

# DESIGN METHODOLOGY

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- ✦ PROGRAM OF SEMESTER COURSE
- ✦ 0. PREFACE - WELCOME - INTRODUCTION
- ✦ 1-4. WAY OF DESIGN
  - ✦ - COMPONENTS,
  - ✦ - METHODS,
  - ✦ - APPROACH
- ✦ 5. DESIGN FACTORS
- ✦ 6. DESIGN PHASES AND MEMBERS
- ✦ 7. ARCHITECTURE AND THE ARTS
- ✦ 8. SUSTAINABILITY IN ARCHITECTURE
- ✦ 9. DESIGN WITH ARCHITECTURAL MONUMENTS
- ✦ 10. NEW TRENDS, NEW CONCEPTS OF DESIGN

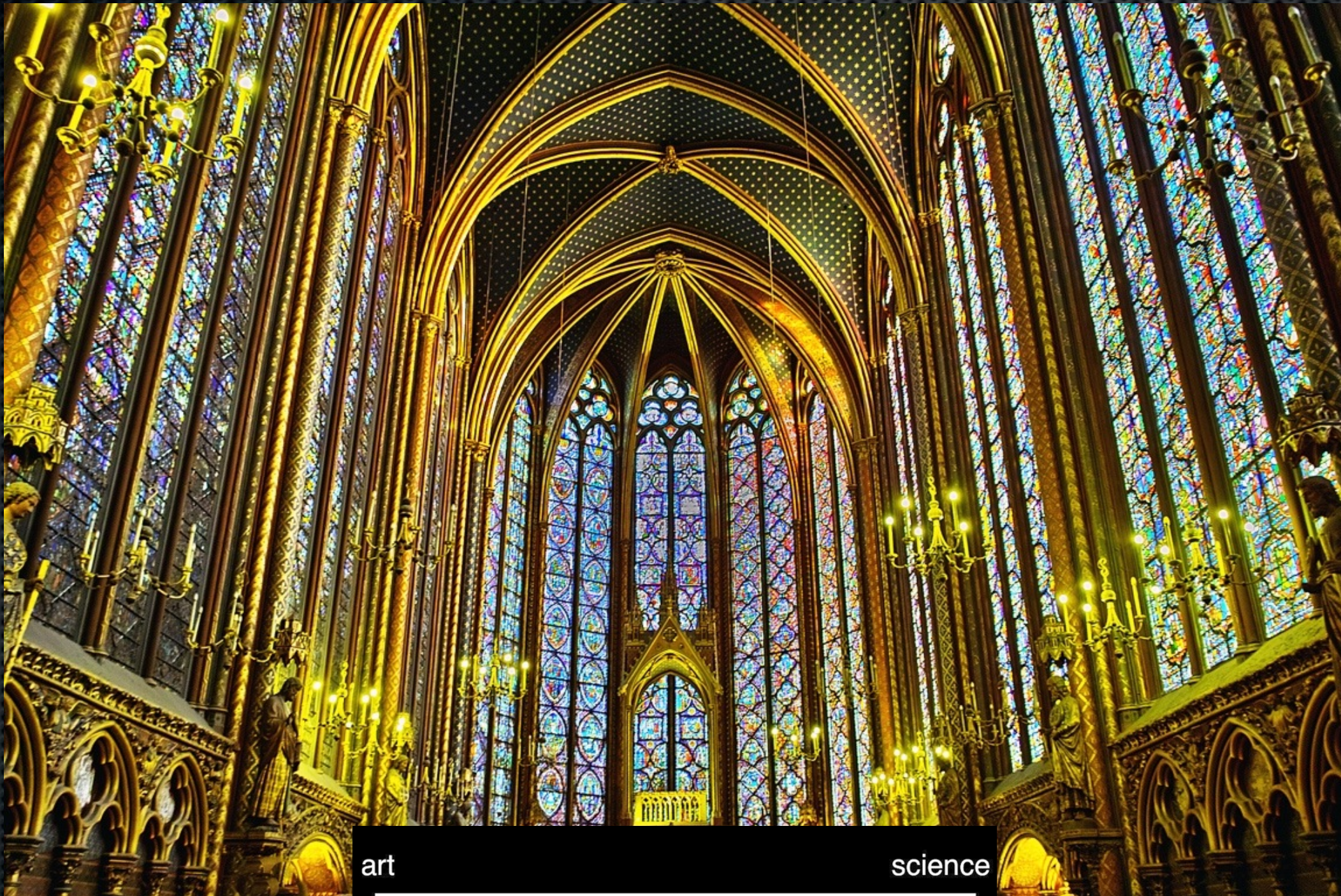


# HARMONY

spirit		material	
components	art emotion	science ratio - sense	- works of Santiago Calatrava - Fallingwater House
methods	analogy intuition	analytics conclusions	- Sidney Opera - works of Michelangelo
approach	subjectivity universality global the whole	objectivity specialization local a part	- works of Frank Gehry - works of Alvar Aalto - works of Carlo Scarpa
harmonic cooperation			



# HARMONY



art

science



# HARMONY



art

science



S . Calatrava  
Alamillo Bridge, Seville



## Tools of art:

1. - scale
2. - proportion
3. - rhythm
4. - form
5. - composition
6. - colours
7. - lights



P. Zumthor  
Chapel Bruder Klaus



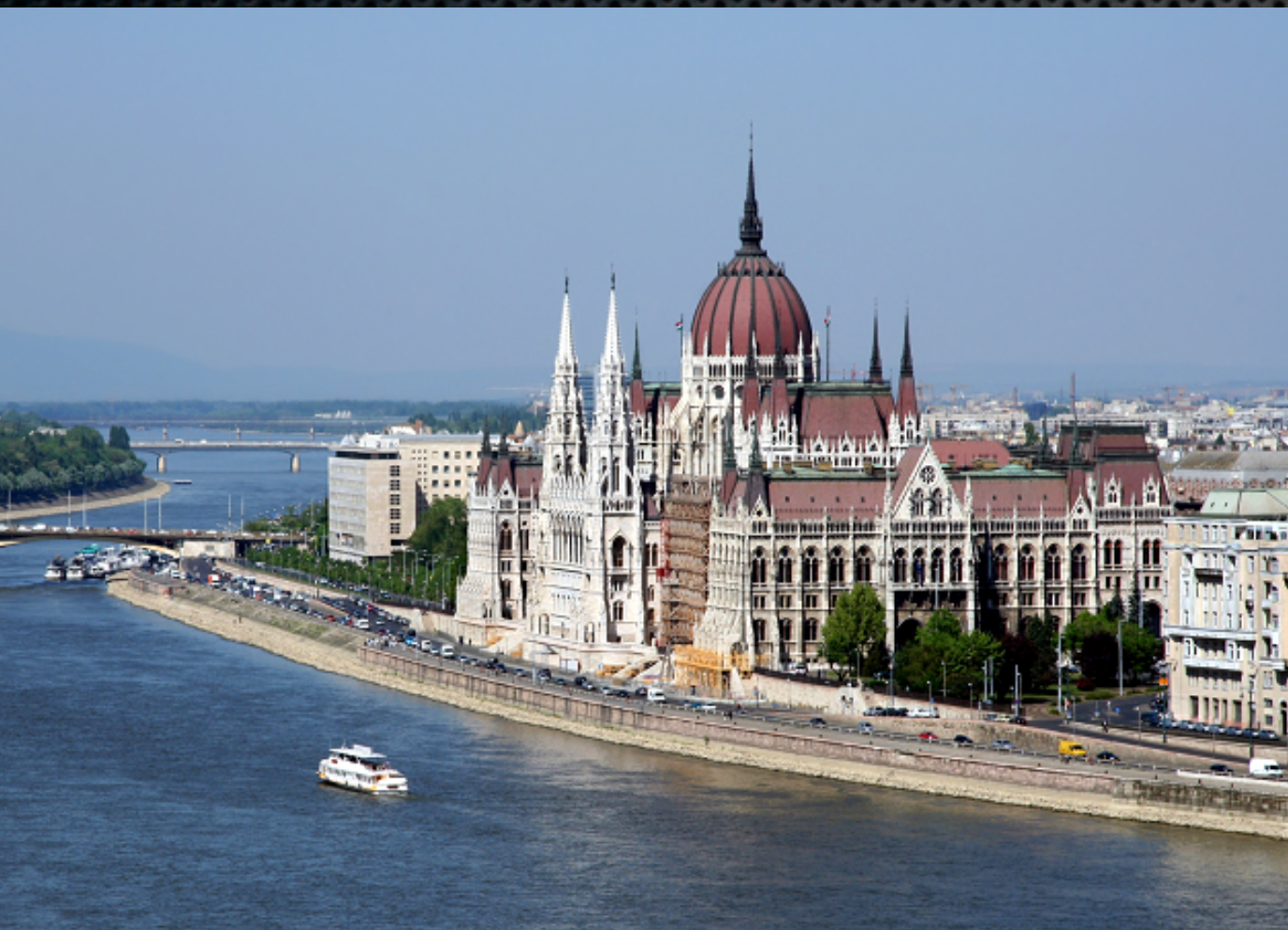
1. - scale is based on comparison  
on point of reference - you!  
(anthropometric comparison)  
correct scale: - traditional village



Vriens



1. - scale is based on comparison  
on point of reference - you!  
(anthropometric comparison)  
correct scale: - traditional village  
correct scale: - depends on function



Parliament of Hungary  
I. STEINDL



1. - scale is based on comparison  
on point of reference - you!  
(anthropometric comparison)  
correct scale: - traditional village  
correct scale: - depends on function



Parliament of Lichtenstein  
GÖRLITZ



1. - scale is based on comparison  
on point of reference - you!  
(anthropometric comparison)  
over-scaling: - tool of emperors, dictators, promotion



105 storey high hotel  
Pyongyang



2.

- proportional (well proportioned, neat)  
more than aesthetic question
- proportional building (design) fits:
- to environment
- to expectation of client
- to budget
- to sustainable future

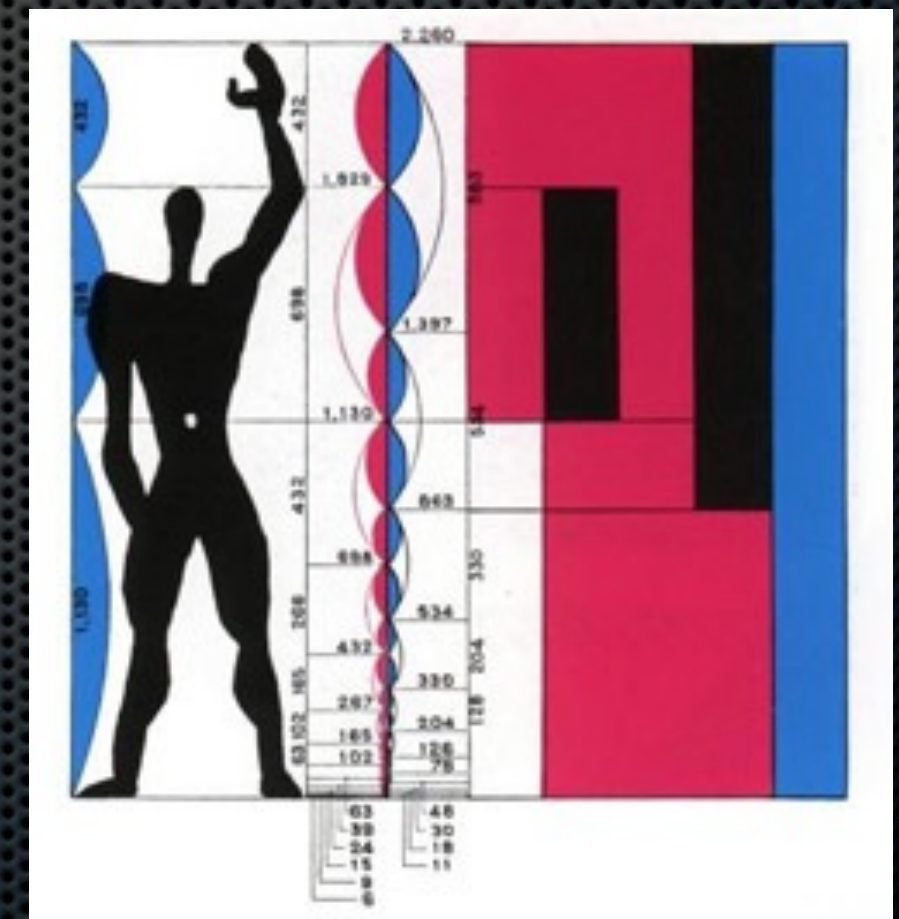
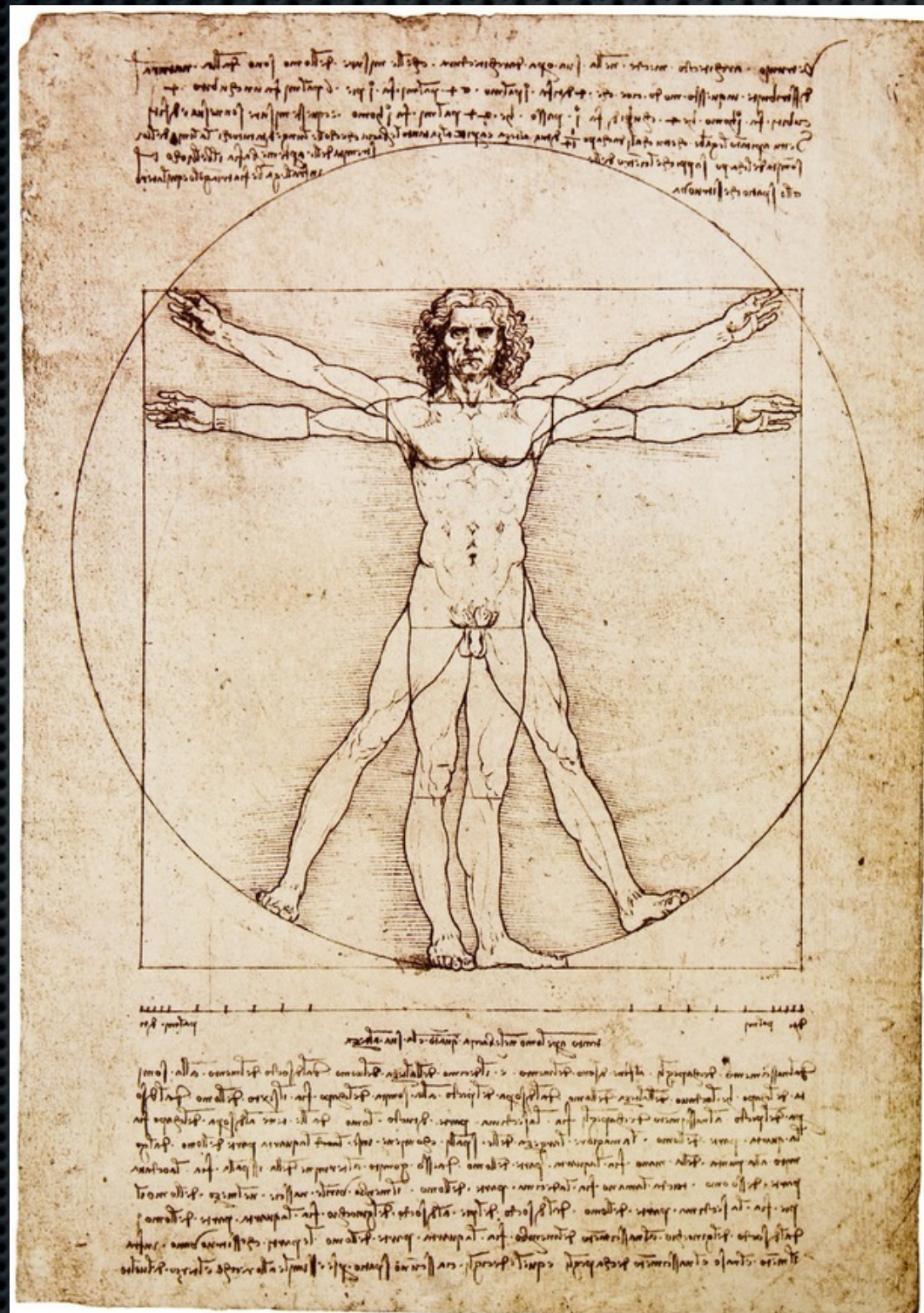


Bamboo House



2.

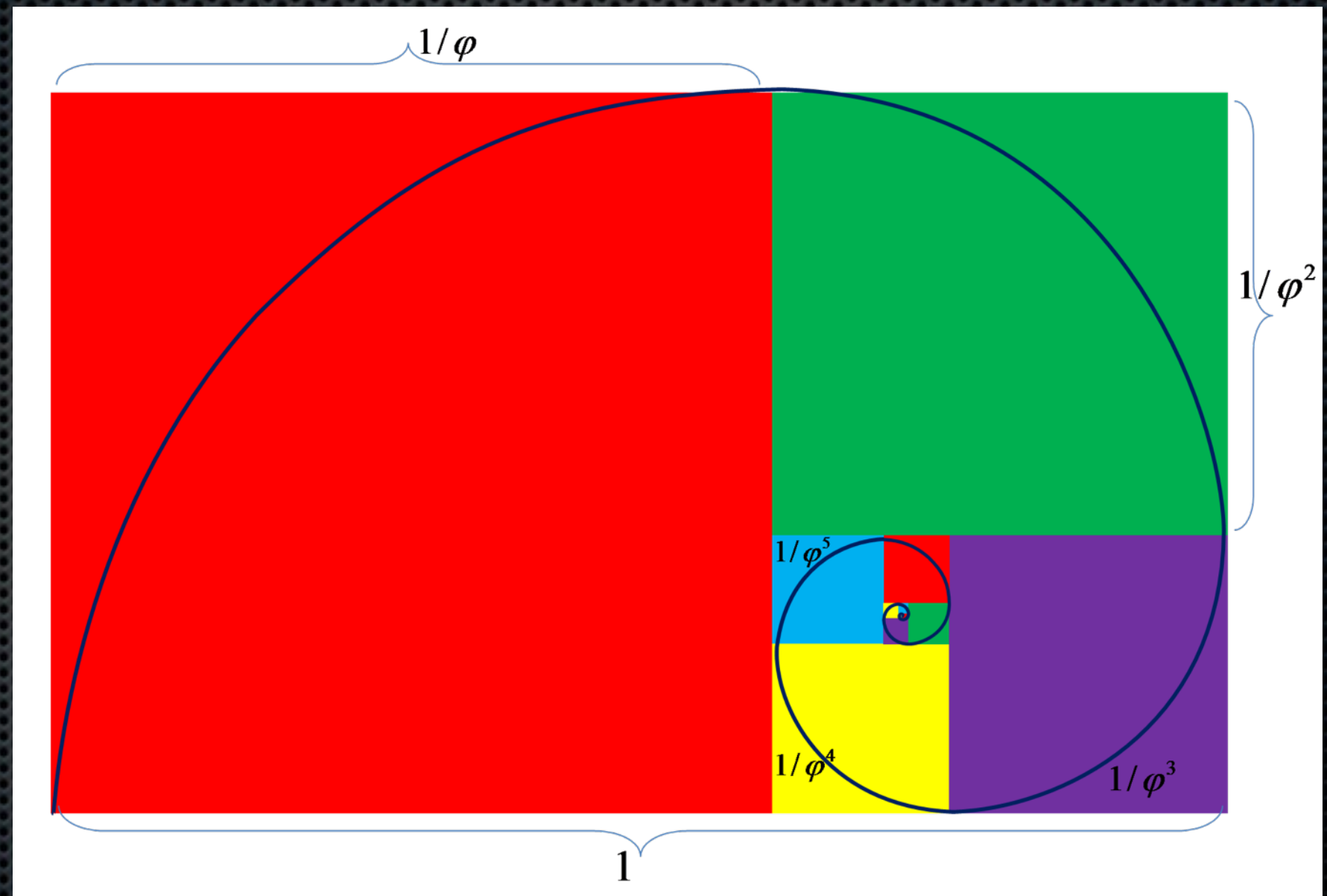
- antropomorf proportion





2.

- antropomorf proportion
- metric proportion - mathematic function



Golden ratio  
FIBONACCI



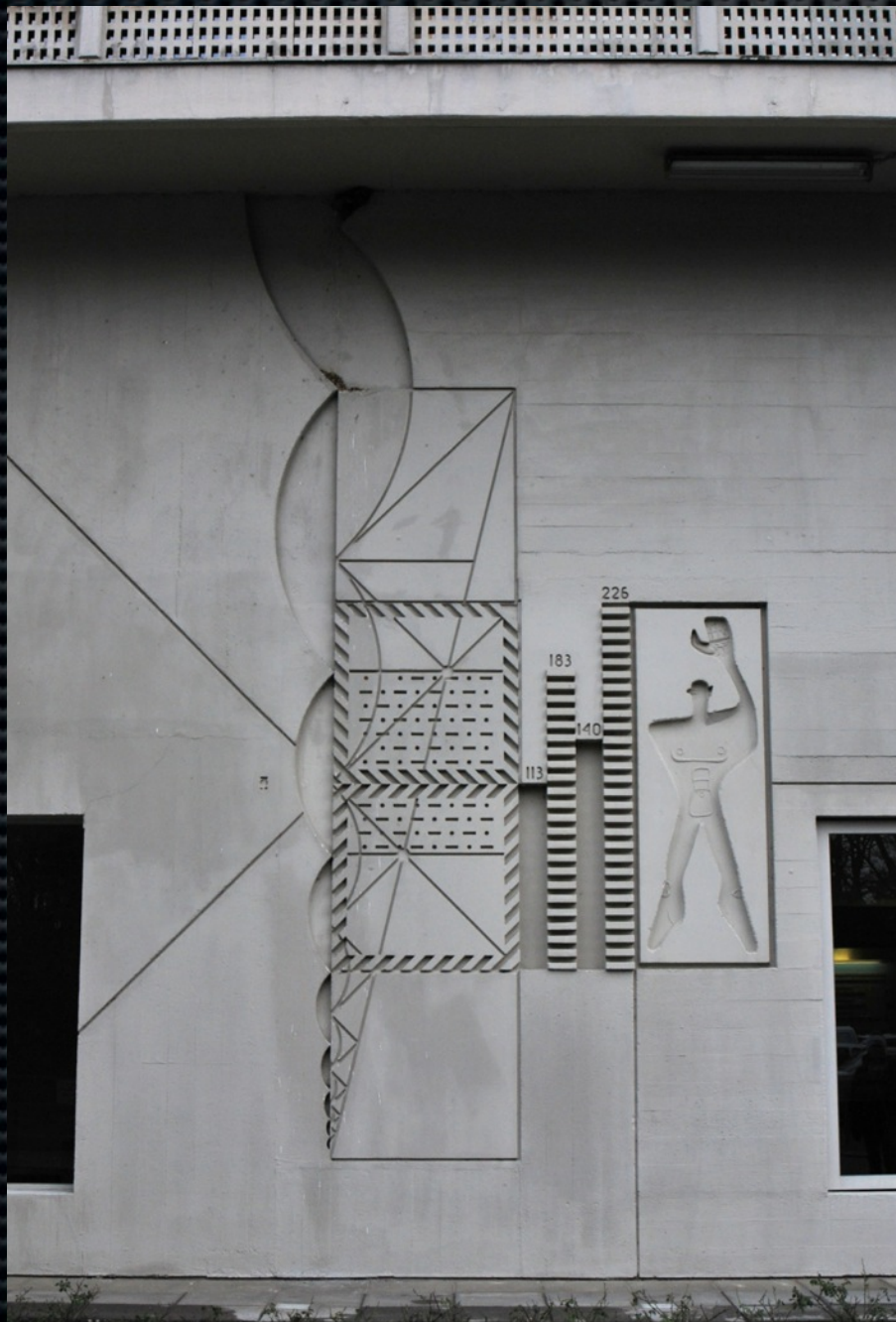
- 3.
- rhythm (based on repetition)
  - monotone - simply repetitive



Olympic Stadium Berlin 1934  
Werner MARCH



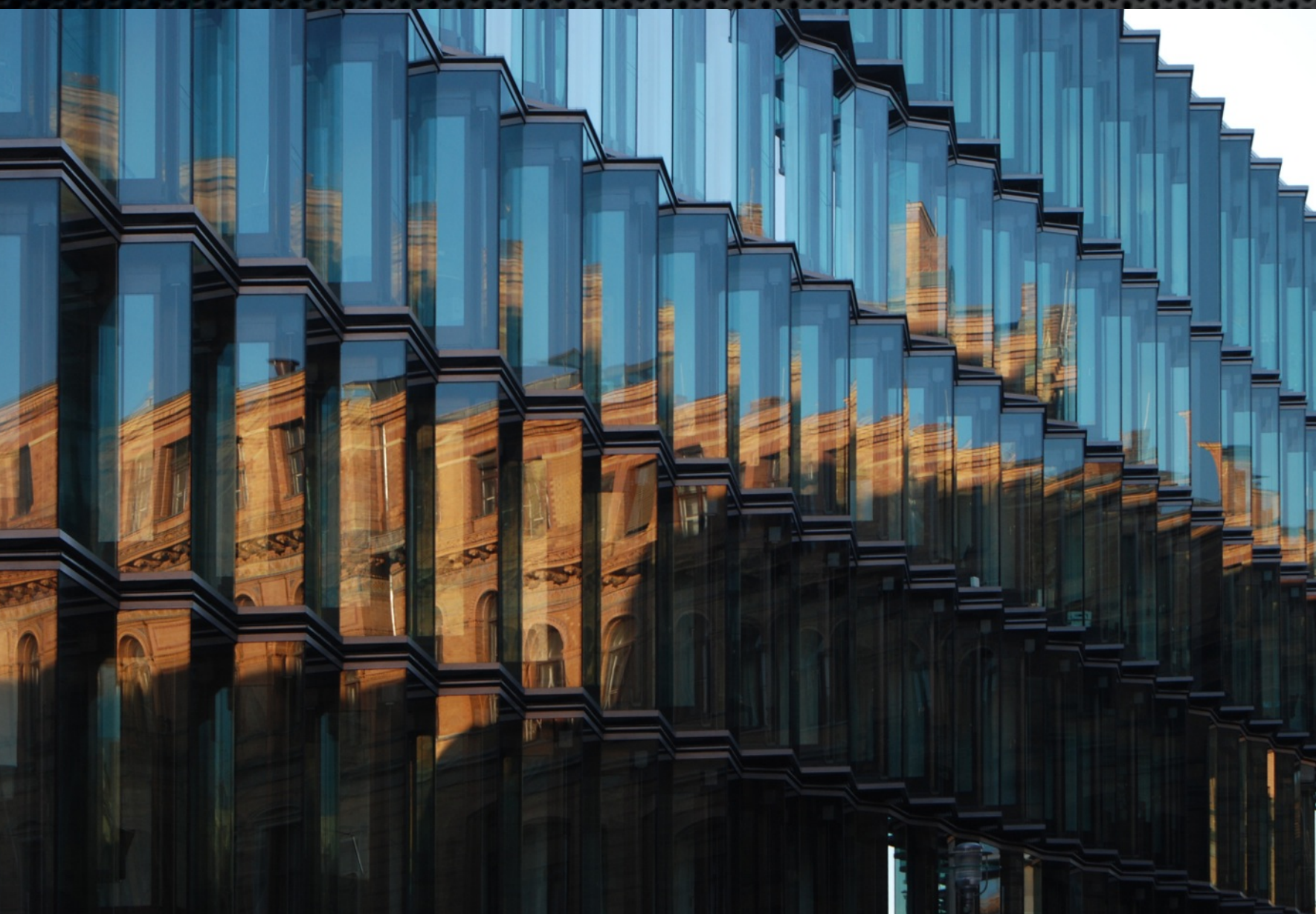
- 3.
- rhythm
    - monoton
    - complex / progressive



IBA Housing, Berlin 1957  
Le Corbusier



- 3.
- rhythm
    - monoton
    - complex / progressive / random



Office building renovation, Berlin  
2010  
LIEB + LIEB



4. - form  
- imitation



Apple Store  
New York



- 4.
- form
  - imitation
  - abstract



Hotel, Arosa  
M. BOTTA

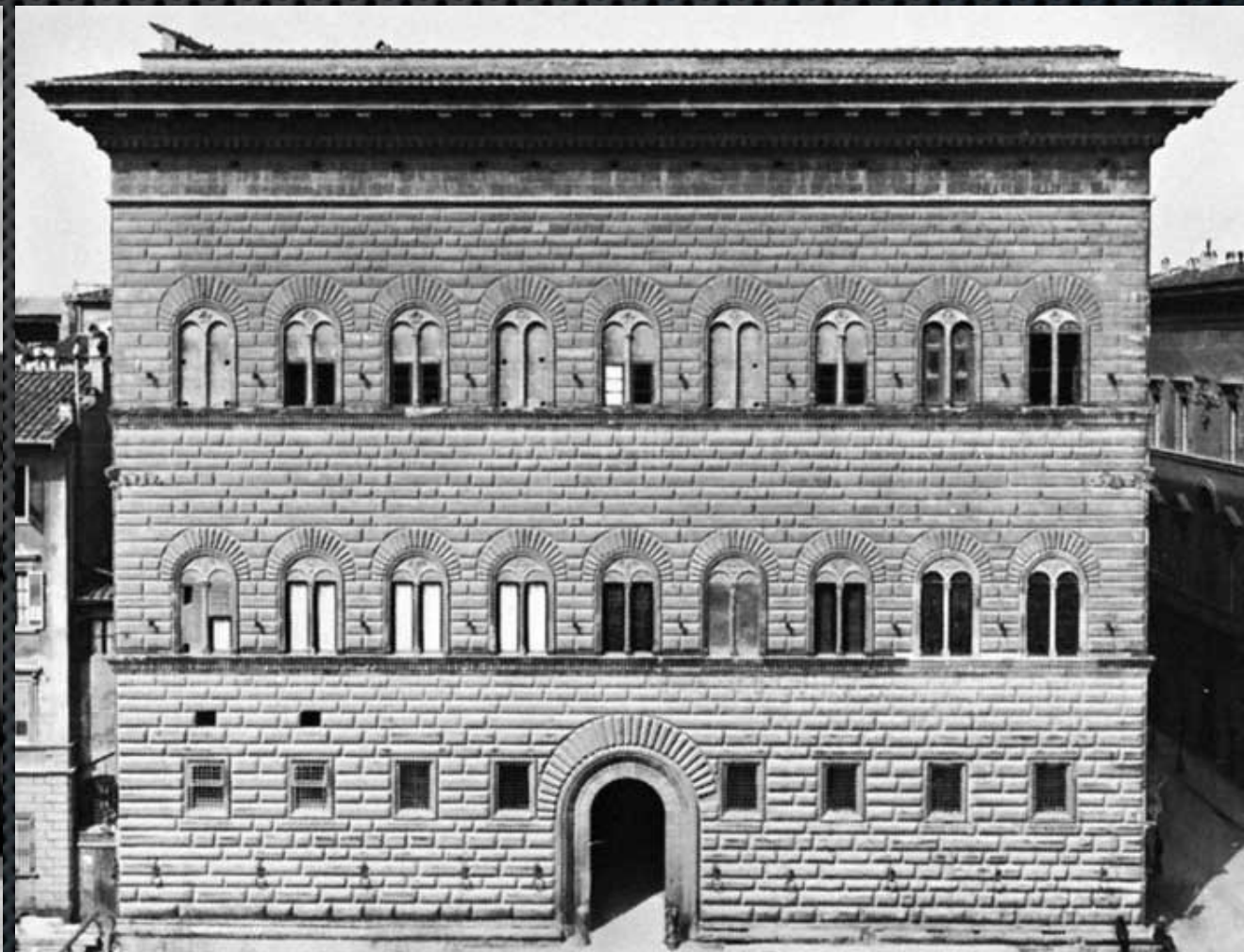
Olympic facilities, Munich  
G. BEHNISCH, O. FREI



- 5.
- composition (arrangement of elements)
  - geometric



Casa di Fascio, Como  
G. TERRAGNI



Palazzo Strozzi, Florence  
B. DA MAIANO



- 5.
- composition
    - geometric
    - organic



Statical model experiment  
A. GAUDÍ



Plan of a church  
I. MAKOVECZ



- 5.
- composition
    - geometric
    - organic
    - accidental / incremental



Social housing, Iquique, Chile 2004  
Alejandro ARAVENA



6. - colours  
- natural



Medieval towns, Croatia



6. - colours  
- natural  
- traditional



Telc, Czech R.



Labin, Croatia



6. - colours
- natural
  - traditional
  - splurge



Shinto Shrine



Children's Hospital Budapest  
Z. SCHRAMMEL



7. - lights  
- daytime



Jewish Museum, Berlin  
D. LIEBESKIND



Church of Light, Osaka  
T. ANDO



7. - lights  
- daytime  
- at night



Moorfields Eye Clinic, London  
PENYOYRE & PRASAD

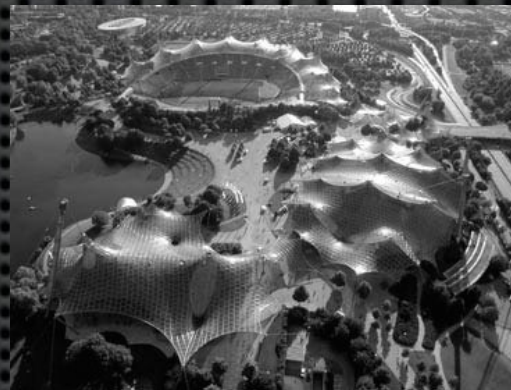


Policlinic reconstruction, Újpest  
Z. SCHRAMMEL



## Tools of art:

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- proportion
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# HARMONY



art

science



G. TERRAGNI  
Casa di Fascio, Como



# HARMONY

Arguments for art:

- delight
- desire
- challenge
- excitement, tension

Arguments for science:

- intelligence
- development
- innovation
- laziness

art

science





# HARMONY

Emotion is needed to create,  
Ratio (knowledge) to be able to create

Users need ratio to be able to use,  
but they get emotions by DESIGN

## Components





# HARMONY



emotion

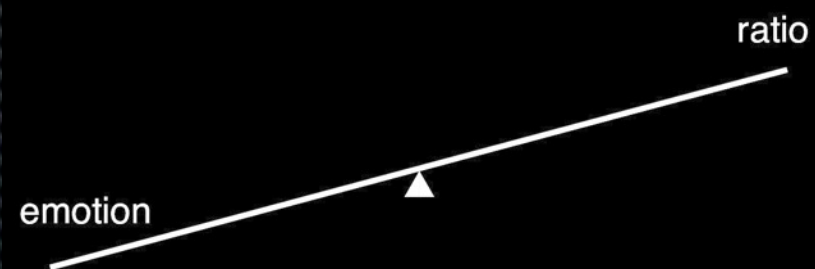
ratio



Le CORBUSIER  
Villa de la Roche, Paris

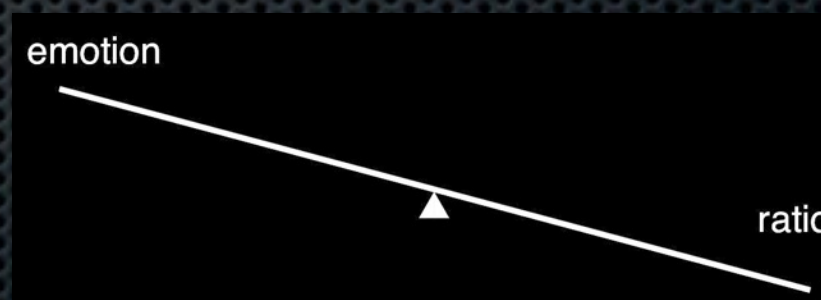
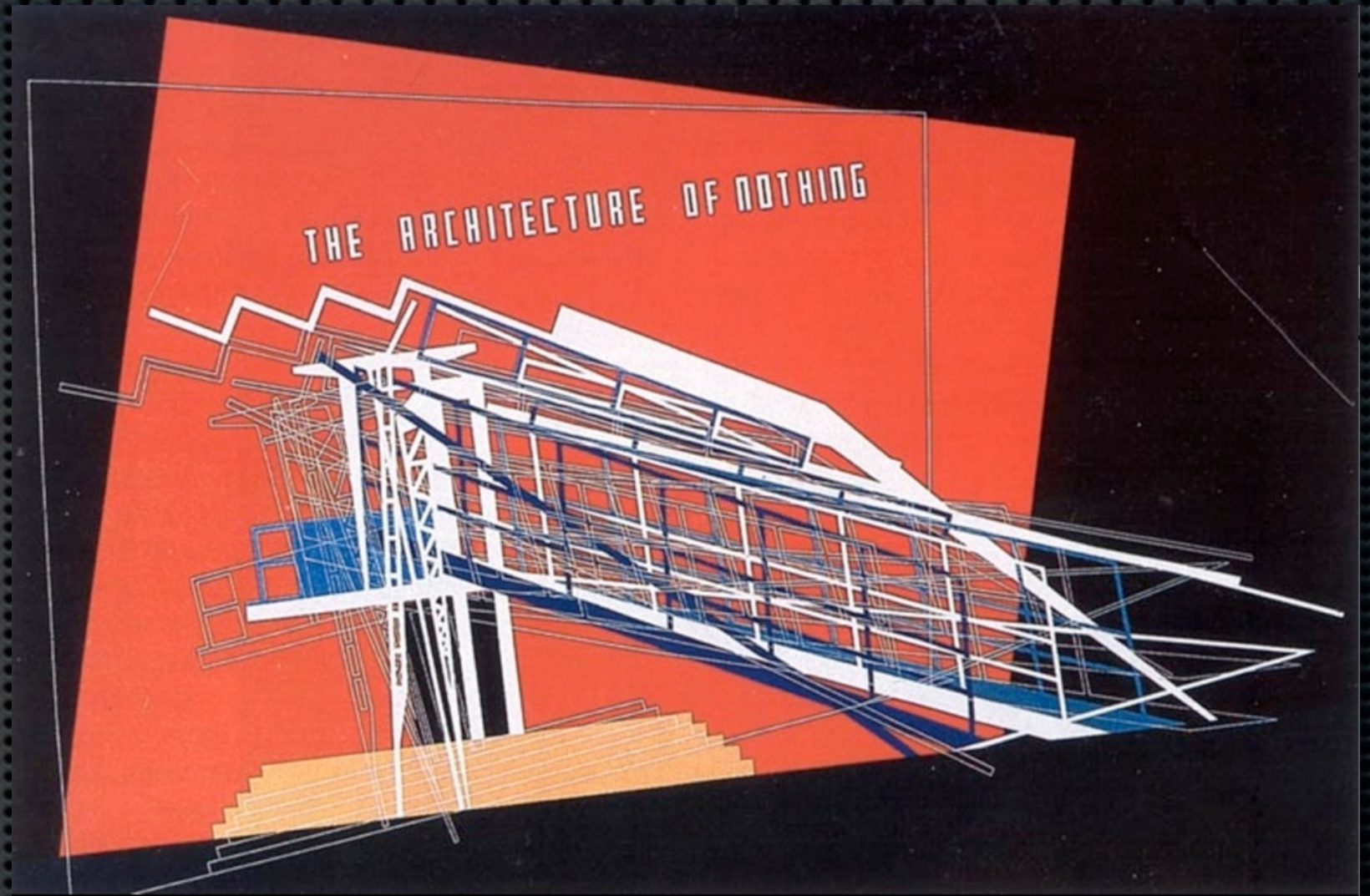
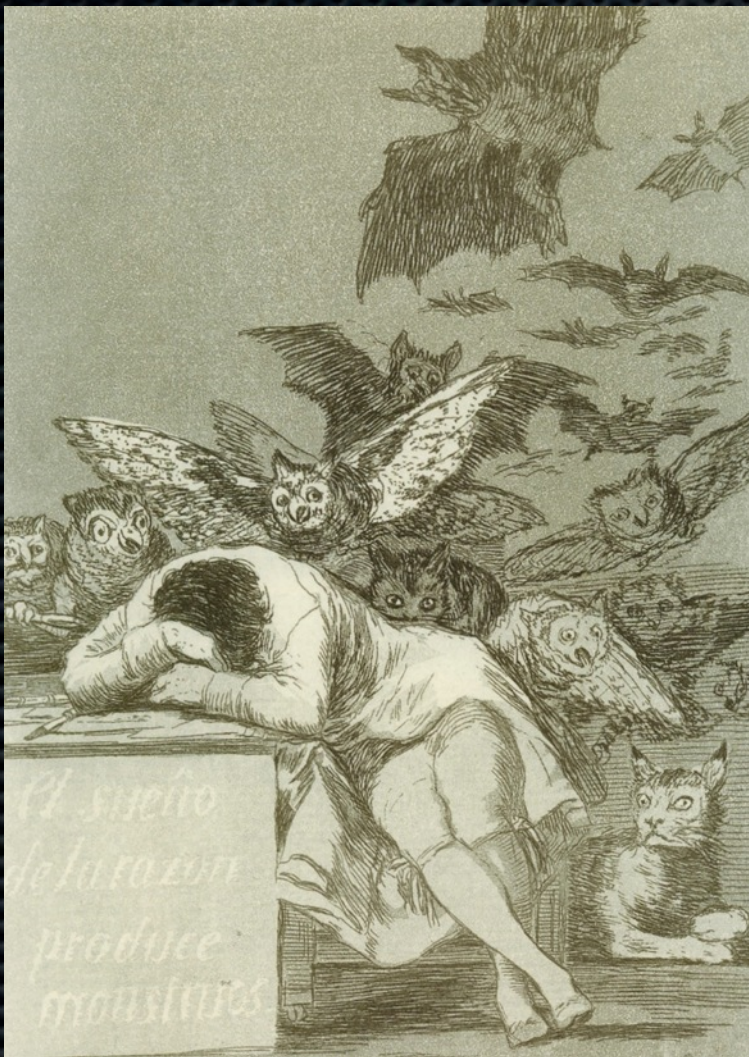


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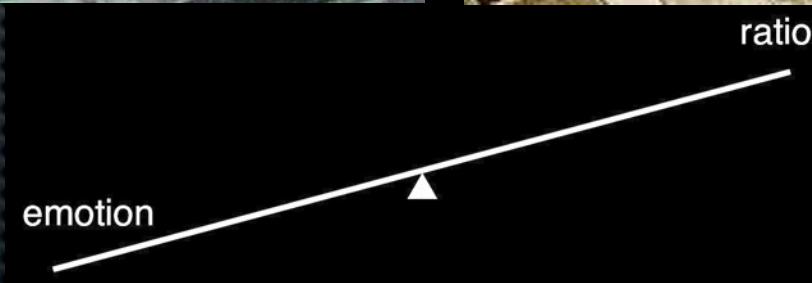


# ҮИЮМЯАН



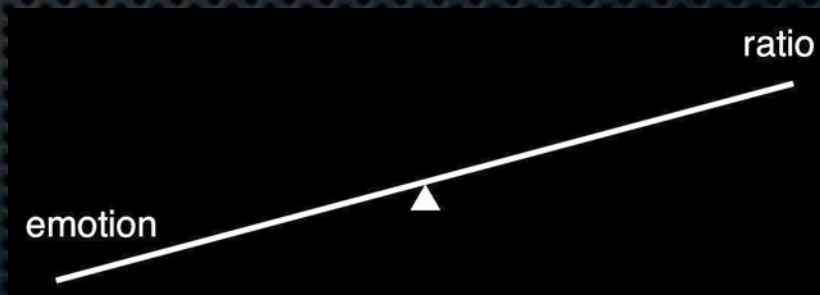


# УИОМЯАН



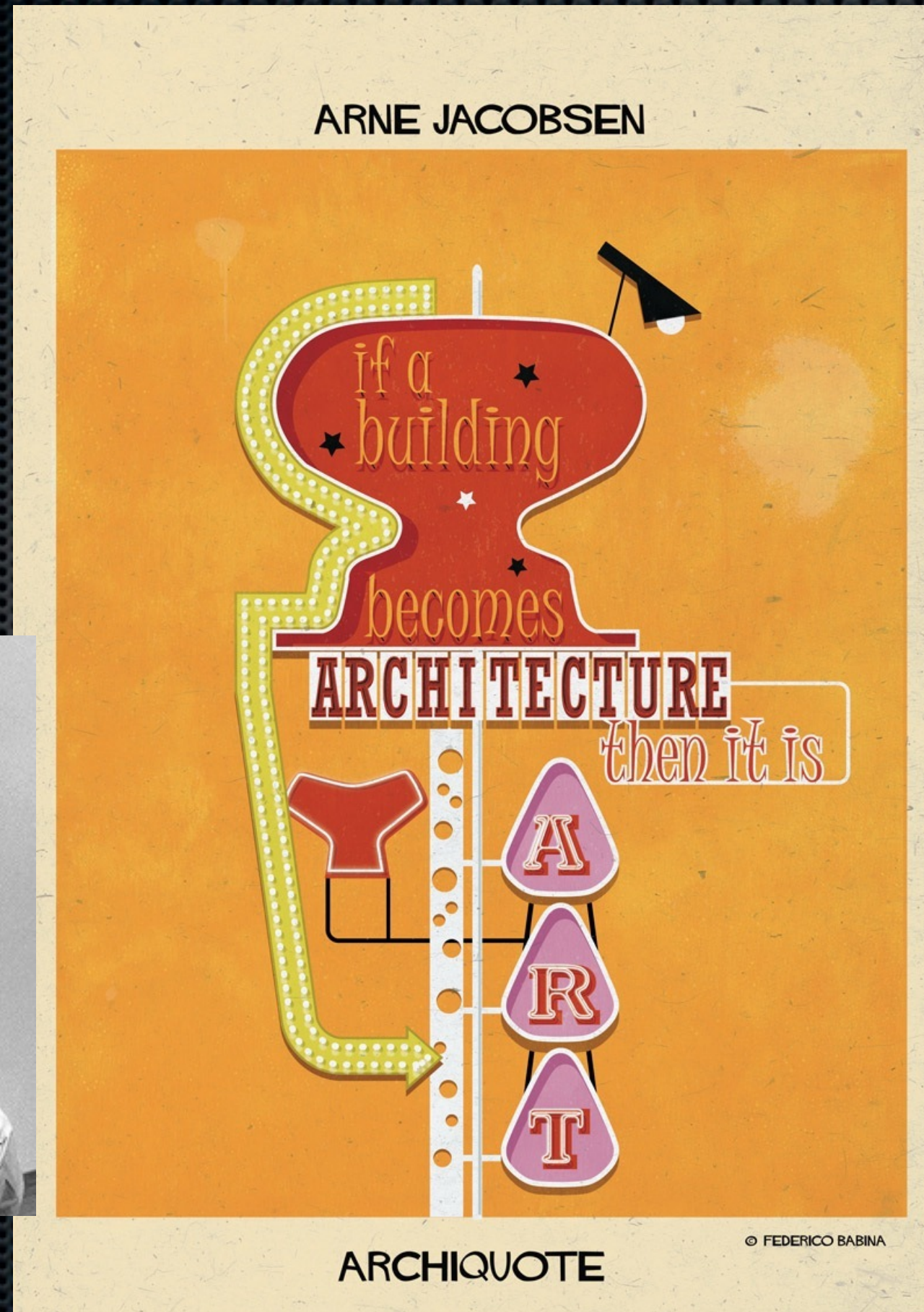


# HARMONY



IBA 1957, Berlin  
Hansaviertel







Quote for today:

“I call architecture frozen music.”

Johann W. von GOETHE (1749-1832)