

Les Couleurs® Le Corbusier

Faenza, September 2018



All in white ?

**forms and
dimensions**

cleanliness

**sum of all
spectral colours**

**for fear of
colour ?**

**good to
see**

*“ **Colour** is the characteristic of human visual perception described through colour categories ...*

This perception of colour derives from the stimulation of cone cells in the human eye by electromagnetic radiation in the visible spectrum.

Colour categories and physical specifications of colour are associated with objects through the wavelength of the light that is reflected from them.

This reflection is governed by the object's physical properties such as light absorption, emission spectra, etc. ... ”

' Colour ' can be explained easily

3 characteristics

- Colour tone: grey, blue, red, ...
- Lightness: how light or dark (on a white - black axis)
- Saturation: how colorful (how far away from the white – black axis)

Along the 3 various colour systems offer spaces for any number of colours.

But

- Which colour shades are suitable for architecture ?
- What are the effects of particular shades (what are most effective values) ?
- Which colours can be combined harmoniously ?
- How to design a skillful colour concept (to ensure that nothing is done wrong) ?

Le Corbusier

“ ... The ranges of the collections are numerous, maybe sufficient.

***I looked at them more closely;
the ranges were not really sufficient;
the colour tones were more or less suitable for architecture.
Decidedly, for myself, the wall seemed to deserve a more precise polychromy.***

***First of all, I eliminated most of the pigment colours;
I kept ' the noble range ': white, black, ultramarine, blue, tones of English green,
yellow ochre, natural sienna, a vermilion, a carmine red, the English red, the burnt
sienna.***

***And for each of these tones, I researched, from the mural perspective, the most
effective values.***

For each colour, there are several values of intensity where the opulence is evident. “

Most effective values (red/red ochre)

Lightness

White

static

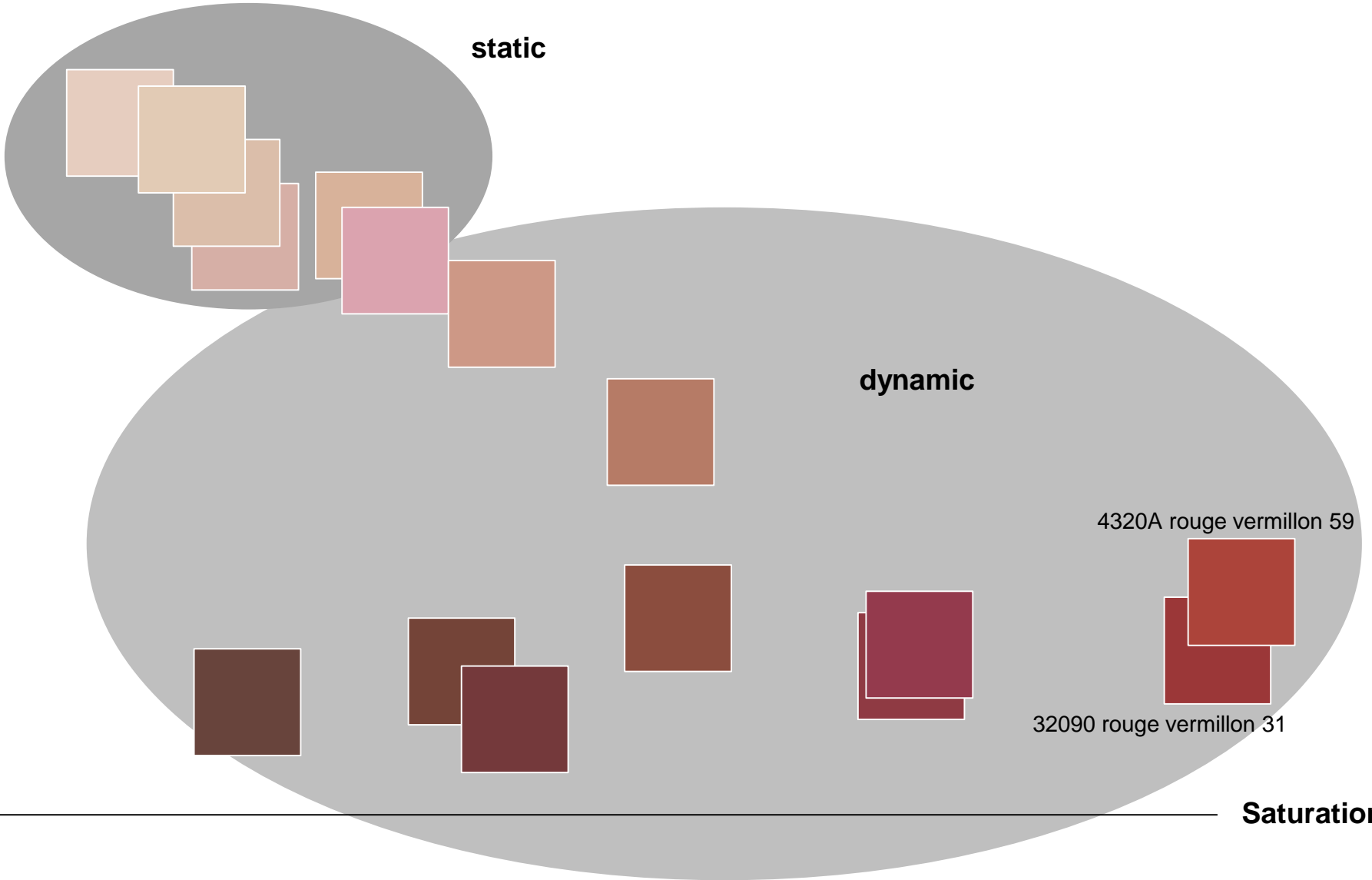
dynamic

4320A rouge vermillon 59

32090 rouge vermillon 31

Saturation

Black



*“ Colour is an incredibly effective triggering tool.
Colour is a factor of our existence.*

‘ Colour modifies space ’

‘ Colour classifies objects ’

‘ Colour acts physiologically upon us and reacts strongly upon our sensitivities ’ “



Le Corbusier



Organisation
des Nations Unies
pour l'éducation,
la science et la culture



Convention du
patrimoine mondial

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE MONDIAL CULTUREL ET NATUREL

*Le Comité du patrimoine mondial
a inscrit*

*L'Œuvre architecturale de Le Corbusier,
une contribution exceptionnelle
au Mouvement Moderne*

sur la Liste du patrimoine mondial

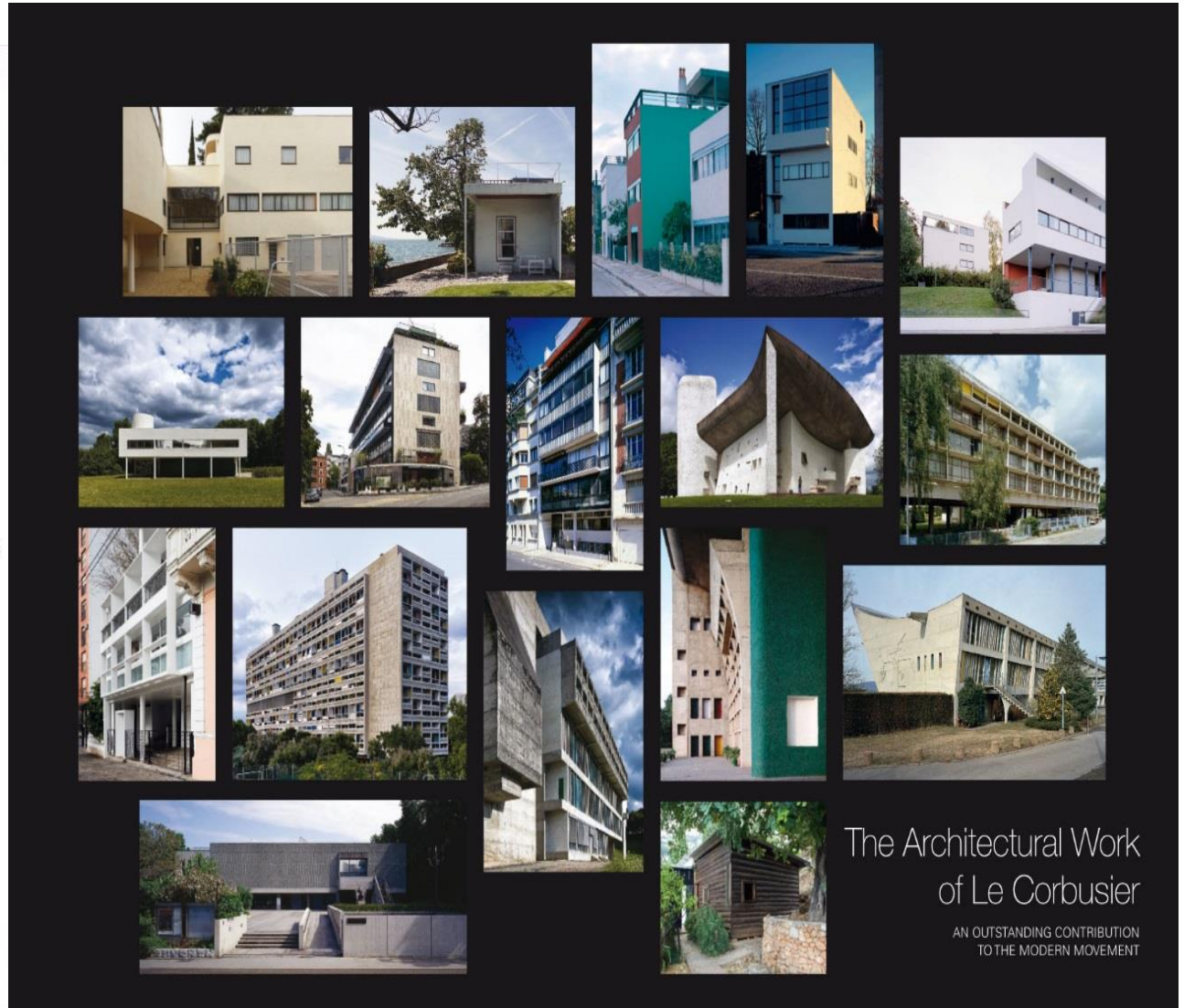
*L'inscription sur cette Liste consacre la valeur
universelle exceptionnelle
d'un bien culturel ou naturel afin qu'il soit protégé
au bénéfice de l'humanité*

DATE D'INSCRIPTION

17 juillet 2016

Irina Bokova

LE DIRECTEUR GÉNÉRAL
DE L'UNESCO



The Architectural Work
of Le Corbusier

AN OUTSTANDING CONTRIBUTION
TO THE MODERN MOVEMENT

Honorary doctor

- University **Zurich** (1933)
- **ETH Zurich** (1955)
- University of **Cambridge** (1959)
- University of **Colombia** (1961)
- University of **Geneva** (1963)



Honory member, Gold medal, Election

- **RIBA** - Royal Institute of British Architects (1937)
- **Royal Fine Arts Academy Stockholm** (1939)
- **RIBA** - Royal Institute of British Architects (1953)
- **American Academy of Arts and Sciences** (1956)
- **Royal Academy of Fine Arts Copenhagen** (1957)
- **American Institute of Architects** (1961)
- **Architectural Society of Boston** (1965)

Switzerland

- Honory citizen of **La Chaux-de-Fonds** (1957)
- Swiss National Bank – **10 Franc note** (1997)

France

- **Chevalier** de la Légion d'Honneur (1937)
- **Commandeur** de la Légion d'Honneur (1952)
- **Commandeur** de l'ordre du Mérite (1961)
- **Grand officier** de la Légion d'Honneur (1963)
- **Grand-croix de la Légion d'Honneur** (1964)

Obviously ahead of time ...

10



Villa Stein-de-Monzie, ' Les Terrasses ', Garches – Vaucresson (F), 1926

Charles-Édouard Jeanneret-Gris, known as Le Corbusier (1887 – 1965), is regarded as most influential architect.

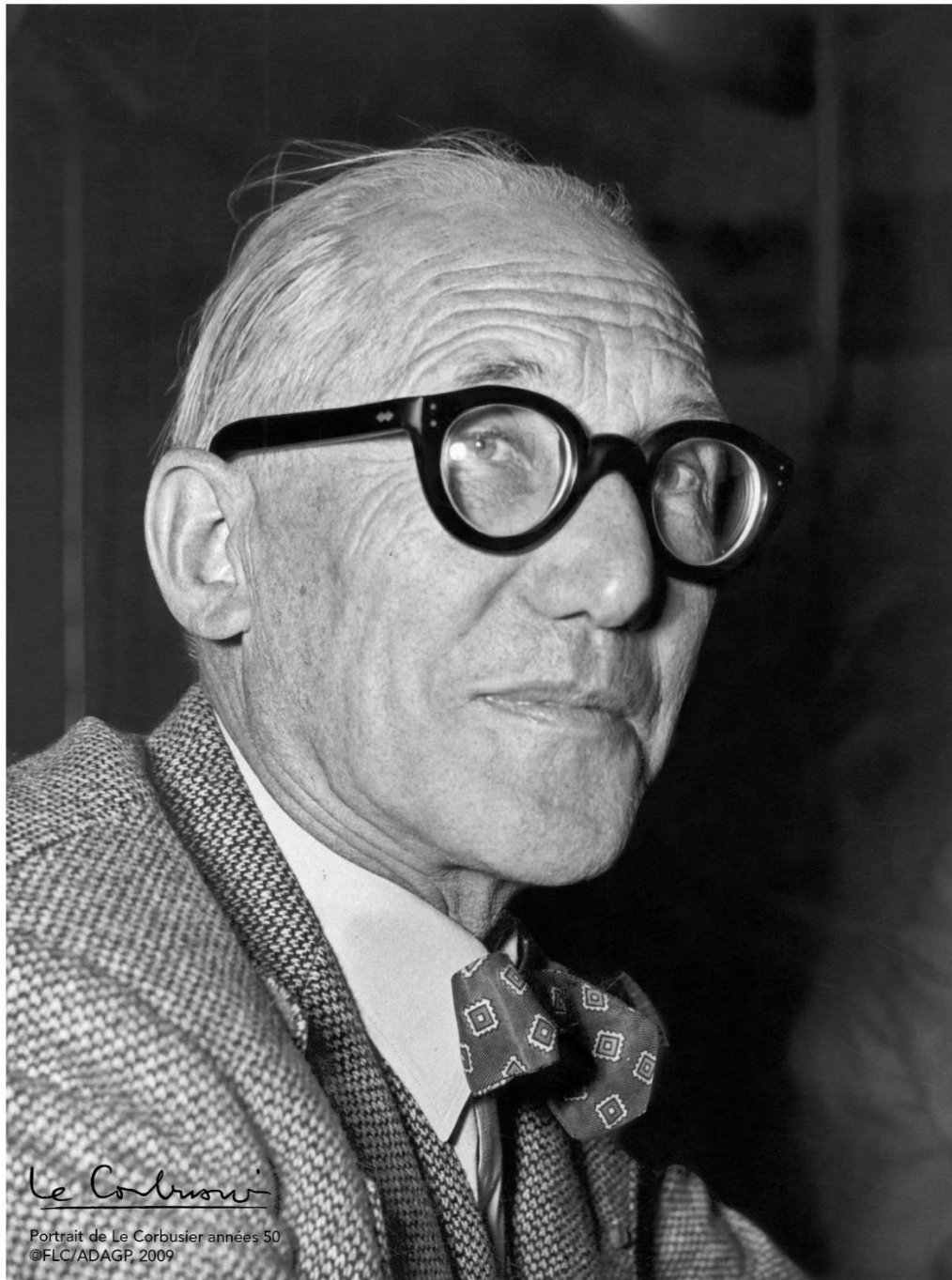
He shaped perceptions of modern architecture and of modernity itself.

Le Corbusier built many pioneering buildings and drew up numerous urban development plans around the world. He developed groundbreaking architectural theories and wrote lots of books and articles.

He created impressive art works and designed timeless furniture icons.

Based on his unparalleled experiences and his continuous practice of the use of colour, Le Corbusier developed the timeless theory of colours

– the Architectural Polychromy
(la Polychromie Architecturale)



Le Corbusier

Portrait de Le Corbusier années 50
©FLC/ADAGP 2009

Pioneering buildings around the world



France



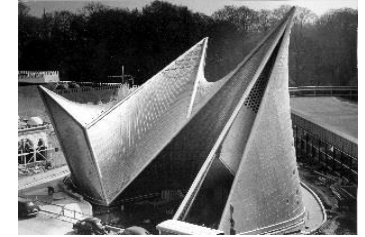
Switzerland



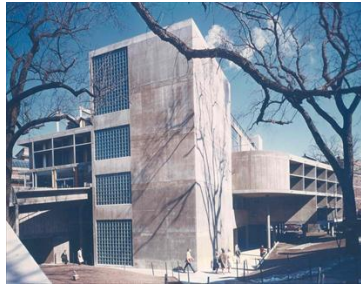
Germany



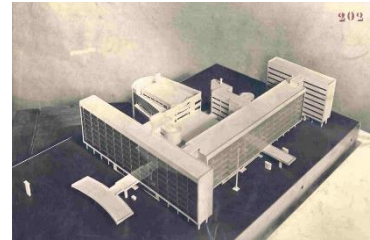
Belgium



USA



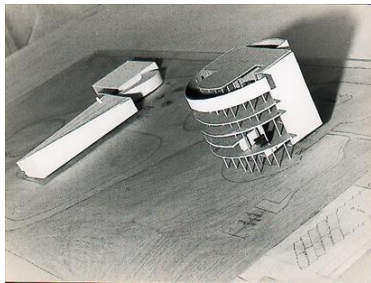
Russia



Japan



South America



Africa



India



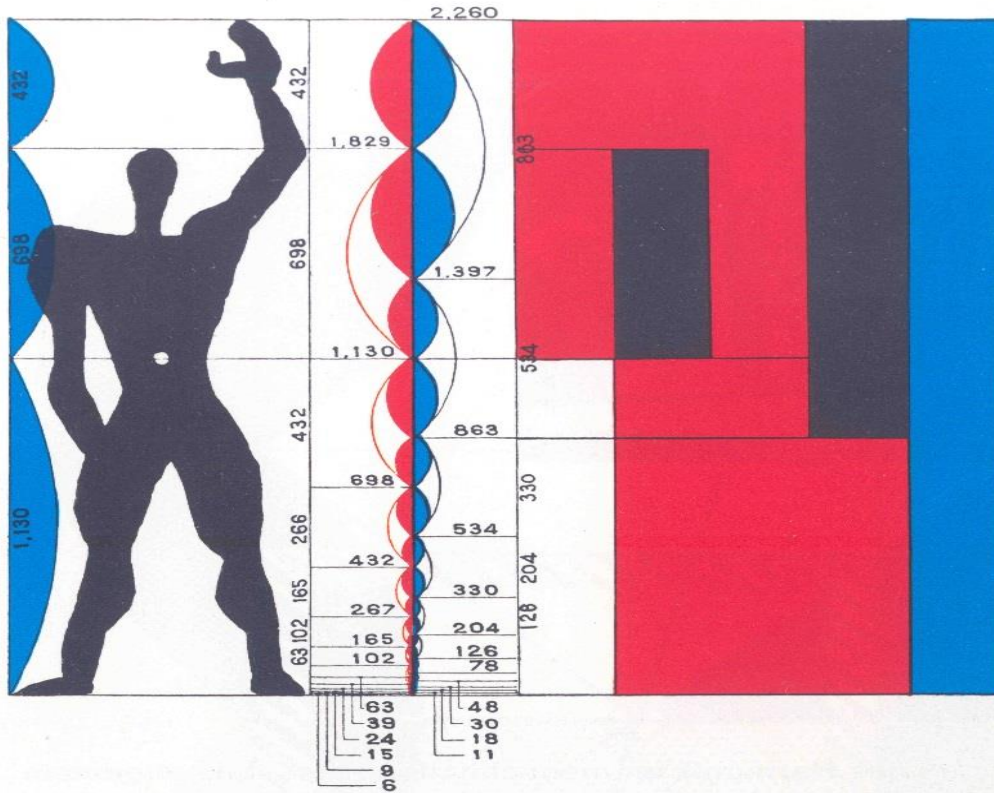
1927 – ‘ The five points
of a new architecture ’

‘ The changes of modernity ’

‘ The absolute icon of Modern Movement ’

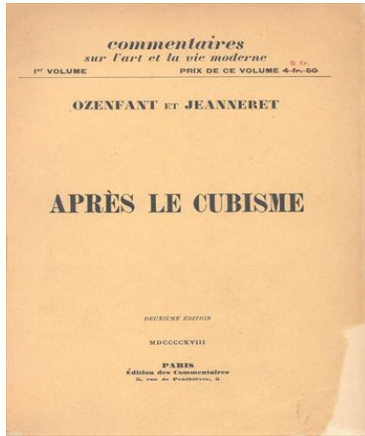
1. The pilotis
2. The roof garden
3. The open plan
4. The open facade
5. The horizontal window





1945, Le Corbusier closed the researches on proportion that he had conducted for twenty years, and which had won for him the degree of Dr. h.c. in philosophy and mathematics of the University of Zurich.

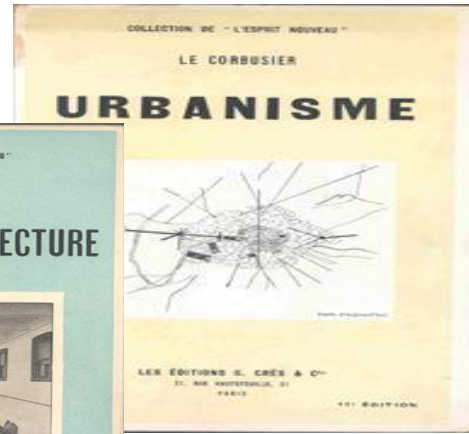
Professor Einstein :
“ It is a language of proportions which makes it difficult to do things badly, but easy to do them well ”.



Après le cubisme, OZENFANT, Amédée et JEANNERET, Charles-Edouard, 1918



Vers une architecture, LE CORBUSIER, 1923



Urbanisme, LE CORBUSIER, 1924



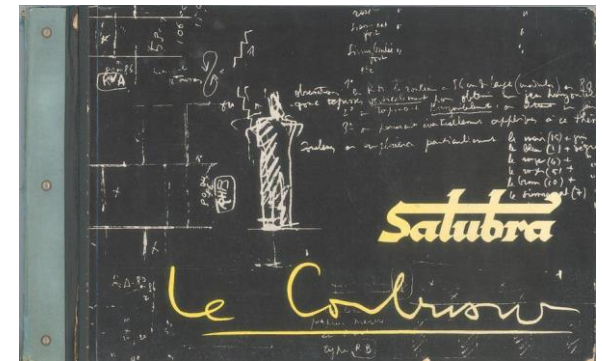
Cover L'Esprit Nouveau, n°24, june 1924



Almanach d'architecture moderne, LE CORBUSIER, 1925



Le Modulor II, LE CORBUSIER, 1955



Salubra, claviers de couleur (2ème série), Author : LE CORBUSIER, 1959

Paintings



La cheminée, 1918

Sculptures



La cathédrale, 1964

Drawings & Collages



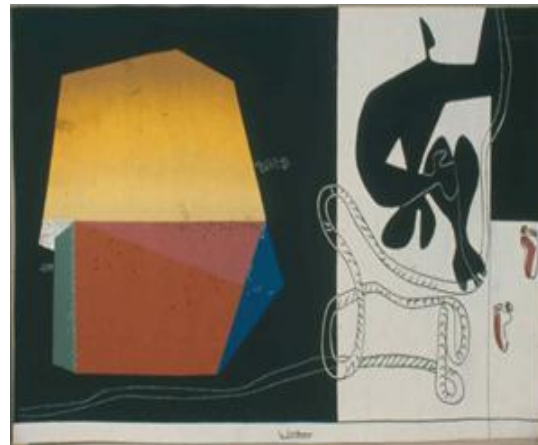
Etude sur le thème de "la pyrénéenne" et nu féminin passant la porte, 1940

Enamels



Composition avec lignes géométriques jaunes, oranges, bleues, 1962

Tapestries



Traces de pas dans la nuit, 1957

Engravings



Bouteille, 1960

Furniture icons



Furniture presented at the Salon d'Automne, Paris, 1929

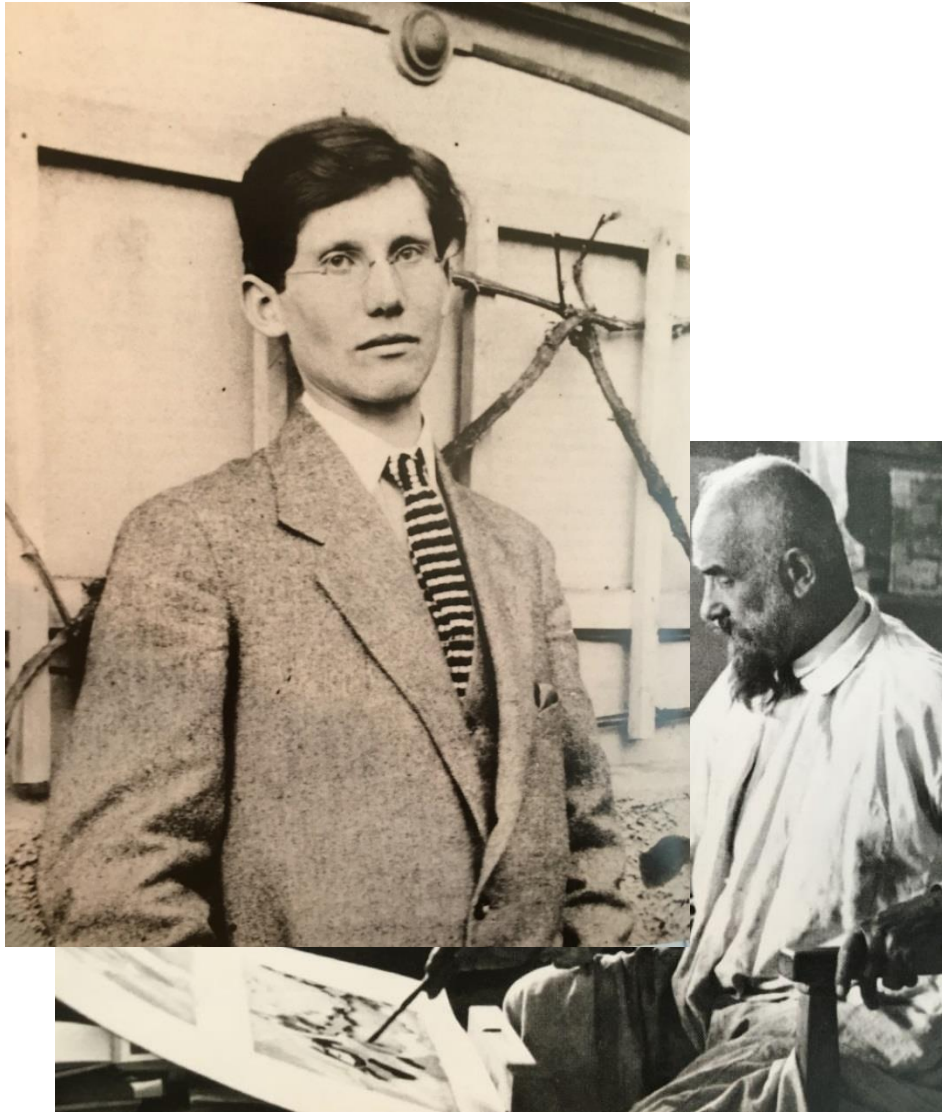


Le Corbusier, Pierre Jeanneret, Charlotte Perriand
LC4 - Chaise longue, 1928,
LC2 - Fauteuil Grand confort, petit modèle, 1928

Chronology

1904

Advanced Decorative Art School



1905 (age of 18)



Villa Fallet, La Chaux-de-Fonds (CH), 1905

1912 (age of 25) - Maison Blanche



Its tendency is neoclassical, influenced by modern German architecture, the popular architecture of the Balkans and Greco-Roman tradition

Villa Jeanneret-Perret (Maison Blanche), La Chaux-de-Fonds (CH), 1912



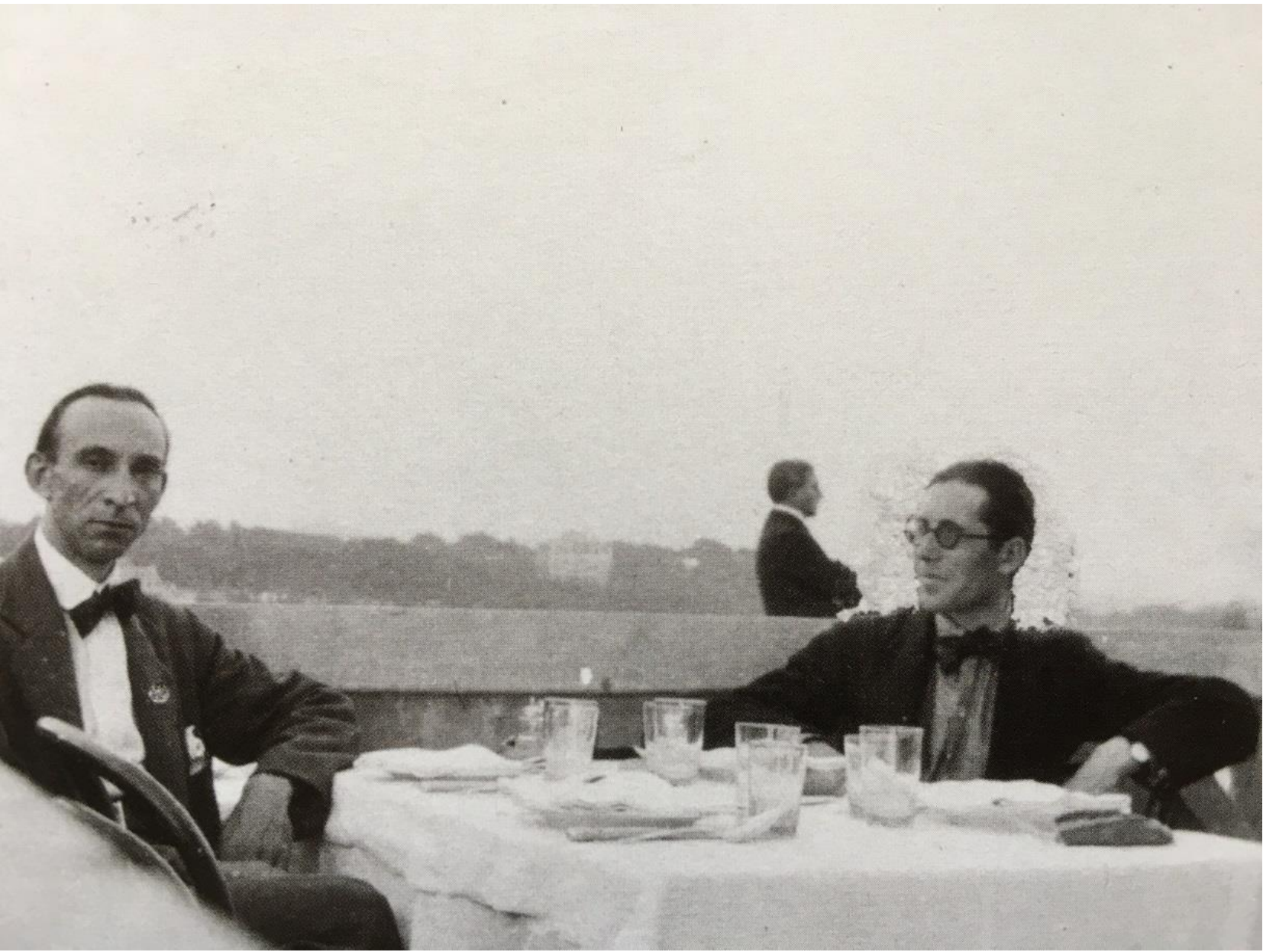
Villa Jeanneret-Perret (Maison Blanche), La Chaux-de-Fonds (CH), 1912



Rich in symbols,
and with elaborate technical
and aesthetic aspects

The ochre brick-work
associated with concrete
accentuates the oriental
character of the house

Villa Schwob, La Chaux-de-Fonds (CH), 1916



Le Corbusier and Ozenfant found the purism



Nature morte à la pile d'assiettes et au livre, 1920 ;
Oil on canvas ; Dimensions H: 0.81 x L: 1.00m;
Painting FLC Bâle, Musée des Beaux-Arts



Nature morte à la pile d'assiettes et au livre, 1920 ;
Oil on canvas ; Dimensions H: 0.81 x L: 1.00m;
Painting FLC 306, New York, Museum of Art

1923/25 - Maisons La Roche-Jeanneret



Le Corbusier:
*„ Entièrement blanche la maison serait un
pot à crème “*

*„ Entirely white, the house would be a
cream pot “*

Maisons La Roche-Jeanneret, Paris (F), 1923 - 1925

1923/25 - Maisons La Roche-Jeanneret



The colour strategies cause an additional interpretation of the houses

Maisons La Roche-Jeanneret, Paris (F), 1923 - 1925

1923/25 - Maisons La Roche-Jeanneret



27

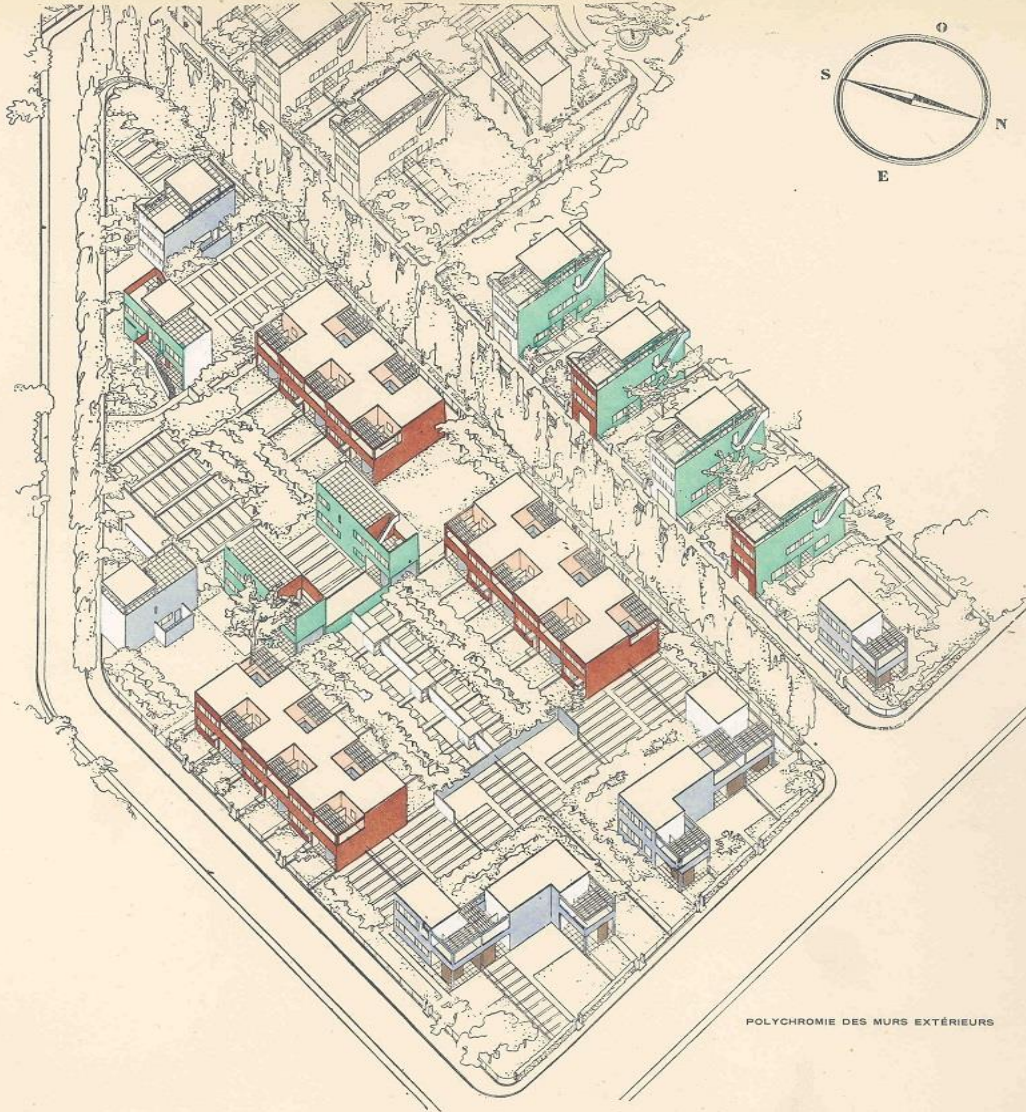


Maisons La Roche-Jeanneret, Paris (F), 1923 - 1925



Maisons La Roche-Jeanneret, Paris (F), 1923 - 1925

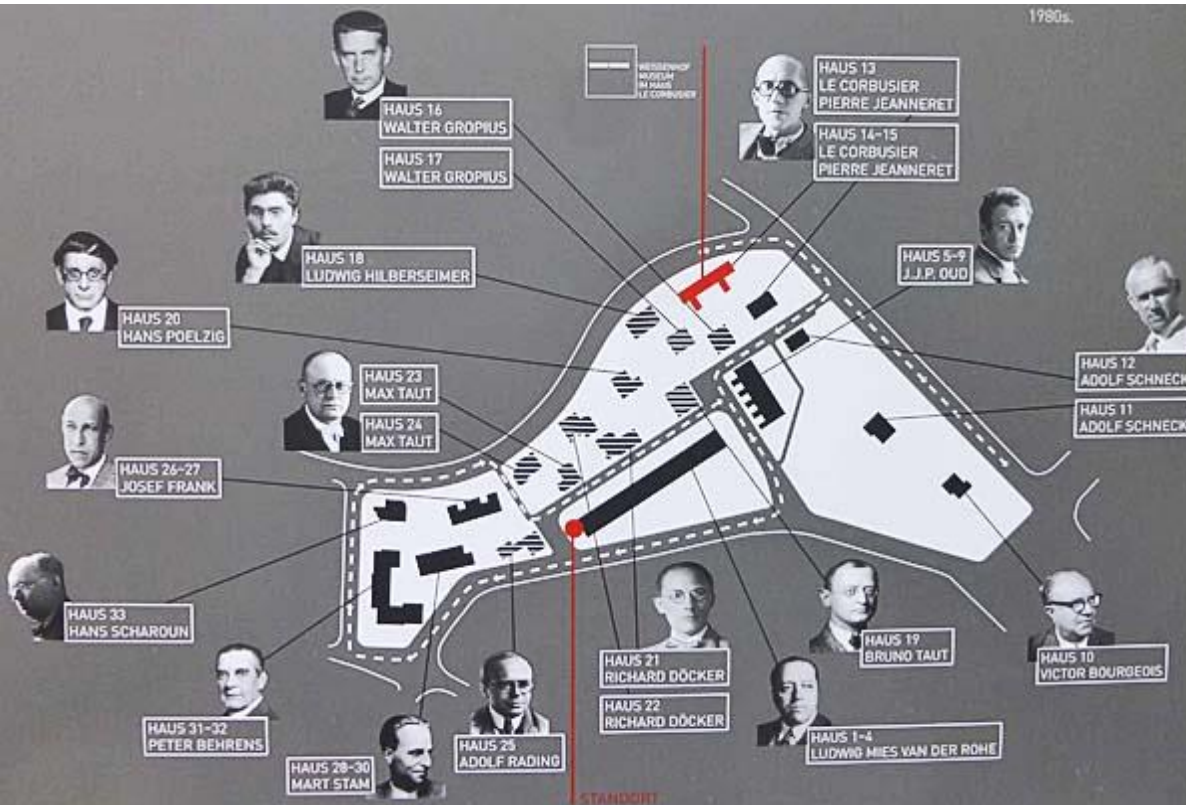
1924 - Cité Frugès



The prototype of standardized city;
an unmatched challenge for that period

Polychromy of the outside space

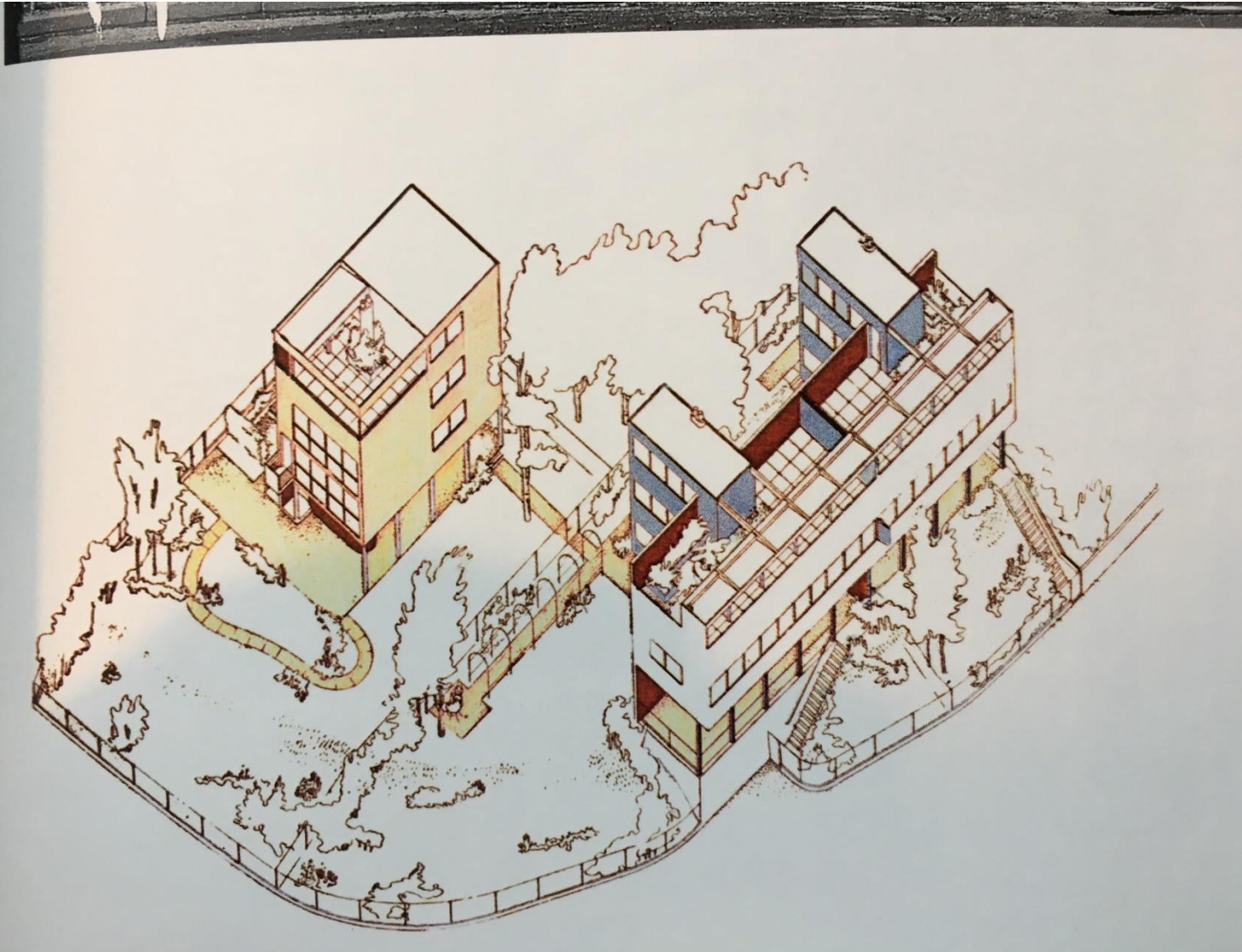
1927 - Weissenhof Estate



17 architects

Peter Behrens, Victor Bourgeois, Le Corbusier, Richard Döcker, Josef Frank, Walter Gropius, Ludwig Hilberseimer, Pierre Jeanneret, Jacobus Johannes Pieter Oud, Hans Poelzig, Adolf Rading, Mies van der Rohe, Hans Scharoun, Adolf Schneck, Mart Stam, Bruno Taut, Max Taut

1927 - Weissenhof Estate



Maisons de la Weissenhof-Siedlung, Stuttgart (D), 1927

1927 - Weissenhof Estate



Illustrates the changes of modernity;
shows a synthesis of the arts in colour design

Le Corbusier employs his
' 5 points of a new architecture '

Maisons de la Weissenhof-Siedlung, Stuttgart (D), 1927

1927 - Weissenhof Estate



Maisons de la Weissenhof-Siedlung, Stuttgart (D), 1927

1928 - Villa Savoye



' The absolute icon
of Modern Movement '

Villa Savoye et loge du jardinier, Poissy (F), 1928

1928 - Villa Savoye



Villa Savoye et loge du jardinier, Poissy (F), 1928

1928 - Villa Savoye

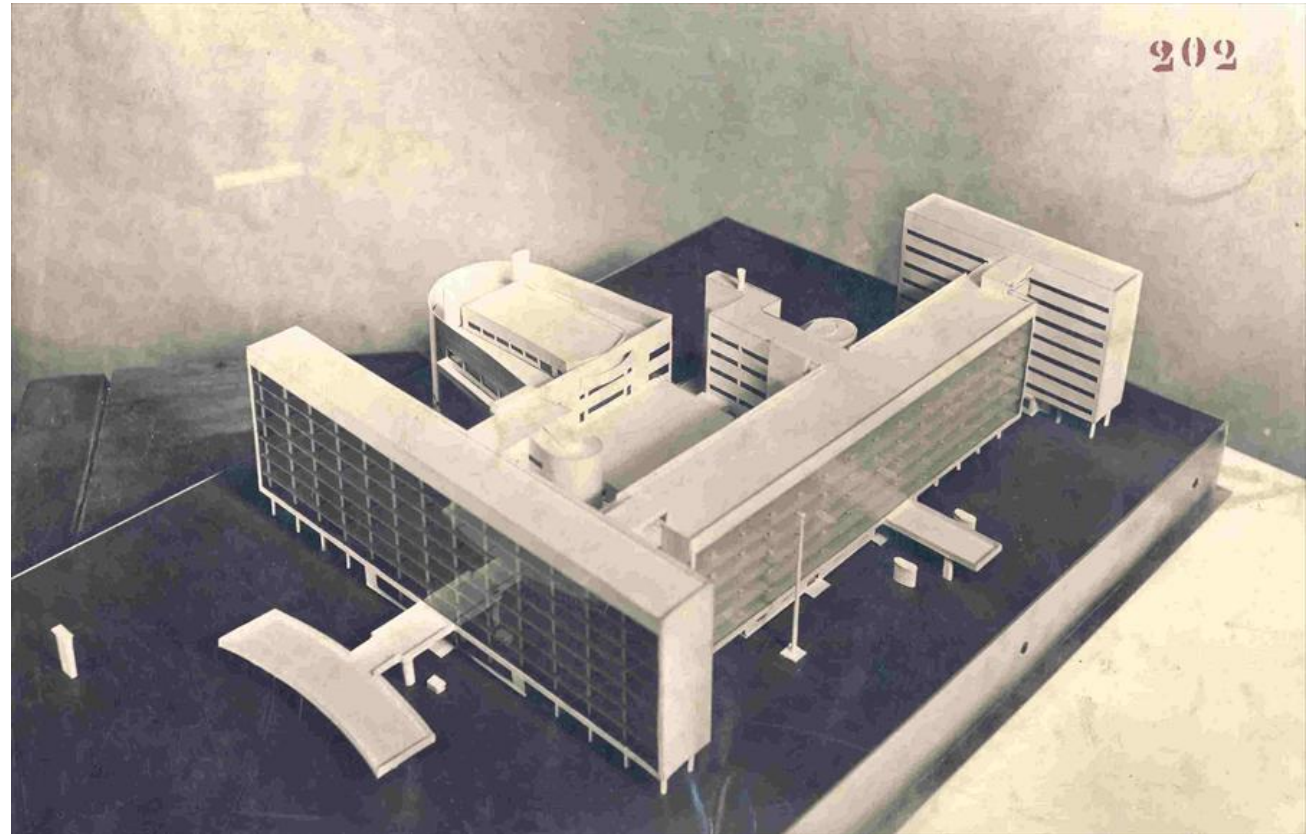


Villa Savoye et loge du jardinier, Poissy (F), 1928





Modern offices for 3500 employees;
communal facilities such as a restaurant,
lecture halls, theater, club, physical culture, ...
a unity comprising both work and récréation



Centrosoyus, Moscow, Russia, 1928

1931 - Immeuble Molitor

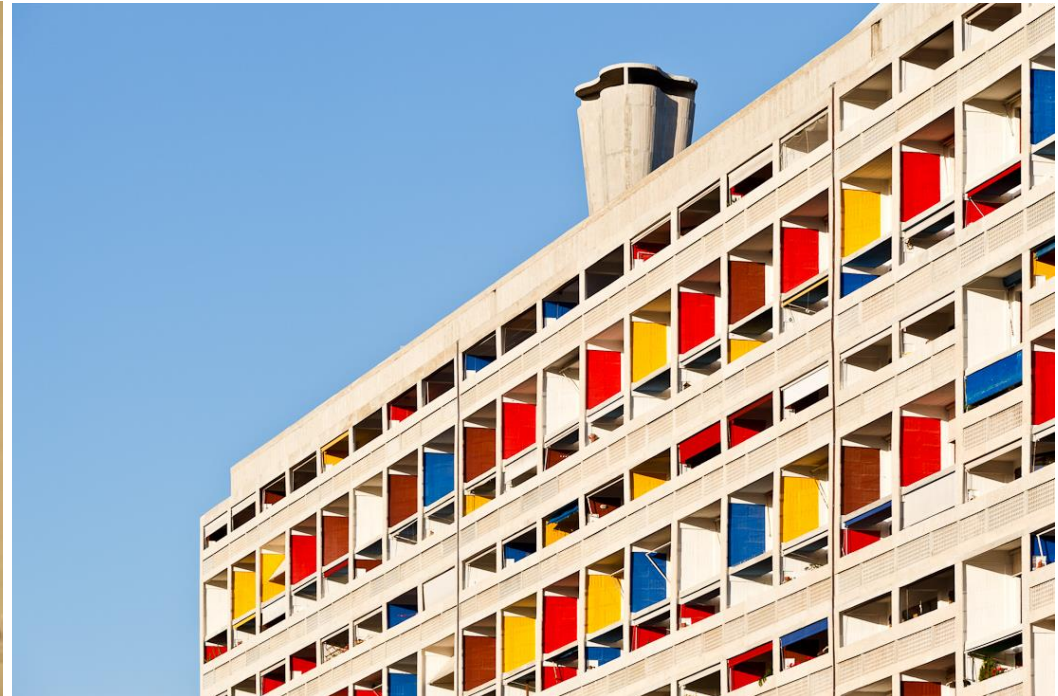
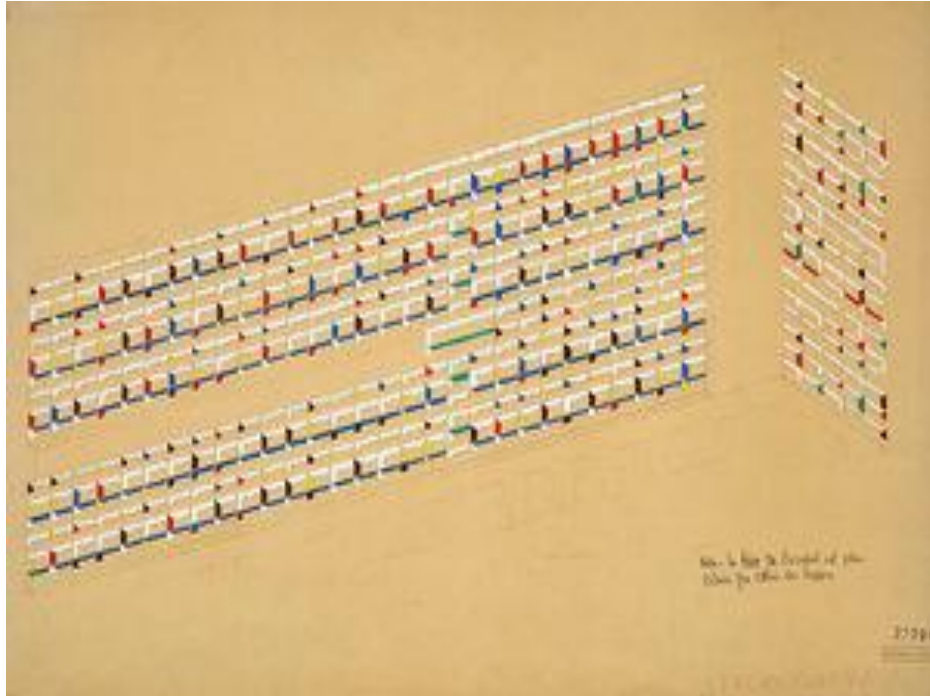


First apartment block with glazed façades



Immeuble locatif à la porte Molitor, Paris (F), 1931 - 1934

1945 - Unité d'habitation



Unité d'habitation, Marseille (F), 1945

Founding work of **Architectural Brutalism**,
a major experiment of a new way of housing
based on the balance between individual and collective needs

1950 - Chapelle Notre Dame du Haut

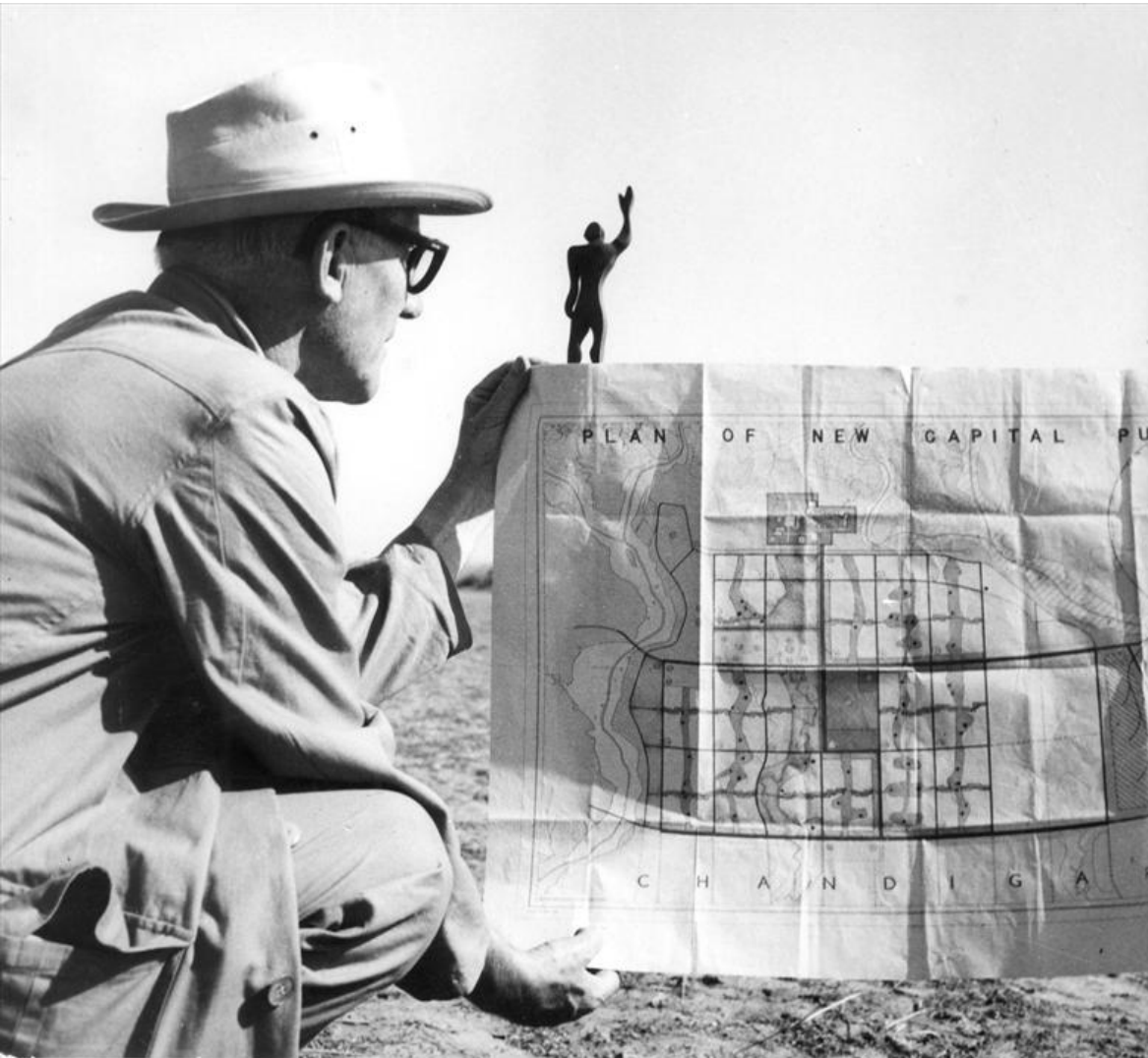


The iconic work for sacred architecture

- a revolution in Christian architecture
of the XXth Century

Chapelle Notre Dame du Haut, Ronchamp (F), 1950 - 1955

1950/1965 - Chandigarh, India



In 1950,
Le Corbusier became consultant
to the administration of Punjab
for the planning of the new capital city
of Chandigarh,
with Pierre Jeanneret, Maxwell Fry
and Jane Drew

Indira Gandhi:

***„ My father brought Le Corbusier to India
and give him a free hand in the planning
of our new capital of Punjab
and now we have Chandigarh,
a symbol of India's entry into the modern age “***

Le Corbusier in Chandigarh
with the map of the new capital
and the model of Modulor (1951)

Chandigarh, Palace of Justice



Haute Cour (Palace of Justice), Chandigarh (India), 1952



Palais de l'Assemblée, Chandigarh (India), 1955



Neelam Cinema Chandigarh,
Chandigarh (India), 1954

1951 - Cabanon de Le Corbusier



‘ A total art masterpiece and the archetype of the minimum cell based on an absolute ergonomic and functionalist system ‘

Cabanon de Le Corbusier, Roquebrune-Cap-Martin (F)

1953 - Maison de la Culture



An innovating program based on the concepts of the Radiant City and the Charte d'Athènes, anticipation of modern sculptural forms in architecture

Maison de la Culture, Firminy (F), 1953

1953 - Couvent Sainte-Marie de la Tourette



47



A unique synthesis of the attainments of the Modern Movement, a combination of purist lines, brutalist surfaces and of exceptional constructive solutions

Couvent Sainte-Marie de la Tourette, Eveux-sur-l'Arbresle (F)

1953 - Couvent Sainte-Marie de la Tourette



48



Couvent Sainte-Marie de la Tourette, Eveux-sur-l'Arbresle (F)

1955 - National Museum of Western Art



Prototype of the Unlimited development Museum, a demonstration of the early reception of LC's work in Japan and of the universality of the Modern Movement

Musée National des Beaux-Arts de l'Occident,
Taito-Ku, Tokyo (JP), 1955



1958 - Pavillon Philips



The structure is composed of hyperbolic-paraboloid shells

Pavillon Philips, exposition internationale de 1958, Brussels (B), 1958



Pavillon d'exposition ZHLC (Maison de l'Homme), Zurich (CH), 1963



“ Colour in architecture

– a means as powerful as the ground plan and section.

Or better: polychromy, a component of the ground plan and the section itself ”

When Le Corbusier presented this thesis, he did it not only on the basis of his continuous practice of using colour.

He had developed a theoretically well-founded approach for the ‘Polychromie Architecturale’ with which designs could be thought in colour from the very beginning.

Colour in architecture

Le Corbusier's Polychromie Architecturale consists of 63 timeless colour shades which he created in two collections – in 1931 and 1959.


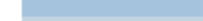


















The 63 shades form a masterfully coherent system

- All colours are colours of nature. They are naturally harmonious and can be combined impressively in any way
- They are selected as 'eminently architectural'
- They possess the highest qualification regarding the signification of colours and colour richness
- Each shade embodies spatial effects and causes characteristic reactions to our sensibilities

The 63 colours are chosen in such a way that the desired effects can be designed easily.

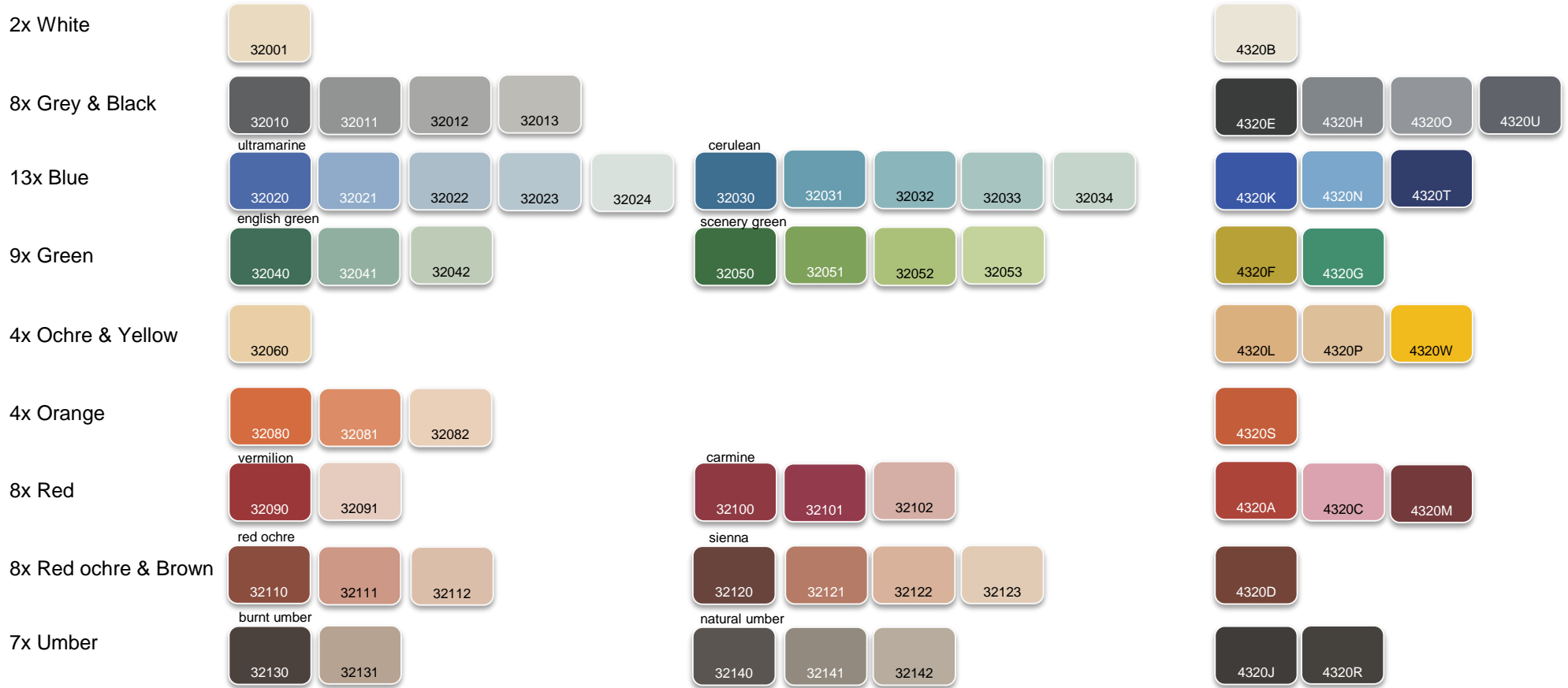
A unique tool for convincing architectural colour design.

1st Collection
(1931)
43 colours

	32001	blanc
	32010	gris foncé 31
	32011	gris 31
	32012	gris moyen
	32013	gris clair 31
	32020	bleu outremer 31
	32021	outremer moyen
	32022	outremer clair
	32023	outremer pâle
	32024	outremer gris
	32030	bleu céruléen 31
	32031	céruléen vif
	32032	céruléen moyen
	32033	céruléen clair
	32034	céruléen pâle
	32040	vert anglais
	32041	vert anglais clair
	32042	vert anglais pâle
	32050	vert foncé
	32051	vert 31
	32052	vert clair
	32053	vert jaune clair
	32060	ocre
	32080	orange
	32081	orange clair
	32082	orange pâle
	32090	rouge vermillon 31
	32091	rose pâle
	32100	rouge carmin
	32101	rouge rubia
	32102	rose clair
	32110	l'ocre rouge
	32111	l'ocre rouge moyen
	32112	l'ocre rouge clair
	32120	terre sienne brûlée 31
	32121	terre sienne brique
	32122	terre sienne claire 31
	32123	terre sienne pâle
	32130	terre d'ombre brûlée 31
	32131	ombre brûlée claire
	32140	ombre naturelle 31
	32141	ombre naturelle moyenne
	32142	ombre naturelle claire
	4320A	rouge vermillon 59
	4320B	blanc ivoire
	4320C	rose vif
	4320D	terre sienne brûlée 59
	4320E	noir d'ivoire
	4320F	vert olive vif
	4320G	vert 59
	4320H	gris 59
	4320J	terre d'ombre brûlée 59
	4320K	bleu outremer 59
	4320L	ocre jaune clair
	4320M	le rubis
	4320N	bleu céruléen 59
	4320O	gris clair 59
	4320P	terre sienne claire 59
	4320R	ombre naturelle 59
	4320S	orange vif
	4320T	bleu outremer foncé
	4320U	gris foncé 59
	4320W	le jaune vif

2nd Collection
(1959)
20 colours

Architectural Colour Design



9 colour groups

43 colour shades of the 1. collection

20 shades of the 2. collection



„ ... Grey, the indifference; calm, search for calm, need of calm...“

With the darker grey shades,
objects and surfaces can be placed into the background and into shadow.

With the brighter grey shades, a velvety atmosphere can be created.

The bright 32013 gris clair 31 is an alternative to white
- appears softer, makes rooms appear larger.

With the blue tones...



... rooms can be loosened up; an airy expansion can be created,

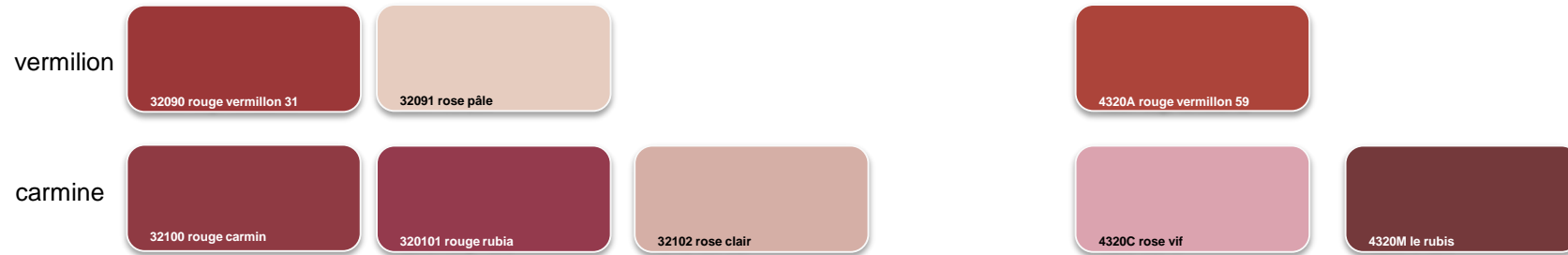
walls and objects can be receded in the distance and almost made imperceptible,

the atmospheres are calming and create sentiments of water-landscape, sea and sky.

The lightest shades are also an alternative to white – to make rooms appear larger.

The saturated shades create deepness, fascination, infinity.

The red nuances



Red is stimulating and implicates sensations of force, intensity and action.

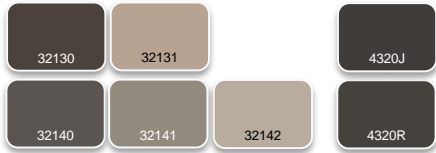
Red colours step forward, fix the wall and affirm exact position and dimension. Objects in red appear substantial and present.

Already with slight brightening, the forward thrust of red colours is slacking. No other colour group develops such a dynamic in the full tone and no other one loses so much power with increasing lightening.



Red ochre - earthy; comfort and warmth.

With dark tones, surfaces can be fixed; they step forward.
The brighter shades appear discreet, like masonries.



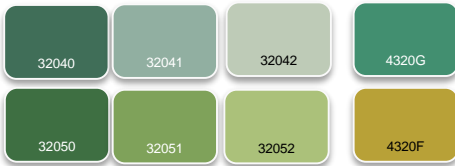
Umber - latin: shadow.

Areas withdraw elegantly into the shadow and escape attention.
The lighter tones create a sandy atmosphere.



Ochre – greek: pale, pale yellow.

The earthy tones evoke mediterranean associations with sand, beach and sun.
With the **yellow**, emotions and reactions are much more intense.



Green - the colour of vegetation, spring and fertility.

English green (with blue) - quiet, cool, restrained.
Scenery green (with yellow) - vernally, slightly come towards.



Orange - lust for life, optimism or youthfulness.

With skilful brightening, the orange becomes sandy.



White - lightest colour, good to see; stands for cleanliness.

Emphasizes architecture most clearly.

Colour characterizations

32140 ombre naturelle 31

The dark natural umber.

An elegant brown grey colour.

32023 outremer pale

The light ultramarine.

An atmosphere that recedes gently.

A 'Space' shade.

32141 ombre naturelle moyenne

The grey brown natural umber.

A balanced, aesthetic and appealing colour.

The colour keyboards





Les Couleurs® Le Corbusier

Fondation Le Corbusier, Paris

Les Couleurs Suisse, Zurich

Conservation and dissemination
of Le Corbusier's overall work

Architectural Polychromy

Les Couleurs® Le Corbusier
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Colour design tools



www.fondationlecorbusier.fr

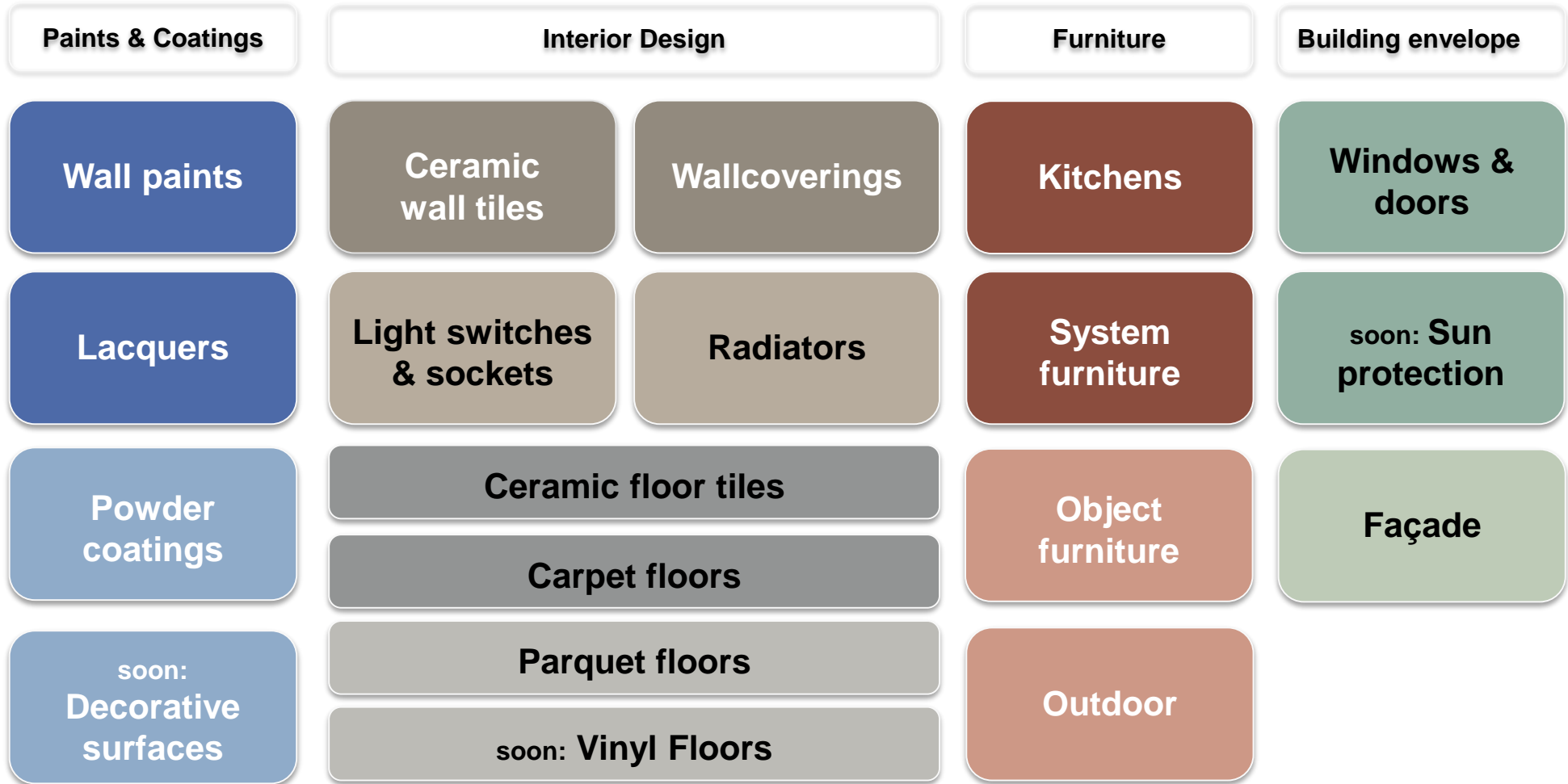
www.lescouleurs.ch

Les Couleurs® Le Corbusier

**provides products and tools
to authentically design rooms and buildings
on the basis of Le Corbusier's Architectural Polychromy**

**enables to choose and to combine
exceptional and harmoniously coloured products
of the Les Couleurs® Le Corbusier partners**

Les Couleurs® Le Corbusier products



Paints & Coatings



POWDER COATINGS.

Interior Design



Portobello

JUNG



ARTE®

zehnder
MINTAL



Furniture

LEICHT®

DAUPHIN HOME®

Bosse

Dietiker
SINCE 1873

manufakt

Building envelope





Appartement, Champ de Mars, Paris (F) - Pisi Design Paris



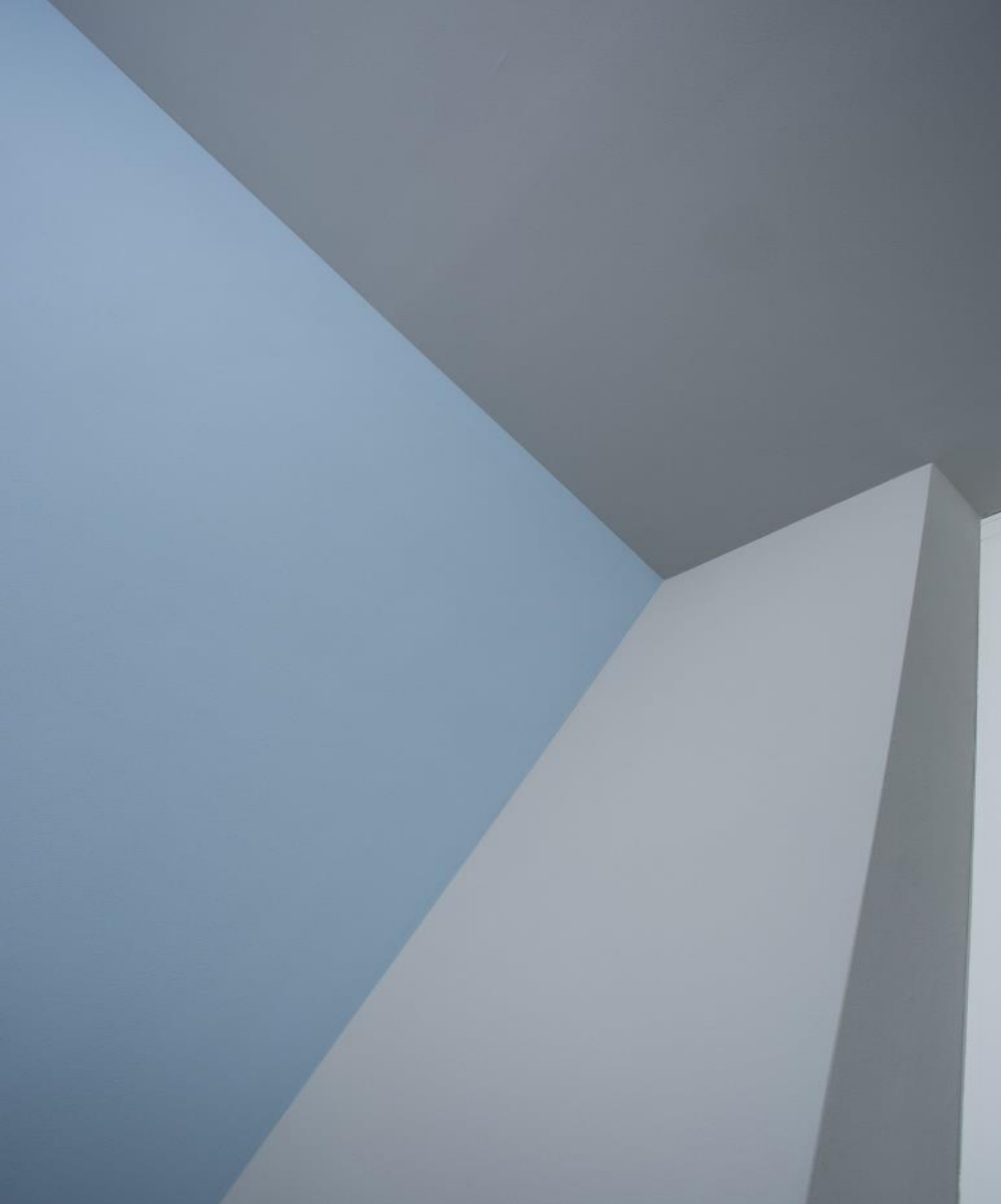
Design Hotel Miramonte, Bad Gastein (A)



Design Hotel Miramonte, Bad Gastein (A)



Private penthouse, Germany



Private penthouse, Austria



KARE Design Kraftwerk, Munich (D)



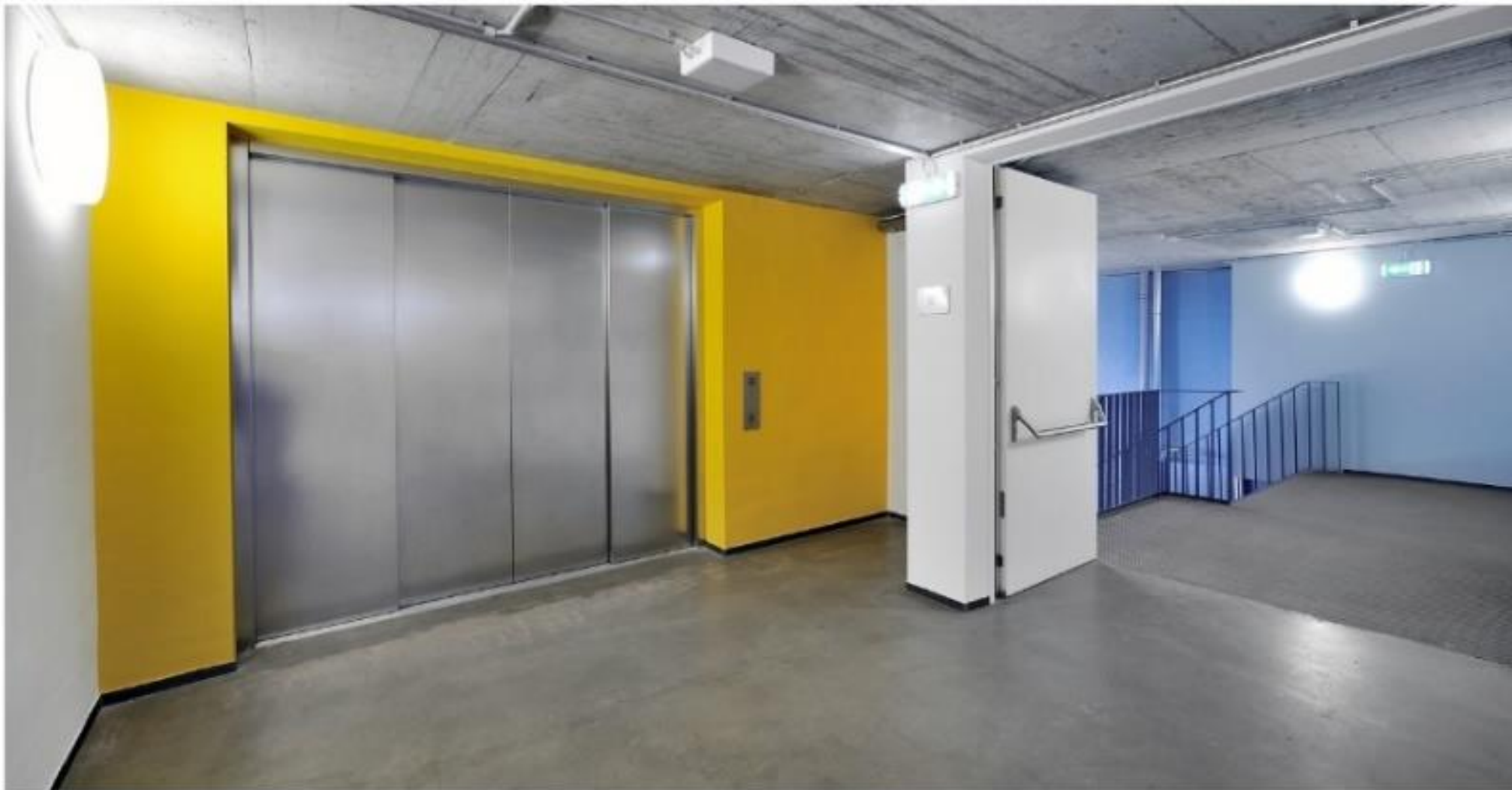
Go up



Go in here



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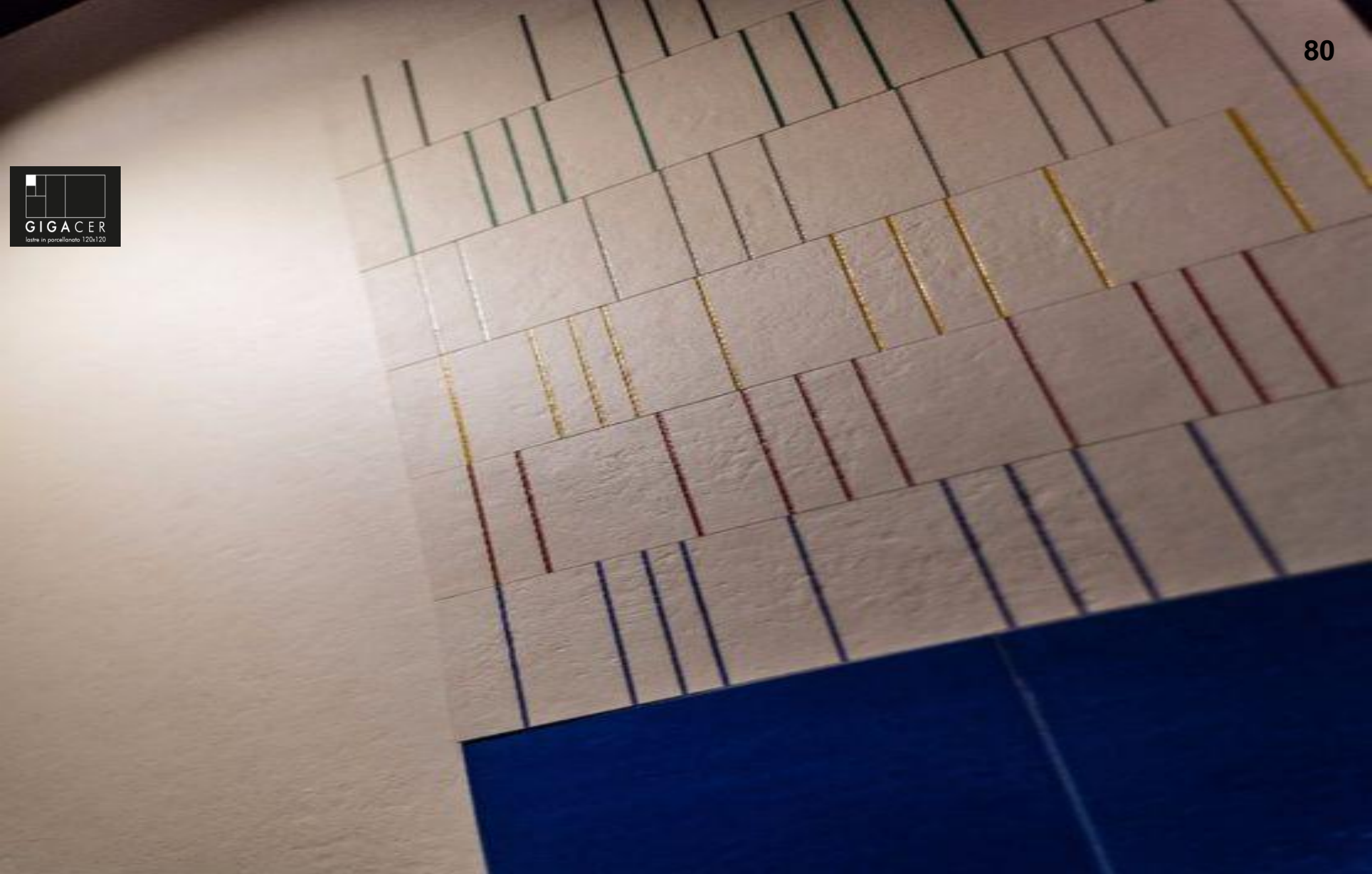


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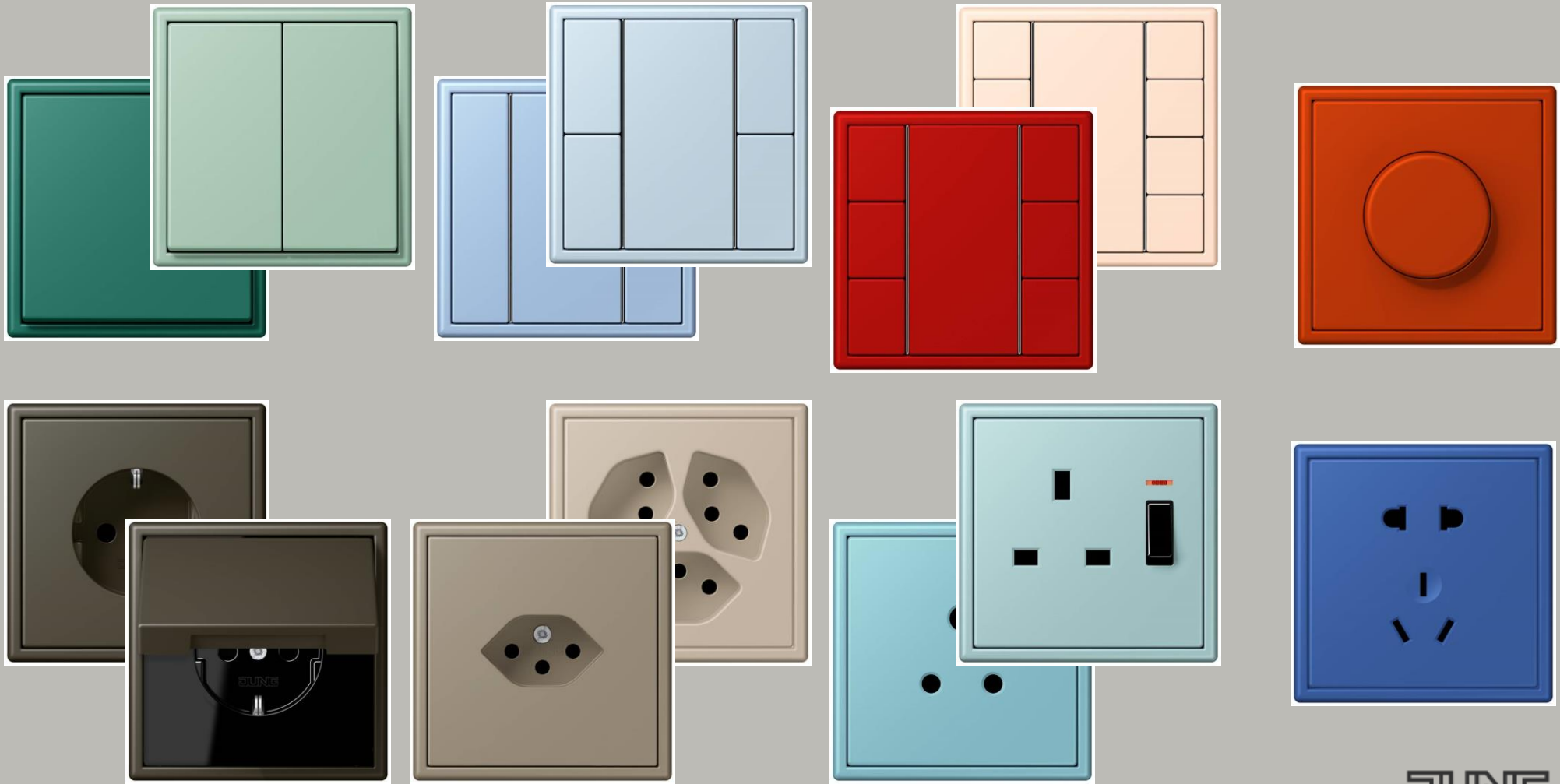
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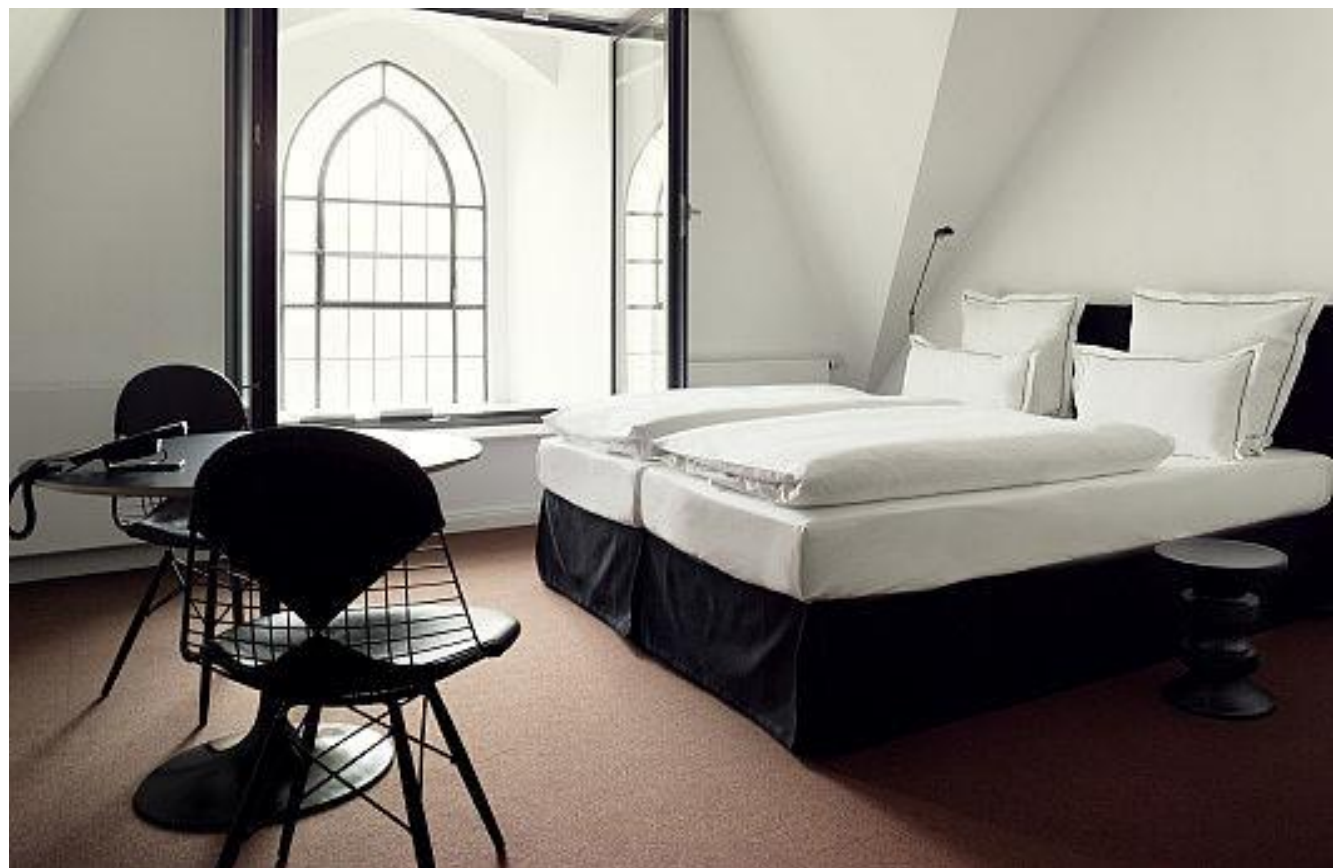




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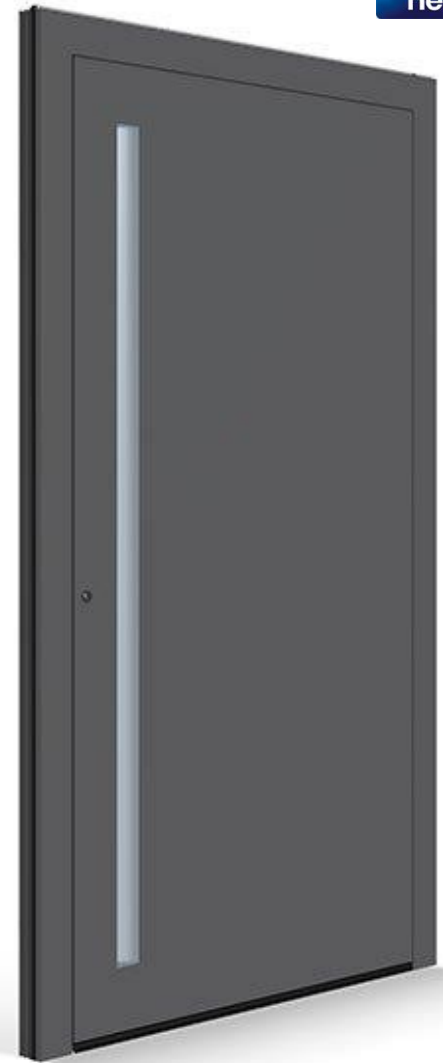












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Thank you !

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