INTERIOR AND EXTERIOR RELATIONSHIP & INTERIOR PLANTING
- Project Site Boundaries
- Topographic Measurements
- Existing structures – Solid & Void
  - Buildings, roads, planting, courtyards, fixed furnitures, stairs etc.)
- Existing water, gas, sewage, electricity lines etc.
Site Inventory & Analysis

- Problems and Potentials analysis
- Surveys (Cultural & physical conditions)
- Historical background research
- Environmental conditions research
- Zoning plans, construction permissions
- Climatic and geographic conditions (Sun, wind directions, major views of the site etc.)
- Major circulation paths (Car and pedestrian traffic)
Major Site Inventory & Analysis Plan Symbols
SITE INVENTORY EXAMPLE
Interior & Exterior Relationship
To Achieve a Coherent Design:

- USER’S
  - Attention
  - Memory
  - Real-time experiences
  - Pleasure
  - Opportunities
  - Stress
  - Healthy social interactions

Is this architectural environment coherent?
How to create a coherent design in between internal and external spaces?

- What is Context
- For Whom
- For What Purpose
- Visual Connection
- Physical Connection
Some Methods of Creating Interior and Exterior Relationship:

- Extending the exterior design decisions to interior
- Use of transparency
- Use of open air spaces like courtyards, gardens etc.
- Borrowing materials from exterior environments and bring them inside
- Creating view points and vistas
Bill & Melinda Gates Foundation
By NBJJ Architects

EXTENDING EXTERIOR DESIGN TO THE INTERIOR
Bill & Melinda Gates Foundation
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EXTENDING EXTERIOR DESIGN TO THE INTERIOR
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EXTENDING EXTERIOR DESIGN TO THE INTERIOR

International Retreat
EXTENDING EXTERIOR DESIGN TO THE INTERIOR

International Retreat
Crescent House
By
Make Architects

USE OF TRANSPARENCY
Farnsworth House
By
Ludwig Mies van der Rohe
La Concha Home

By
MOORAC
La Concha Home
By MOORAC
Farnsworth House
By
Ludwig Mies van der Rohe

USE OF OPEN-AIR SPACES
Terrace with a Wooden Roof
Using Similar Materials / Furniture / Styles / Forms
Using Similar Materials / Furniture / Styles / Forms
CREATING VIEWPOINTS
A House in Lemesos (Greece)

By

George Papadopoulos – Skinotechniki
Some Benefits of Interior Planting:

- Brings a natural feeling
- Year-round dynamism
- Striking forms, colors, textures, fragrances
- Can be used to hide or soften unwanted existing situations
- Blocks noise, dust, unwanted images, control the acoustics and the lighting
- Produces oxygen and cleans the air
- Can be used to lower stress and for healing of patients
To achieve these functions:

A Plant should be;

- Resistant to
  - certain level of stress,
  - changing environmental conditions,
- Suitable to grow in planters and containers,
- Have a pleasant look all year long,
- Planted in certain environments with appropriate heating / cooling, lighting & humidity.
Classification of Interior Plants

1- In Terms of Ecological Needs
   a. Heat
   b. Water & Humidity
   c. Light

2- In Terms of Form
   a. Climbing Plants
   b. Pendulous Plants
   c. Architectural Plants

3- In Terms of Foliage Colors & Shapes

4- In Terms of Flowers Colors
Ecological Needs:

**Heat**

- Level of temperature to grow and to have a full form.
- Between 0-40°C.
- Rest period in winter:
  - Need 5-10°C less temperature
  - Wooden parts and buds grow.
Ecological Needs:

Water & Humidity:

- Plants get the food & minerals from the soil with their roots and carry those to branches and leaves with water.
- Transpiration: Plants give off excessive water vapor from the tiny pores in leaves. By this way they get rid off waste.
- Transpiration is directly related to the humidity, heat, wind, air pressure and water in the soil.
- Plants generally need 60-70% percent humidity.
Ecological Needs:

**Light:**

- Need light to survive and grow.
- The light need depends on the season, the age of the plant.
  - Young plants → more light,
  - In rest period → less light.
- Different species have various light needs.
- Plants show their light need by unhealthy branches and dull colored leaves.
- When plants only get light from one direction they start to grow towards that direction.
Form:

a. Climbing Plants
- They always grow vertically and very fast.
- They can grow around other vertical supporting elements such as other trees and walls.
Form:

b. Pendulous Plants
- Can be used as groundcover or hung and let it grow downwards.
- Usually have attractive colored flowers and leaves

PELARGONIUM PELTATUM-SARDUNYA
PETUNIA ‘PINK WAVE’- PETUNYA
c. Architectural Formed Plants
- Can be used as a focal and/or reference points or to direct people in the space.
- Can have column form or a tree form.
Foliage Colors & Shapes:

- Some of the interior plants are being preferred because of their attractive leaves.
- Evergreen plants are highly preferred since they are easier to maintain. And have a full form all year-round.

CALATHEA MAKOYANA – TAVUS KUSU CICEGI

NEPHROLEPIS EXALTATA – ASK MERDIVENI
Flower Colors:

- Some of the interior plants are being preferred because of their attractive flower colors and fragrances.

LAVANDULA ANGUSTIFOLIA – LAVANTA

HYACINTUS – SUMBUL
The Design & Maintenance:

A designer should consider:

- Plants are living organisms that breaths, sweats, grows.
- The natural factors of the space such as day light/artificial light direction, heating/cooling systems, watering systems.
- The relationship of the plants with each other and with other design features.
- Design concepts
- Function of the space
- Working hours of the space?
- The physical features of the building such as direction and dimensions.
- Using the appropriate tools, planters and furniture.
References:

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