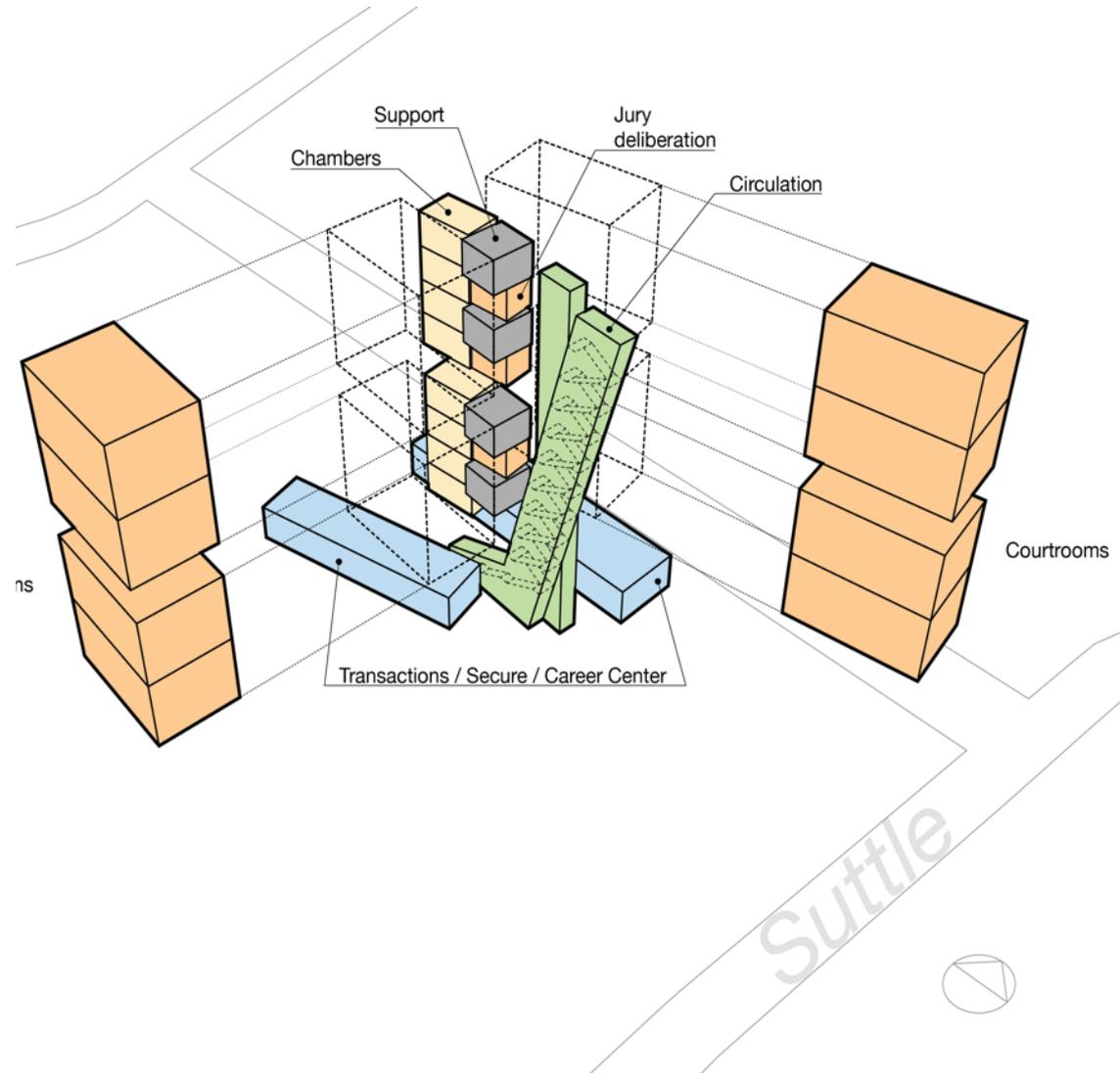
Axonometric diagrams

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.



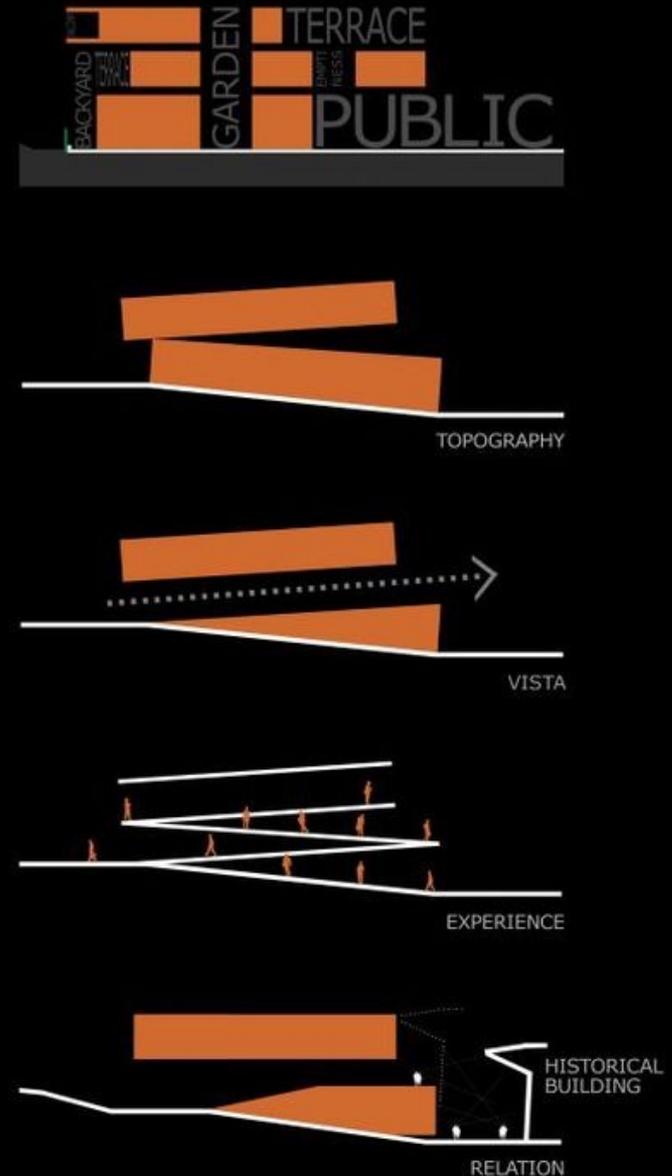
Programmatic diagrams

Programmatic diagrams relate to the layout of a building in terms of program and use, and are rarely used to visualize 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.



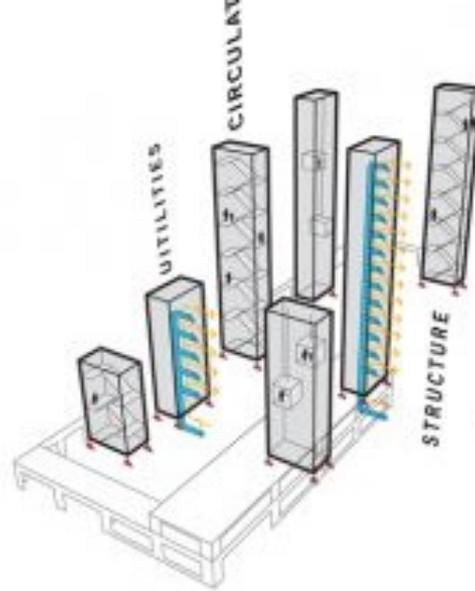
Contextual diagrams

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.

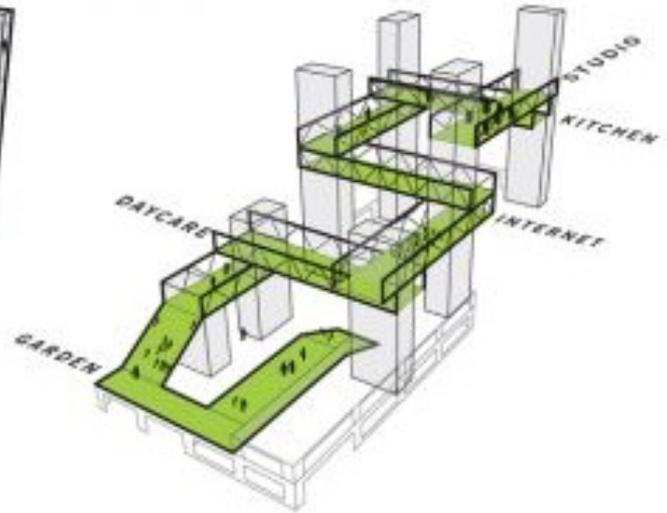


Circulation diagrams

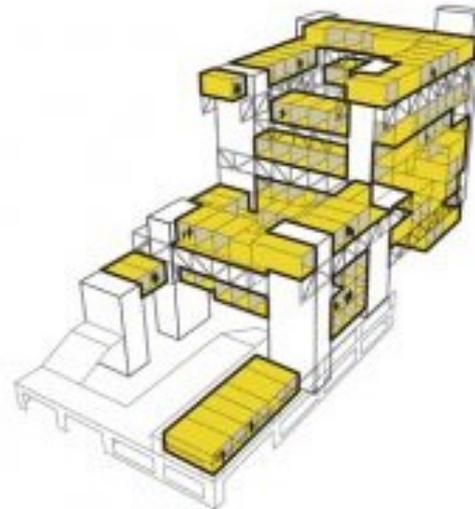
Circulation diagrams relate building form to the circulation aspects of a design concept. Circulation often included as an aspect in programmatic diagrams, though can often be represented in a more detailed manner when presented in diagrams focusing purely on circulation.



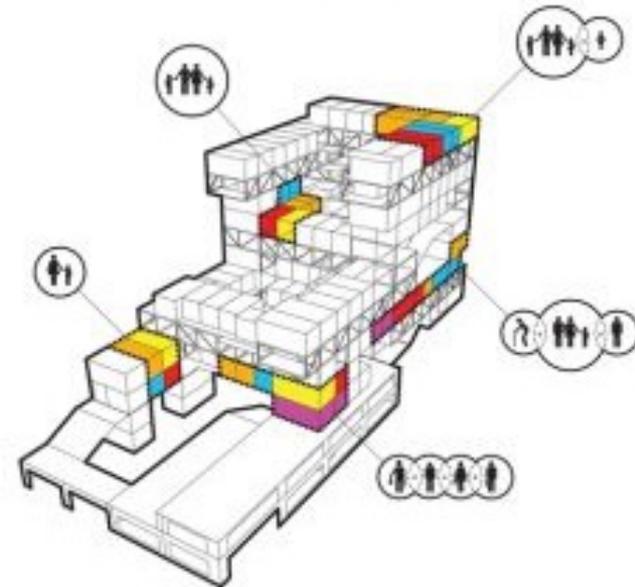
CONCRETE CORES



NETWORK OF COMMUNITY SPACES



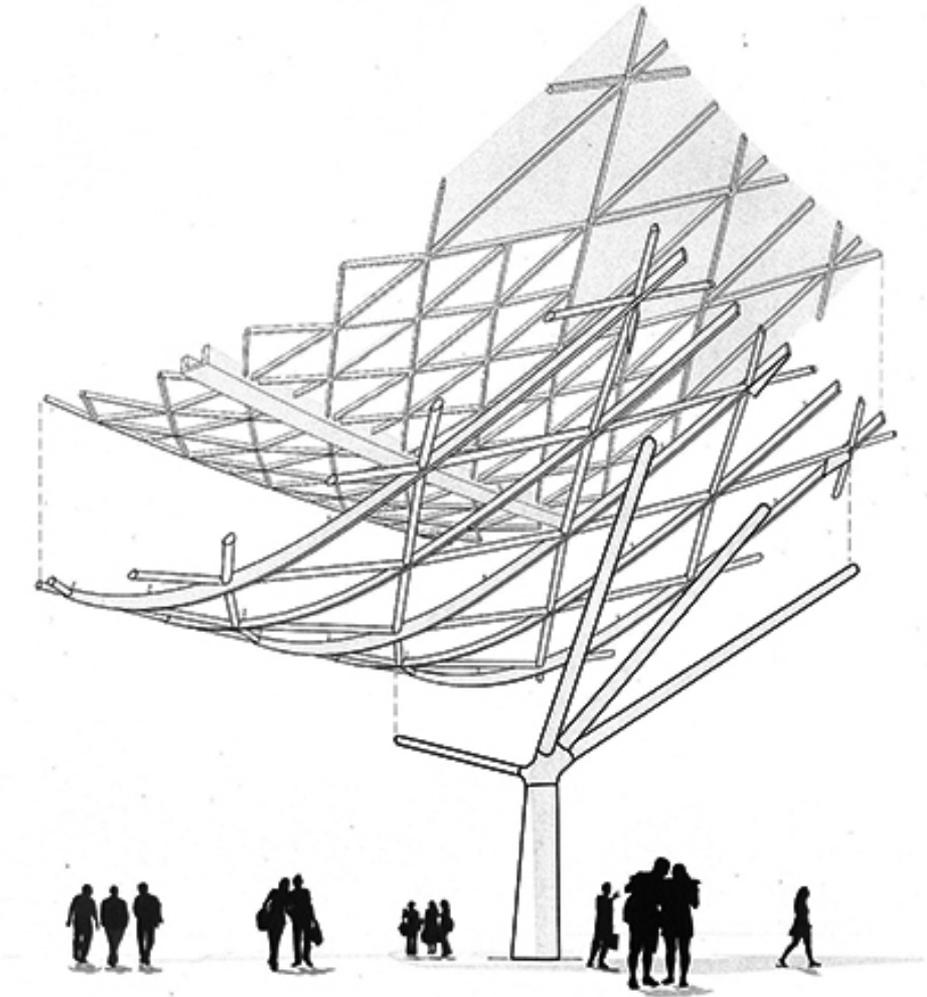
LIVE-AND-WORK UNITS



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.

