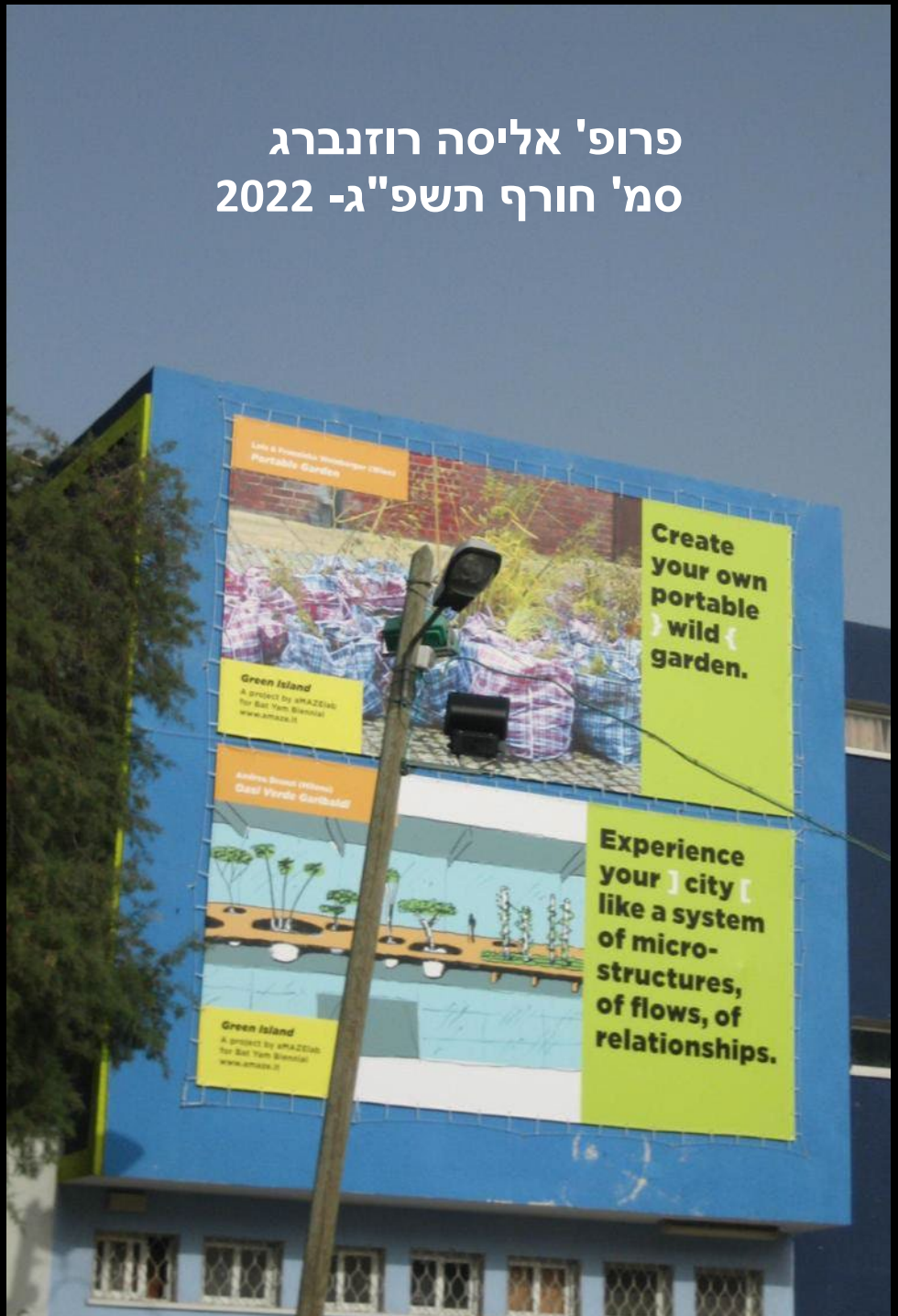
פרופ' אליסה רוזנברג
סמ' חורף תשפ"ג- 2022



הנוף האורבני

עמק יזרעאל – גל וונשטיין. 2002

עמק יזרעאל, 2002, MDF, שטיחים מקיר לקיר, פי.וי.סי., 19×14×0.03 מ׳
מראה הצבה, מוזיאון הרצליה לאמנות עכשווית, אוסף מוזיאון תל אביב לאמנות
Valley of Jezreel, 2002, MDF, wall-to-wall carpets, PVC, 19×14×0.03 m, installation view,
Herzliya Museum of Contemporary Art, Collection Tel Aviv Museum of Art

נוף

LANDSCAPE:
From the Old English term, *landskip*

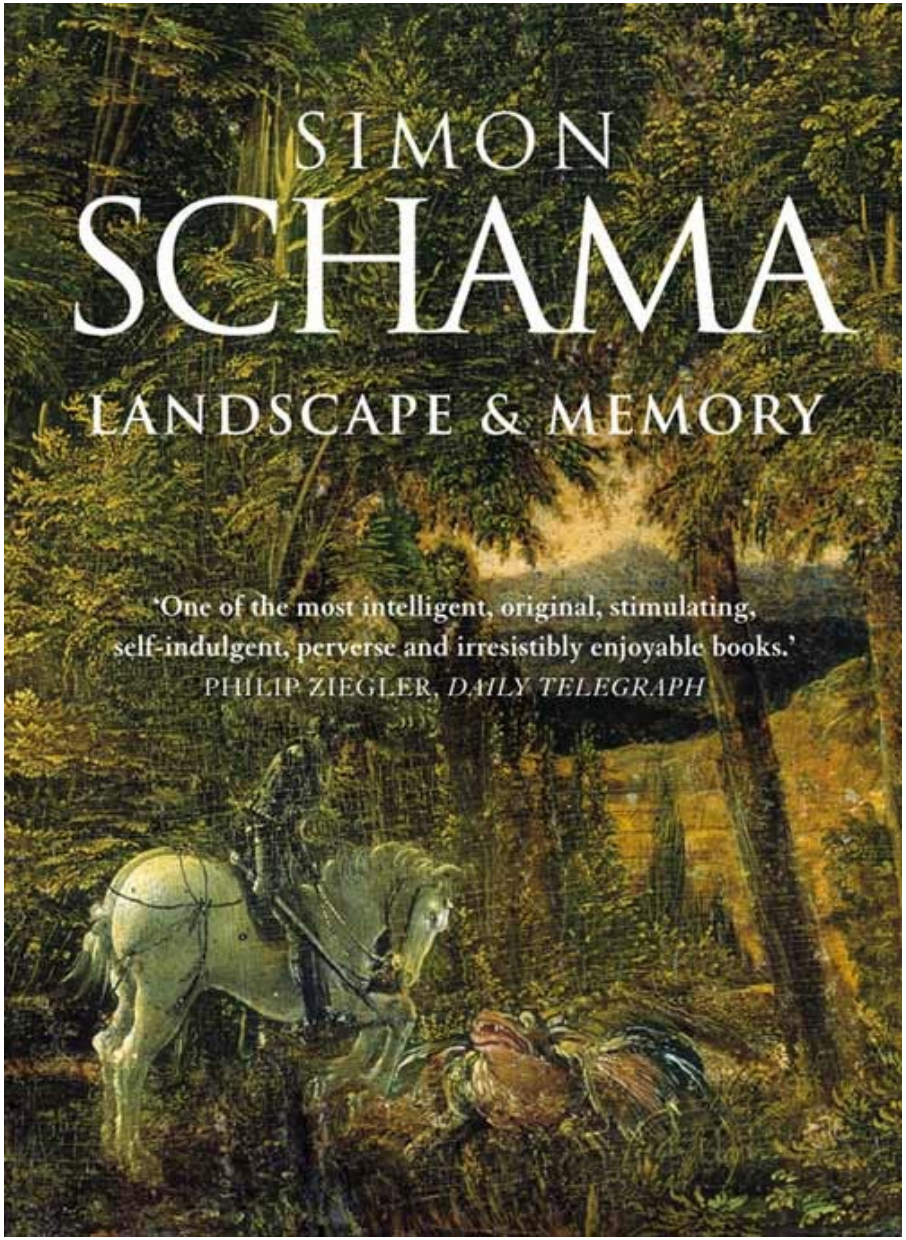
"A view or prospect of natural inland scenery such as can be taken in at a glance from one point of view". OED, 1725.

Landscape was defined **externally by the observer** who invested it with human meaning

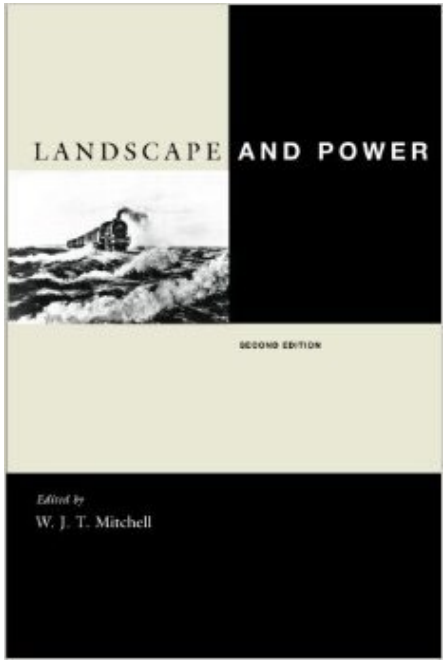
מושג הנוף מוגדר על ידיי **הצופה** המעניק לו את משמעותו

“Before it can ever be the repose for the senses, landscape is the work of the mind. Its scenery is built up as much from strata of memory as from layers of rock.” (Schama, p.6)

"לפני שנוכל לחוש אותו, הנוף הוא פרי יצירתו של המחשבה. הנוף בנוי משכבות זיכרון כמו משכבות סלע. "



Simon Schama, 1995. *Landscape and Memory*



"The aim of this book is to change 'landscape' from a noun to a verb. It asks that we think of landscape, not as an object to be seen or a text to be read, but as a process by which social and subjective identities are formed…. Landscape and Power aims to ask… not just what landscape "is" or "means" but what it does, how it works as a cultural practice."(Mitchell, p. 1)

"מטרת הספר הזה היא לשנות את מושג ה-'נוף' משם עצם לפועל. הוא מבקש שנחשוב על נוף, לא כאובייקט שיש לראותו, או טקסט שמבקש לקרוא, אלא כתהליך שבו נוצרות זהויות חברתיות וסובייקטיביות .... *Landscape and Power* שואף לשאול ... לא רק מהו הנוף או מה "פירושו" אלא , ביצד הוא פועל כפרקטיקה תרבותית. "

W.J.T. Mitchell, 1994. *Landscape and Power*

הנוף כפרקטיקה תרבותית

- אוביקטיביות של הטבע? מהי המסגרת התרבותית דרכה אנו תופסים-רואים-חווים-מבינים את הטבע?
- אספקטים פוליטיים ואידיואלוגיים
- המרחב ככלי לביטוי ועיצוב זהות לאומית, חברתית, אישית

Landscape as a cultural practice

- Nature is not “neutral”- cultural framework
- Political, ecological and ideological dimensions
- SPACE as an instrument of power as a vehicle for national, social and personal identity

It (landscape) naturalizes a cultural and social construction, representing an artificial world as if it were simply given and inevitable..
(Mitchell)

(הנוף) מגלם הבנייה תרבותית וחברתית, ומייצג עולם מלאכותי כאילו הוא פשוט נתון ובלתי נמנע ..


Landscape, we suggest, doesn't merely signify or symbolize power relations; it is an instrument of cultural power… (Mitchell)
(C) BibleWalks.com

הנוף הישראלי: "יש מאין"

The Israeli landscape: “something from nothing”-

A cultural practice….

"All the lands there are for dismal scenery, I think Palestine must be the prince. The hills are barren, they are dull of color, they are unpicturesque in shape. The valleys are unsightly deserts fringed with a feeble vegetation that has an expression about it of being sorrowful and despondent.

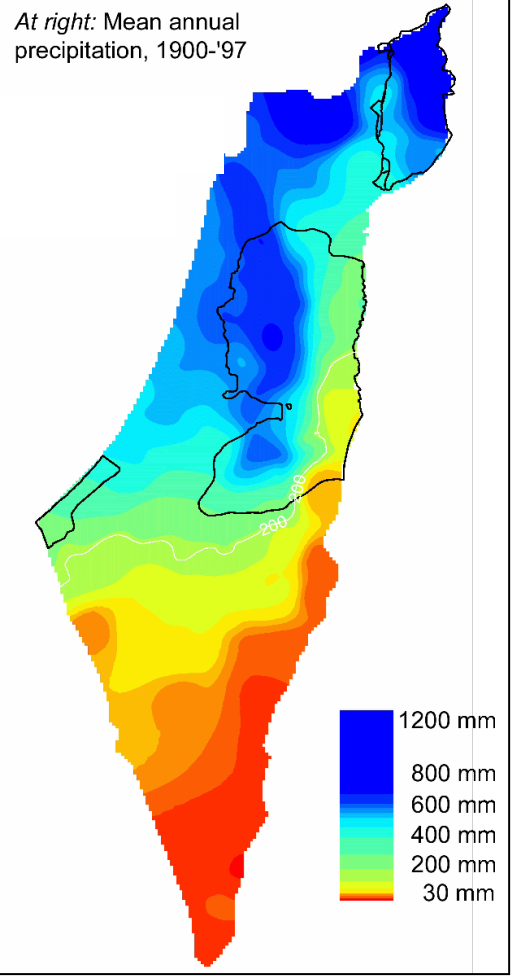
It is a hopeless, dreary, heart-broken land.

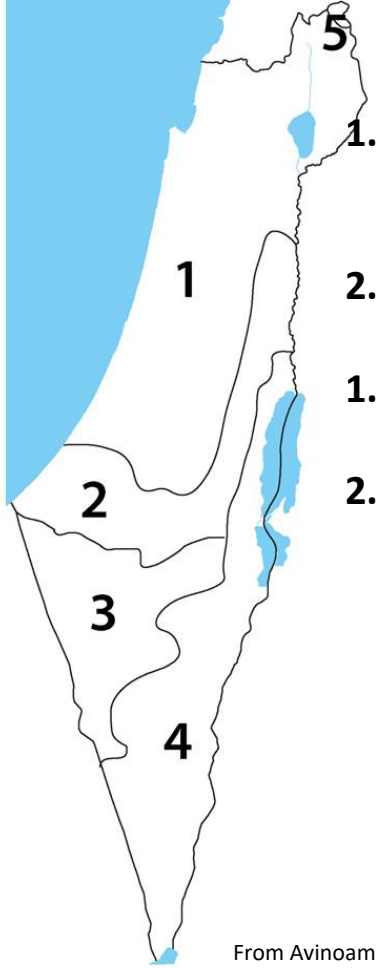
-Mark Twain, Innocents Abroad, 1884.

Photographs by the **Palestine Exploration Fund**

Mt. Tabor, 1866

Agricultural terraces at Batir, 1892





1. **Mediterranean:** oak woodlands, carob, pines-maquis
2. **Irano-Turanian:** steppe vegetation
1. **Saharo-Arabian:** desert plants
2. **Sudanian:** sub-tropical, need permanent water supply

Biogeographical regions in relation to annual rainfall

From Avinoam Danin, Flora of *Israel*

1

Quercus calliprinos

2

Artemesia sieberi Besser

3

Thymeliea hirsute

4

Acacia tortilis

Fig. 51. Pinus halepensis Mill.

Early use of Eucalyptus to drain the swamps in Hadera

Jacaranda mimosifolia

Acacia saligna

Grevillea robusta

Brachychiton australis

John Brinckerhoff Jackson

:

משמעות התרבותית
של נופי היום -יום: מבוניות
וכבישים,
חצרות מדרכות וגדרות

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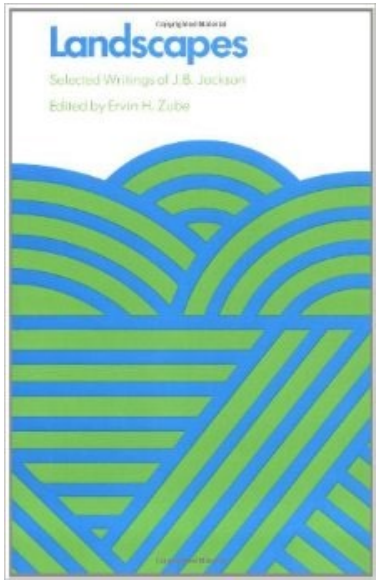
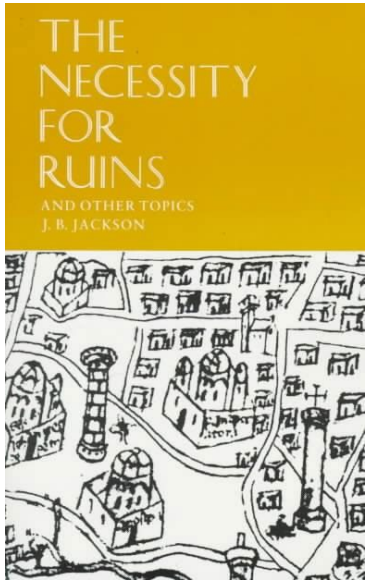
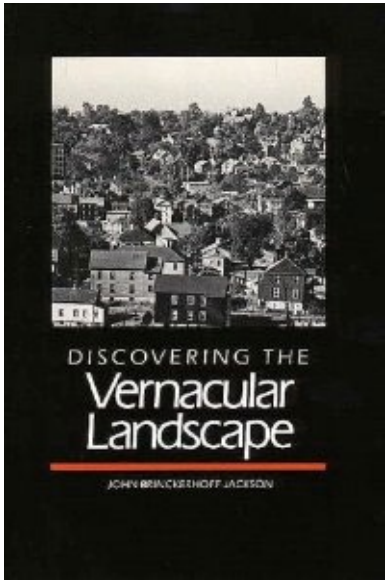


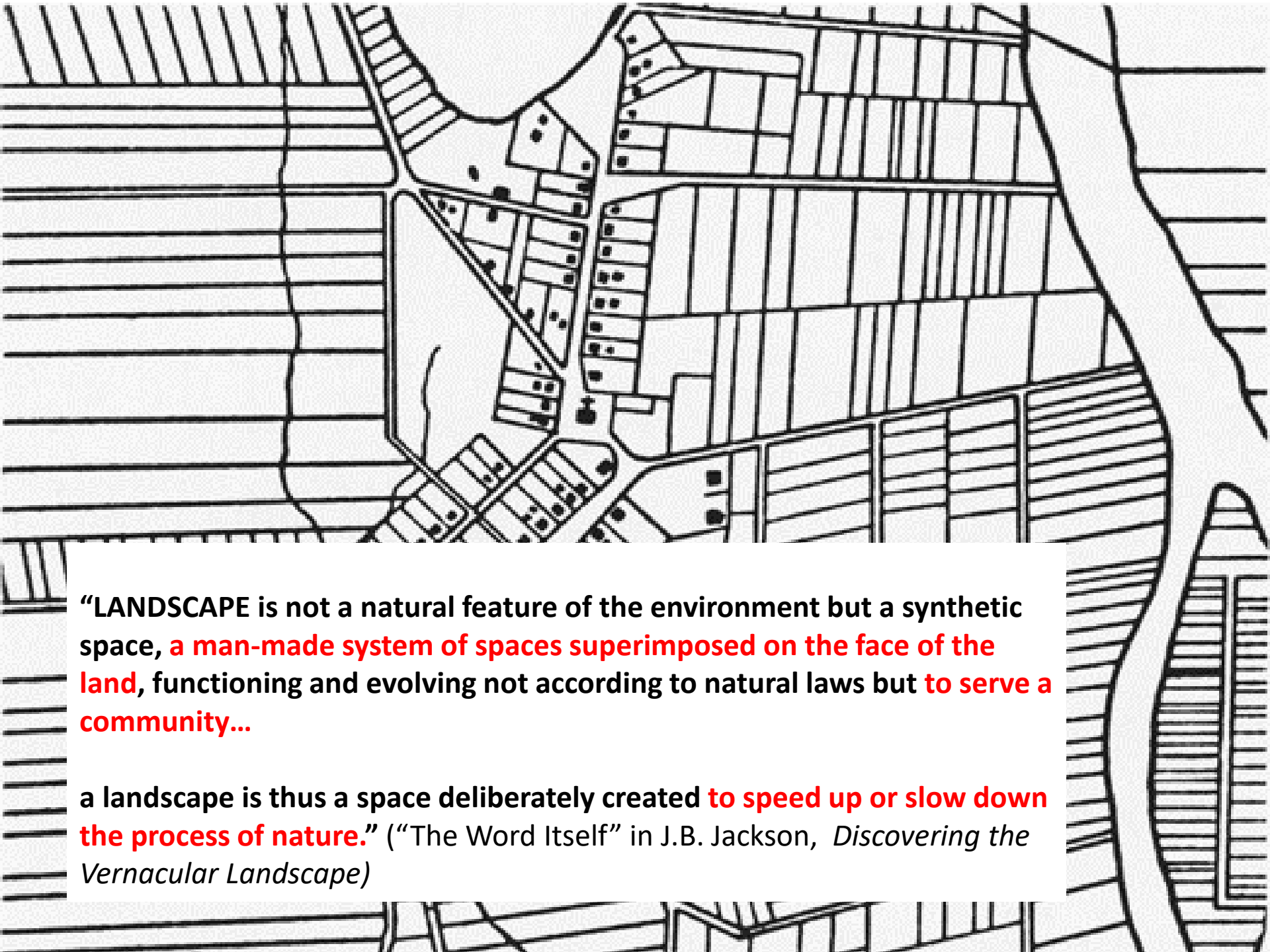




נופי תרבות- CULTURAL LANDSCAPES

טרסות בבתיר- אתר מורשת עולמי

דרך הבשמים



“LANDSCAPE is not a natural feature of the environment but a synthetic space, a man-made system of spaces superimposed on the face of the land, functioning and evolving not according to natural laws but to serve a community…

a landscape is thus a space deliberately created to speed up or slow down the process of nature.” (“The Word Itself” in J.B. Jackson, *Discovering the Vernacular Landscape)*

1

The Urbanization of nature: The “urban pastoral:”

פסטורליה עירונית: התפתחות הפארק העירוני במאה ה-19

הנוף הפסטוראלי

2

Landscape urbanism

LANDSCAPE AS URBAN STRUCTURE

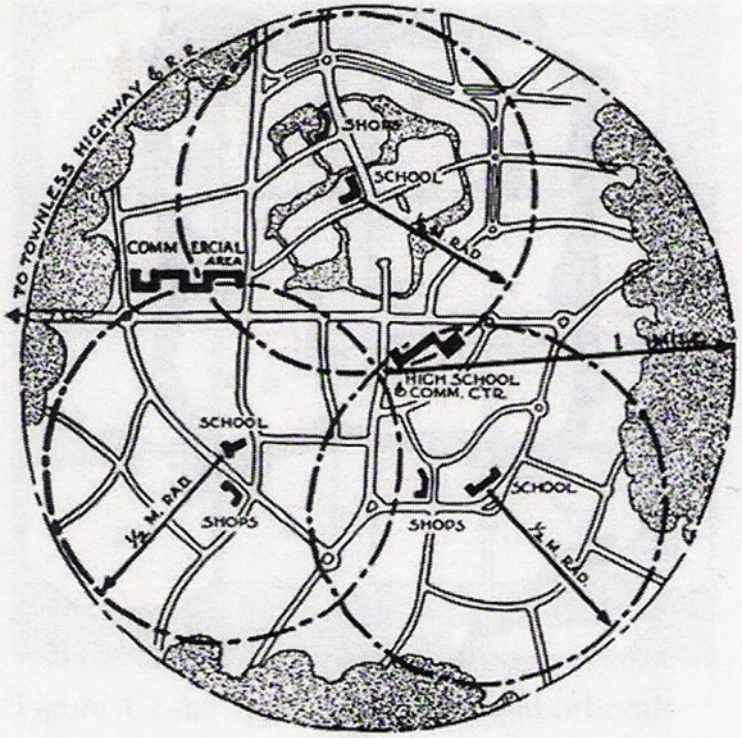
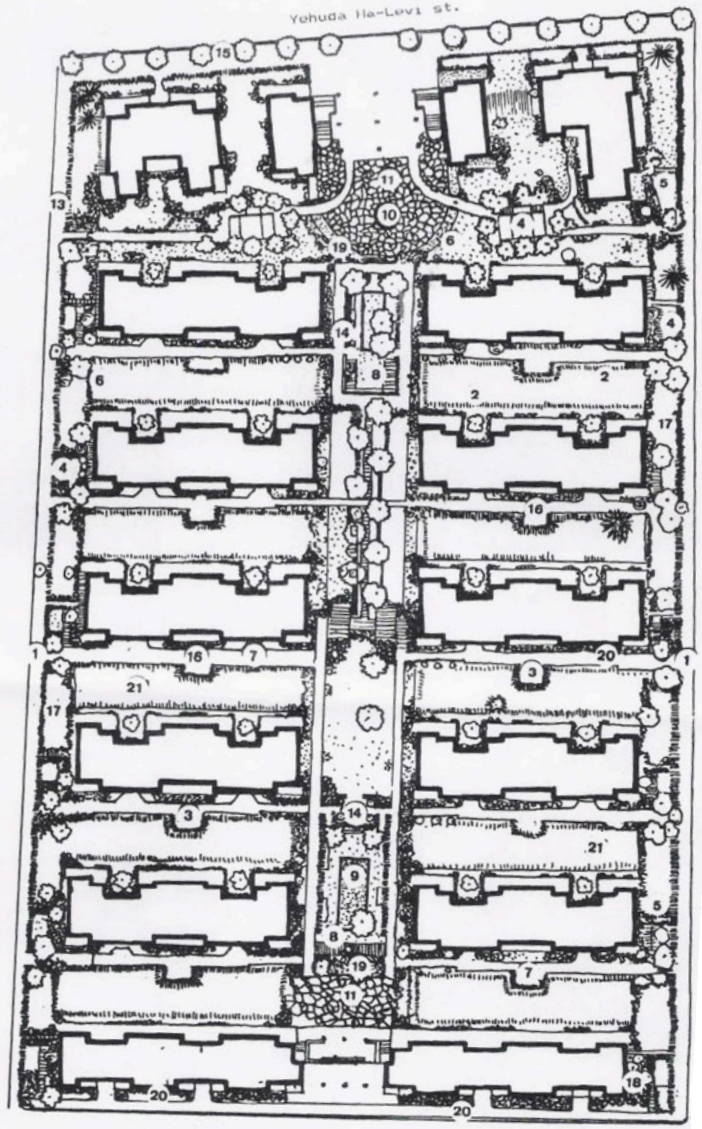


Figure 1.5 Clarence Stein's neighborhood unit. (Source: De Chiara, Panero, and Zelnik, *Time-saver Standards for Housing and Residential Development,* p. 51)

COPENHAGEN, FINGER PLAN 1948

Legend מקרא

1. כניסה מהרחוב
entrance from street
2. שיפוע
slope
3. מתקן לחנית אופנים
bicycle parking
4. פחי אשפה
trash-bins
5. תעלה לניקוז מי גשם
drainage ditch
6. קיר יבש
dry wall
7. מדרכות פנימיות
inner sidewalk
8. פרגולה
pergola
9. ארגז חול
sand box
10. עצים קיימים
existing trees
11. רחבה מרוצפת עם צמחיה
aved & planted square
12. גדר ארעית
temporary fence
13. מדרכות ציבוריות
street sidewalk
14. ספסלי ישיבה
bench
15. עצים
trees
16. שיחים
shrubs
17. גדר חיה
hedge
18. צמחי אבן
rock plants
19. שושנים
roses
20. פרחים רב שנתיים
flowers
21. דשא
lawn



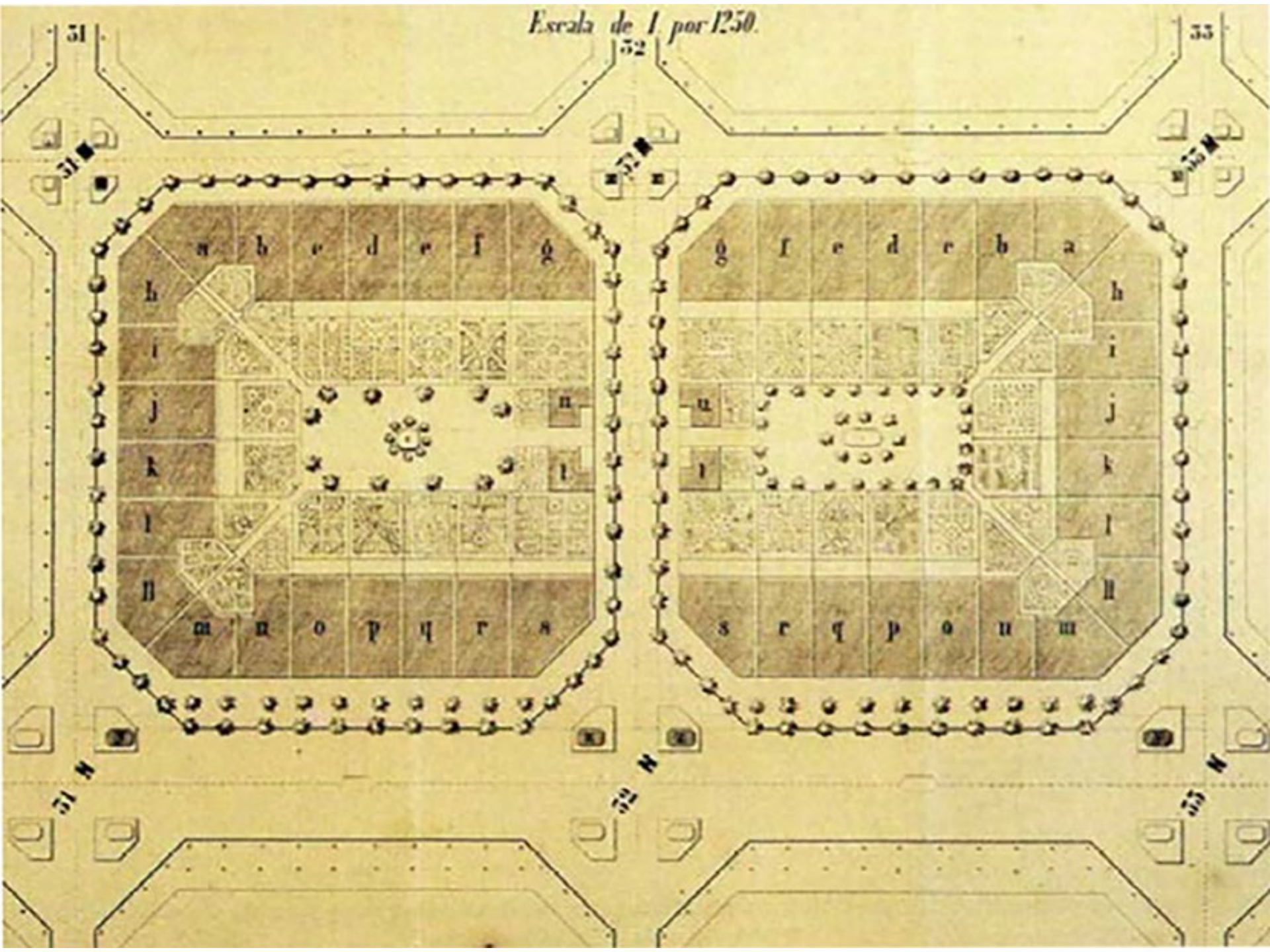
תכנית גן קריית-מאיר, 1936

The Open Space Plan of Kiryat Meir, 1936

N

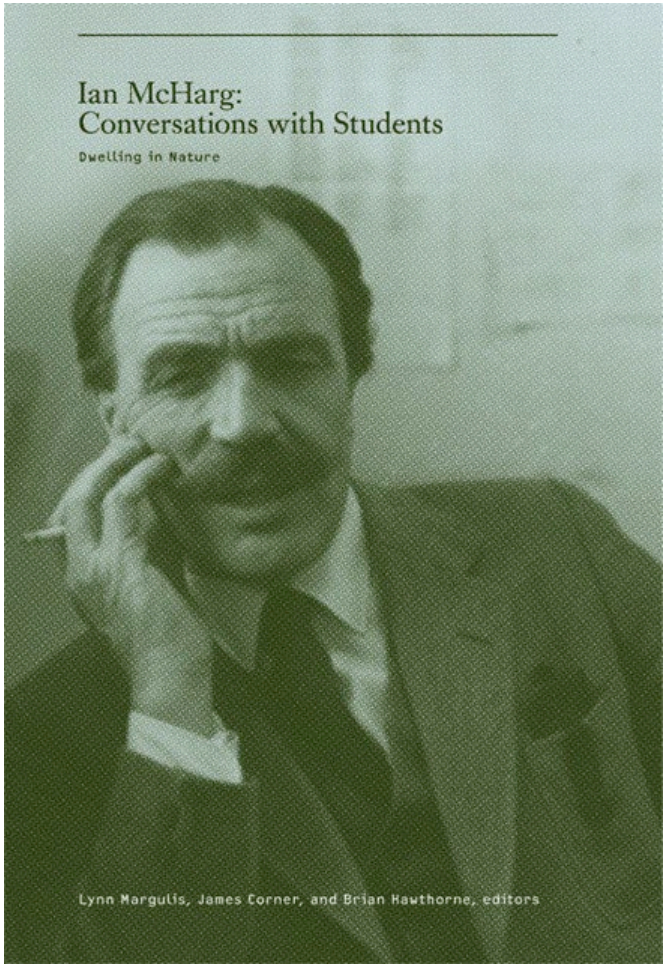
m 0 10 20
5 15 25

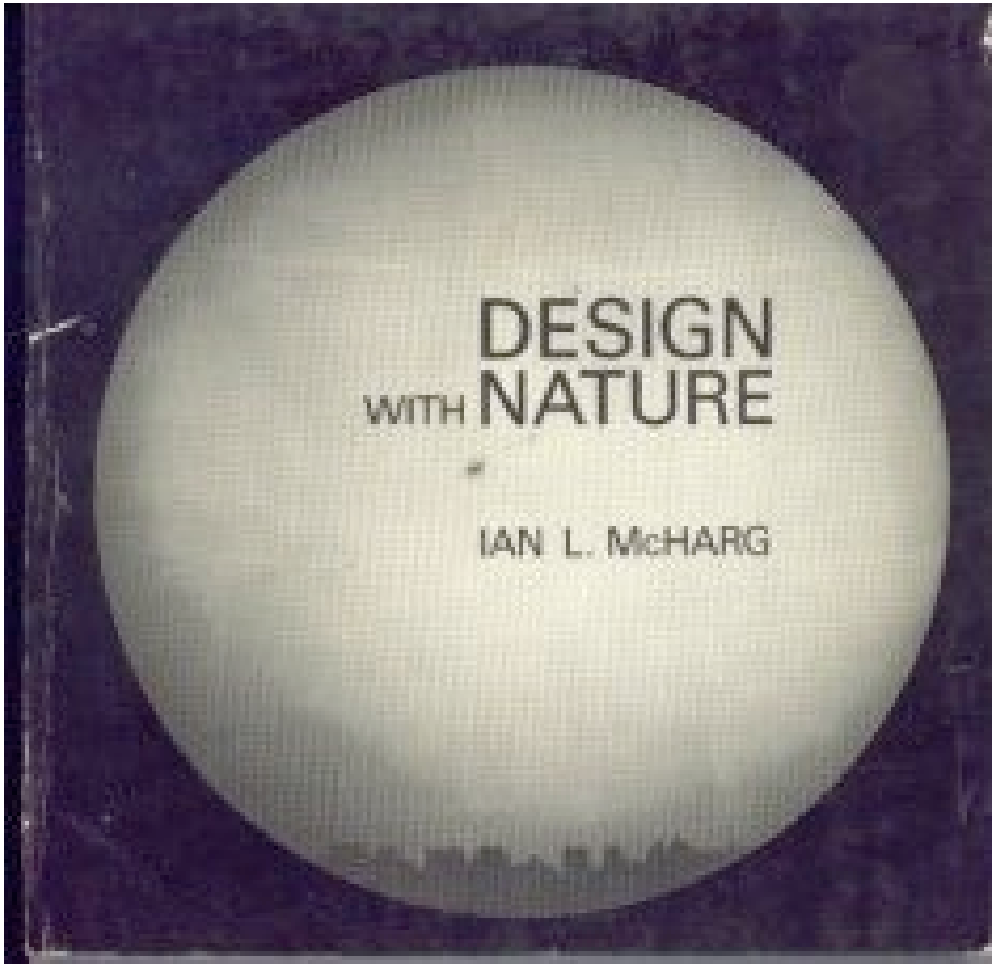

Cerda Plan Barcelona-
Eixample 1859

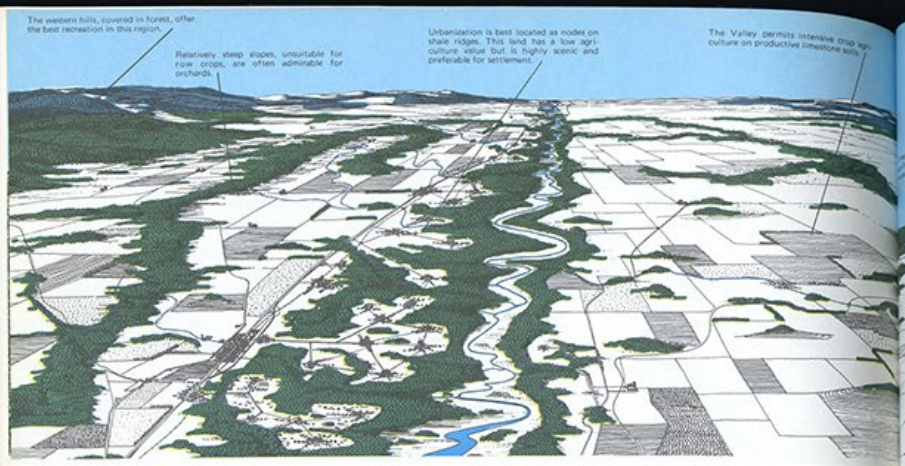

Escala de 1 por 1250.
31
32
33
a b c d e f g
h
i
j
k
l
ll
m n o p q r s
g f e d c b a
s r q p o n m

3

Resilience, adaptation and climate change


Ian McHarg:
Conversations with Students
Dwelling in Nature
Lynn Margulis, James Corner, and Brian Hawthorne, editors

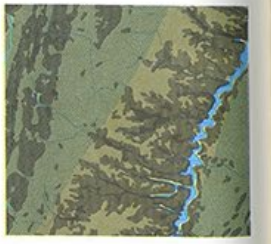

DESIGN
WITH NATURE
IAN L. McHARG

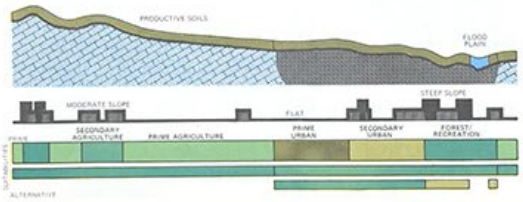


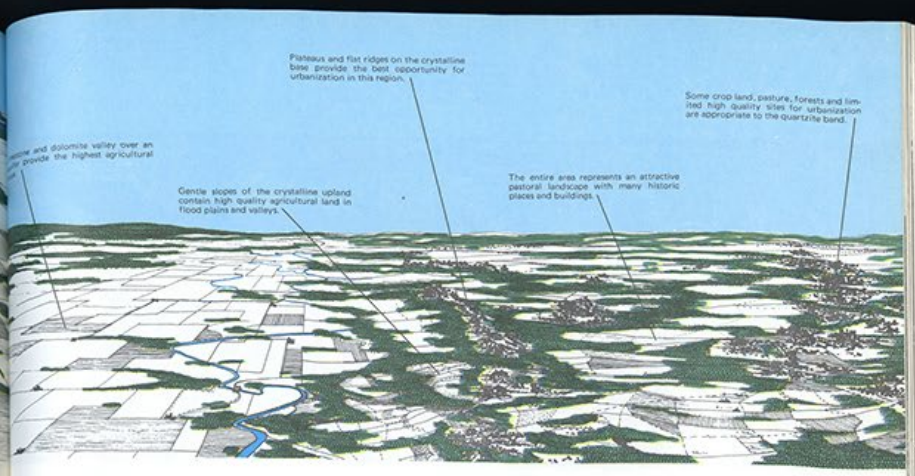
THE GREAT VALLEY

The Great Valley is one great agricultural region east of the Rockies—a broad, generally flat valley with predominantly rich limestone soils. There are, however, three subdivisions—the western hills on sandstone, shale, limestone and quartzite, the wide belt of Martinsburg shale and the valley proper of limestone and dolomite. In brief the hills provide the maximum recreational potential, the limestone the agricultural resource, and the shale the best locations for urbanization. This last is important as it ensures that urbanization does not occur over the aquifer.

The resources and their distribution are most felicitous—wooded hills, a fertile valley, a swath of shale suited for urbanization, the latter bordered by a fine river and exhibiting considerable scenic quality.

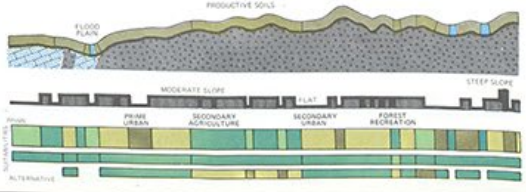


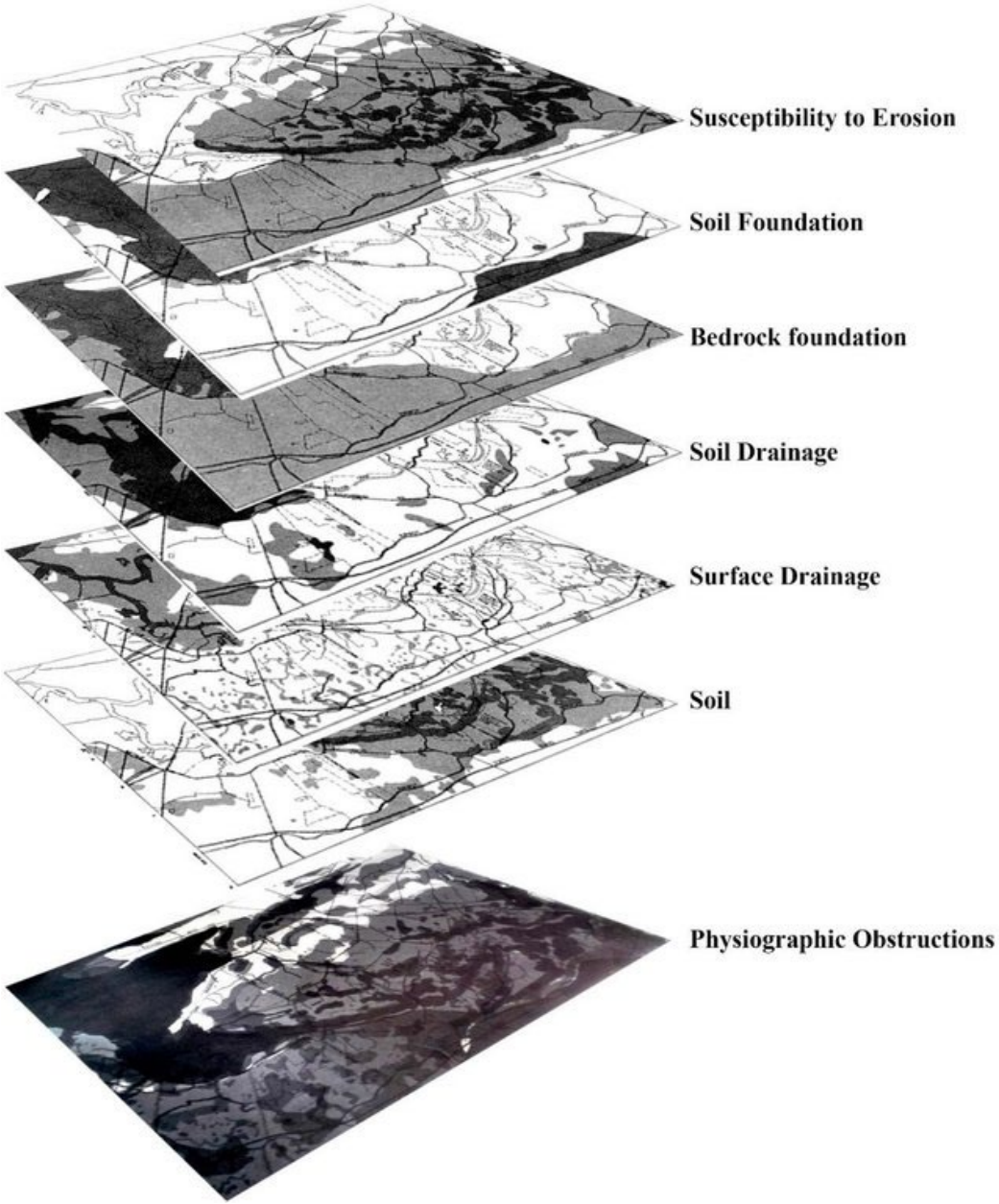




THE PIEDMONT

The section of the Piedmont illustrated reveals a great complexity—a limestone and dolomite valley, a preCambrian upland of crystalline rocks fissured with intrusions, a broad band of quartzite, yet another of shales. Intrinsic suitabilities respond to geology and the consequential physiography, hydrology and soils. The limestone and dolomite valley is most suited for agriculture, the shales for pasture and non-commercial forests, some crops, pasture and forests are appropriate to valleys and flood plains in the crystalline area. The most suitable urban sites fall in the crystalline region on flat plateaus and ridges. They are absent on limestone, rare on the shales. This is an area on the edge of urbanization. Opportunities abound but planning must respond to the specific opportunities and constraints afforded by the region.



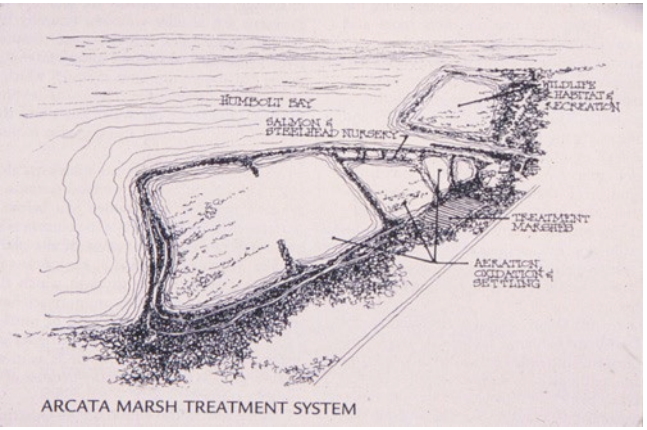

Susceptibility to Erosion
Soil Foundation
Bedrock foundation
Soil Drainage
Surface Drainage
Soil
Physiographic Obstructions


REBUILD
BY
DESIGN
LIVING BREAKWATERS
SCAPE / LANDSCAPE
ARCHITECTURE TEAM
CLIENT
•U.S. Department of Housing and
Urban Development
COLLABORATORS
Parsons Brinckerhoff
Stevens Institute of Technology
Ocean and Coastal Consultants
SeArc Ecological Marine
Consulting
The New York Harbor School
LOT-EK
MTWTF
Paul Greenberg

4

Infrastructure landscapes and urban metabolism

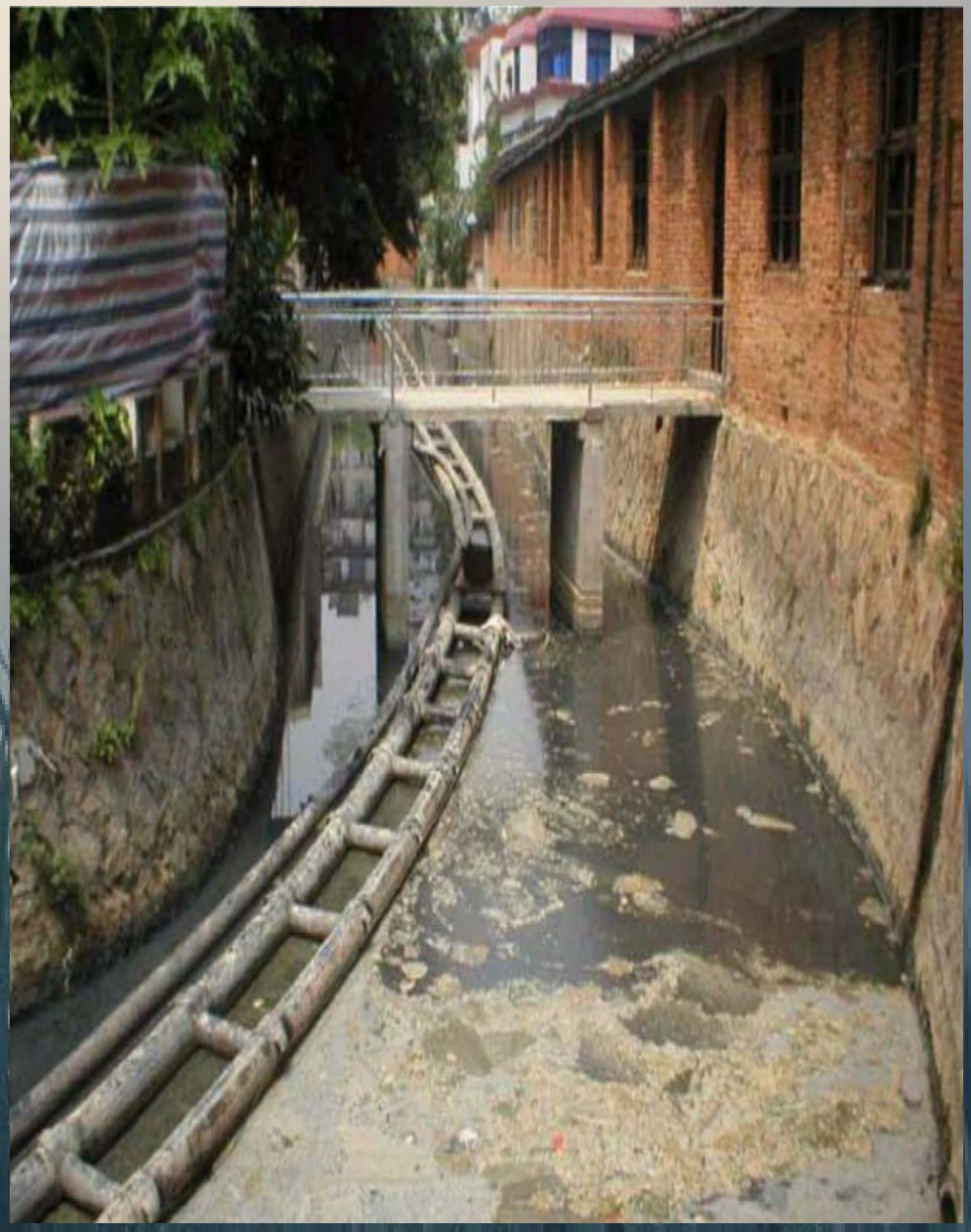
From Harry Granick, ***Underneath New York*****, 1947**

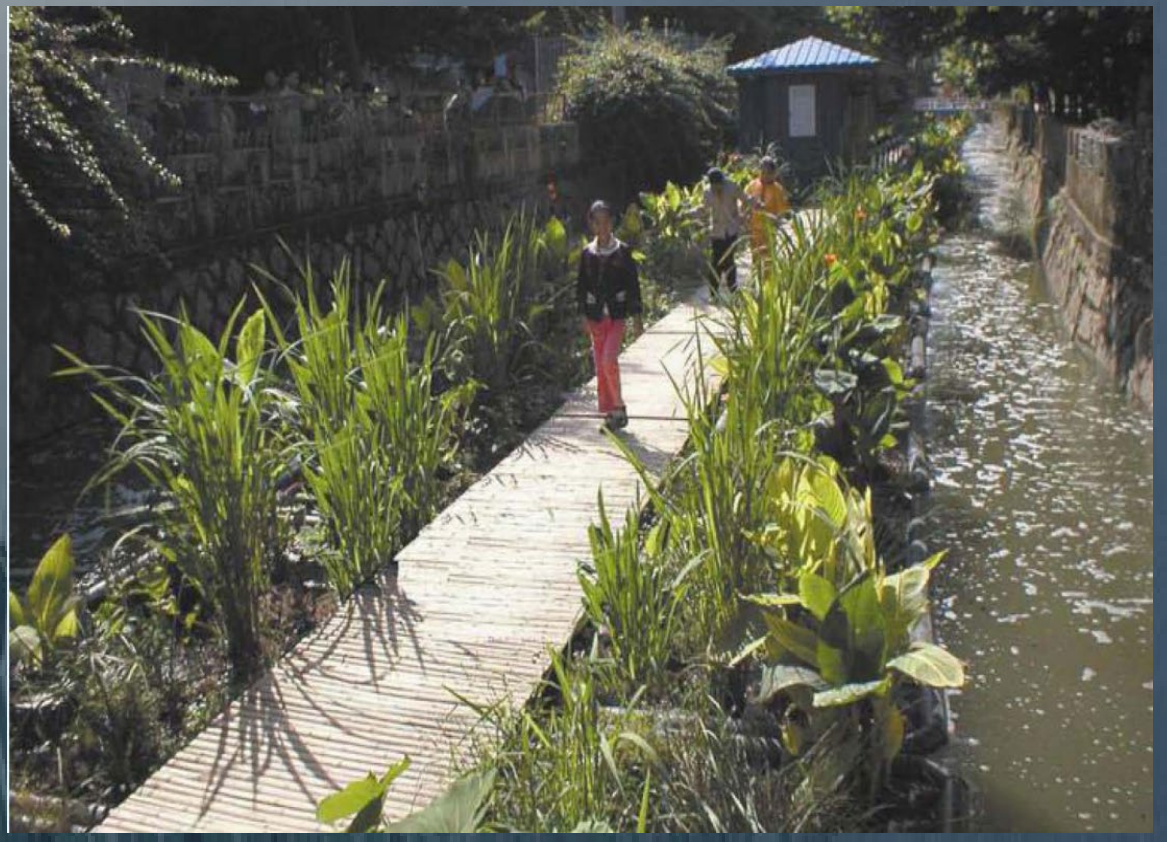


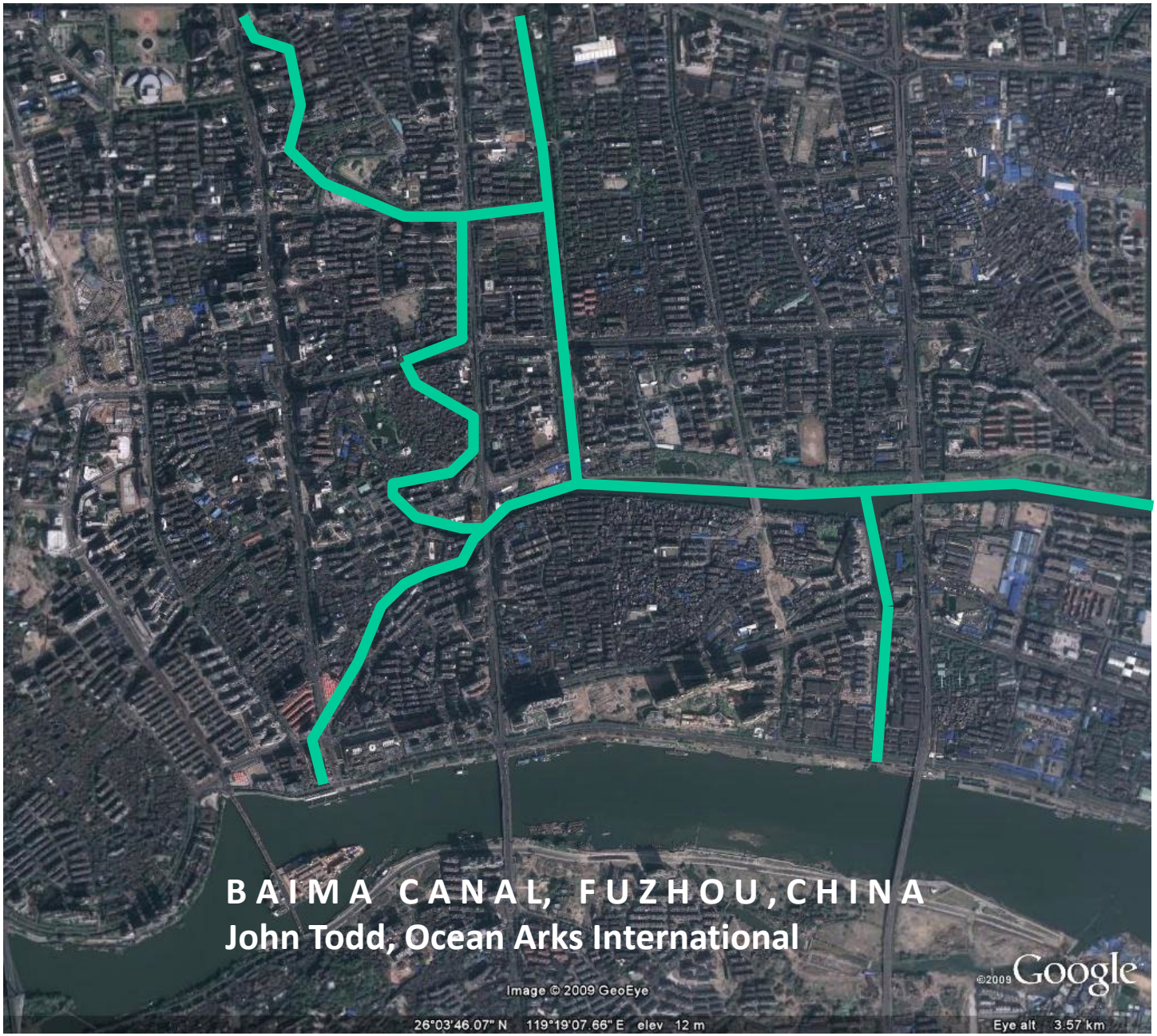
wastewater

Arcata Marsh and Wildlife Sanctuary, Arcata CA, 1981

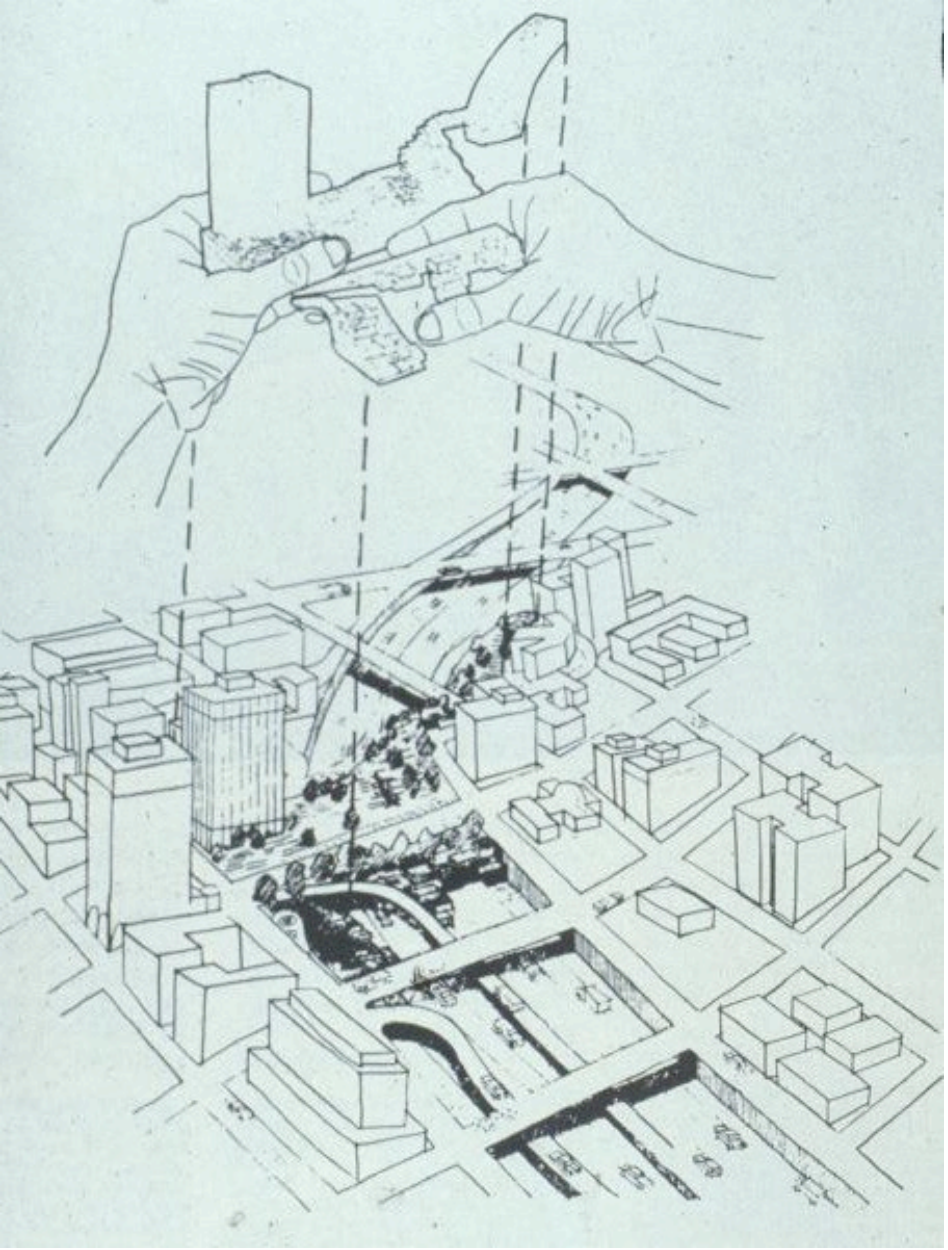
Green Infrastructure principles- contemporary use of landscape processes



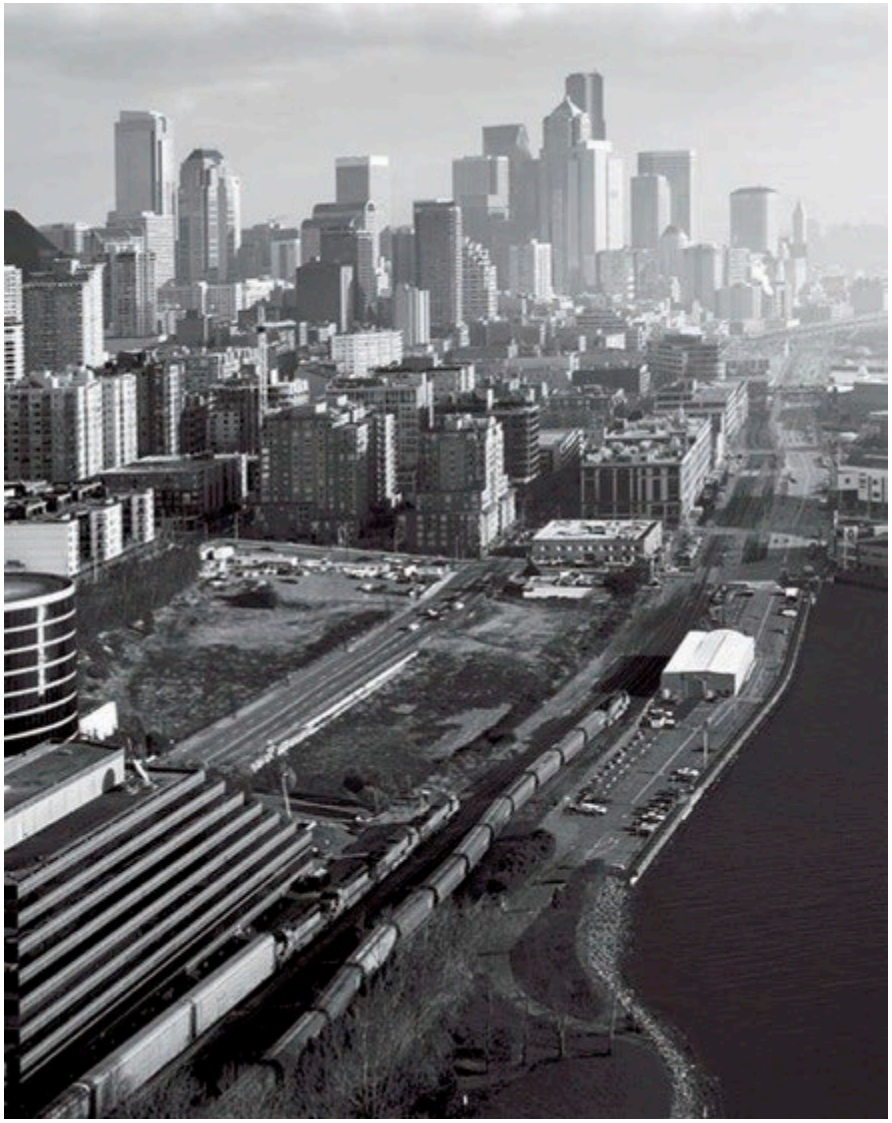


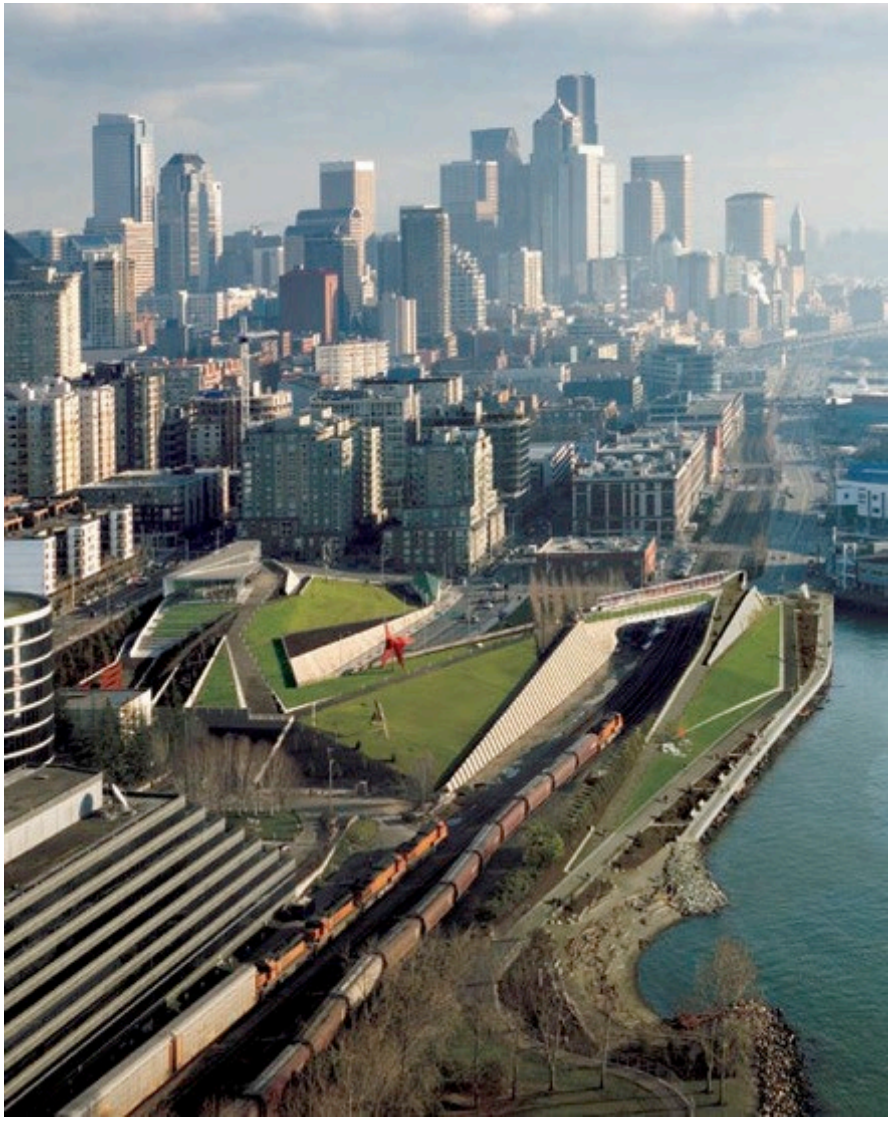

BAIMA CANAL, FUZHOU, CHINA
John Todd, Ocean Arks International
Image © 2009 GeoEye
©2009 Google
26°03'46.07" N 119°19'07.66" E elev 12 m
Eye alt 3.57 km

Rain water harvesting and Irrigation



Seattle Freeway Park
Halprin Associates



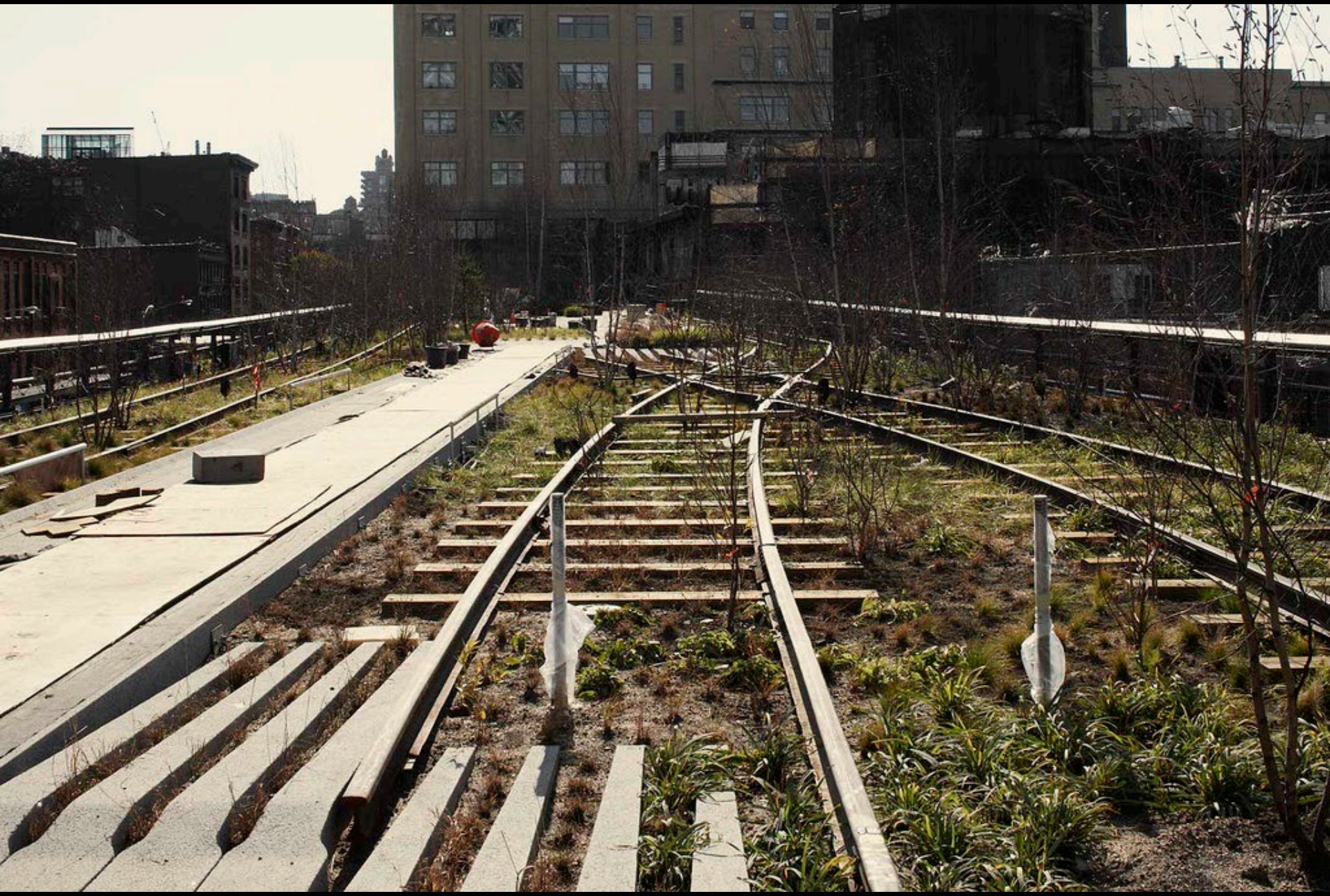


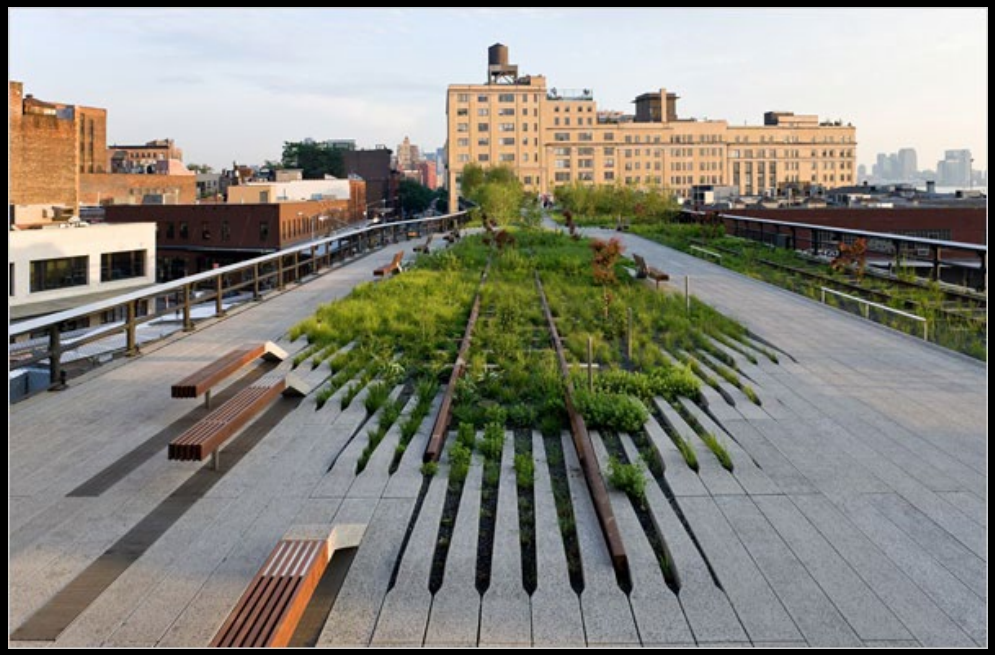
Seattle Art Museum and Olympic Sculpture Park,
Weiss and Manfredi, 2006

6

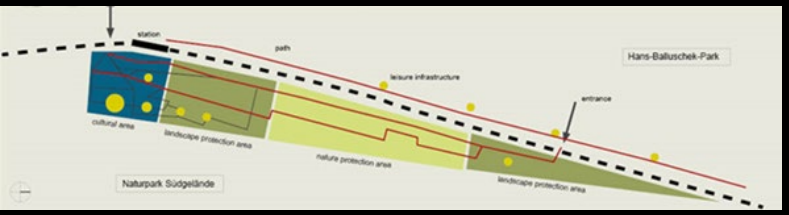
Urban wastelands, wildscapes and biodiversity

The Highline: photo by Joel Sternfeld





Park Ariel Sharon- Hiriya
Tel Aviv
Latz + Partner, Moriah-Sekely


station
path
Hans-Balluschek-Park
leisure infrastructure
entrance
cultural area
landscape protection area
nature protection area
landscape protection area
Naturpark Südgelände

"אפשר לאסוף פטריות, לקצור עצי פרי, לקטוף פרחי בר, ליהנות מאופק רחב ומחום האחו היבש ... ילדים ... מסוגלים לרקוד ולשחק, בלי מתקנים אחידים ויקרים."

מגוון מינים בעיר

7

Open space: S M L: Microurbanism/ Pocket parks

Temporary spaces

Park(ing) Day- Rebar

Dumpster Pool
Park Avenue, NY, 2010
Macro Sea

Community Garden
Minnesota Blvd
Givat Olga, 2016

A Lamppost with a Switch
Bat Yam Biennale, 2008
Shiri Cnaani and Tali Arieli

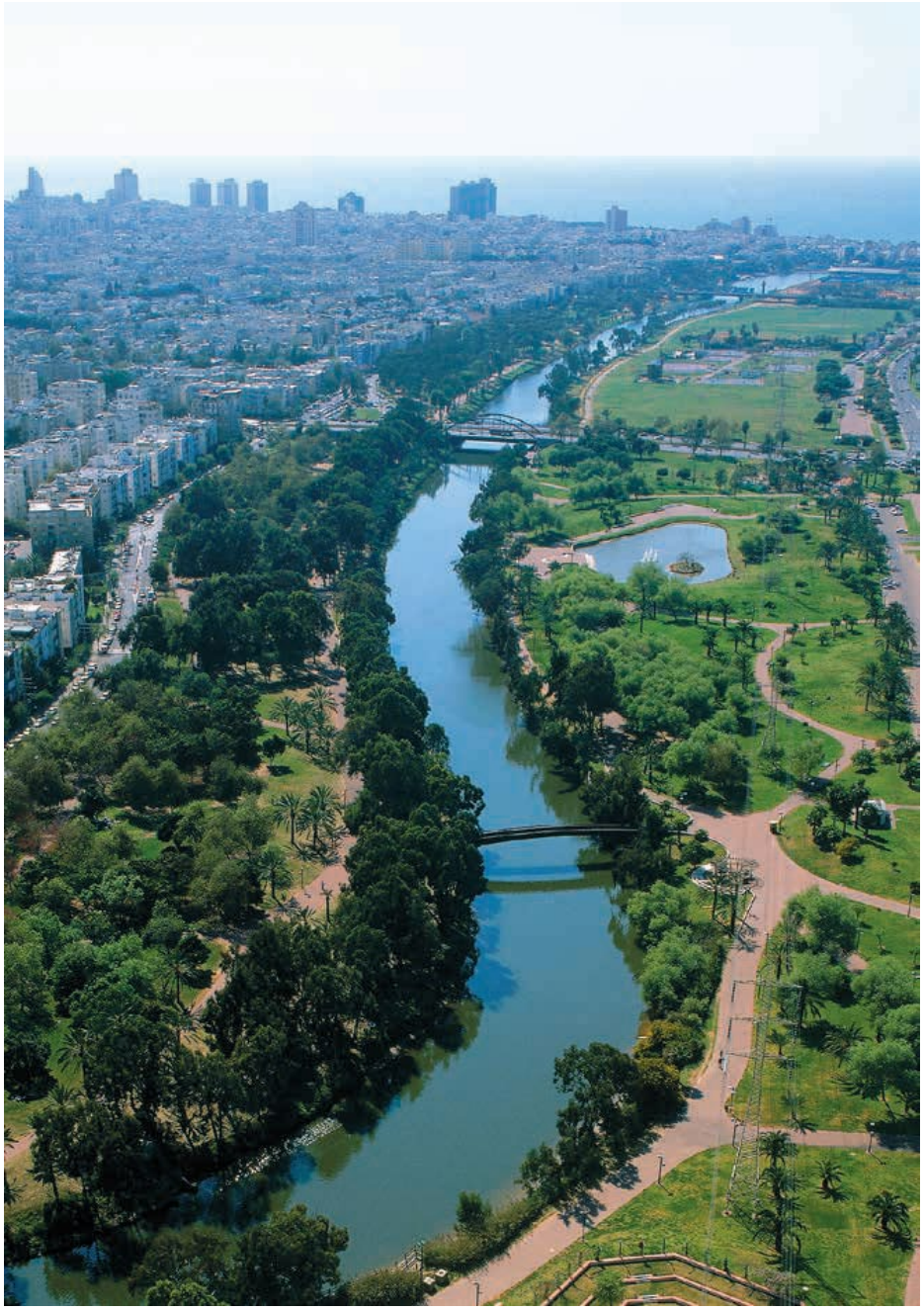
8

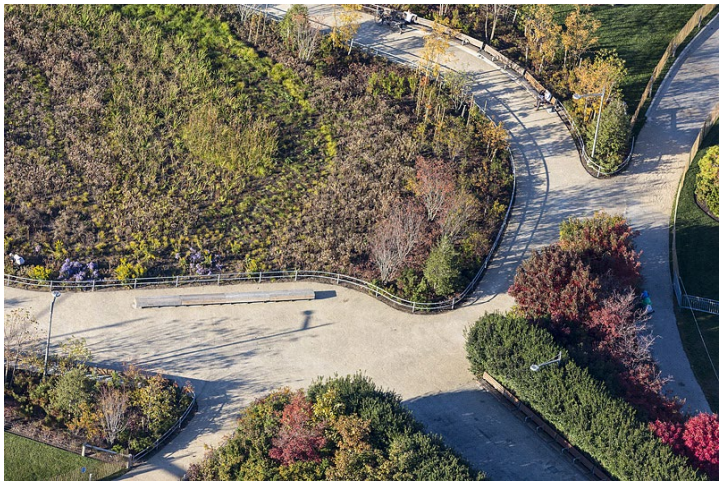
Open space: S M L: Linear to metropolitan parks and beyond

שדרות רוטשילד, 1930

Braudo Maoz Tel Baruch Promenade, Tel Aviv

פארק הירקון





9

Urban Water

SPONGEcity, sponsored by the Dutch Ministry of Transportation, Public Works and Water Management, and designed by Niall Kirkwood and landscape architecture graduate students from]the Harvard Graduate School of Design floodwaters are captured by a dual sponge system both soft and structural.

Cellular networks of Super Absorbent Polymers (SAP's) are placed in new elbows along the River Waal and when the dikes close to the river are breached a new absorbent sponge landscape is created along the entire river.


SØNDERBOULEVARD
Dry
Existing Street Profile
Safety Zone
Flood Pathway
3,300 l/s flow capacity
EVERYDAY RAIN
30% DISCONNECTION
from existing combined
SEWER system.
Flood Event

10

Urban trees, shade and microclimate regulation

Plaza: stormwater collection tray. Stormwater is channelled into into the drainage troughs. Rainwater is collected in cisterns below and recirculated in the plaza's drip irrigation system and into the memorial fountain

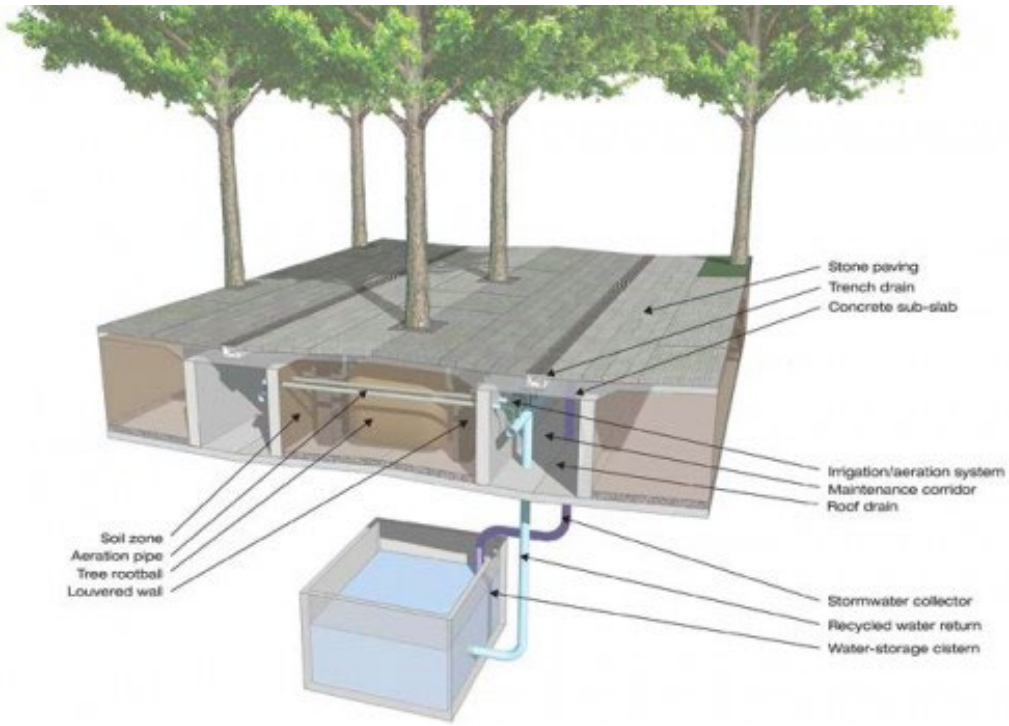
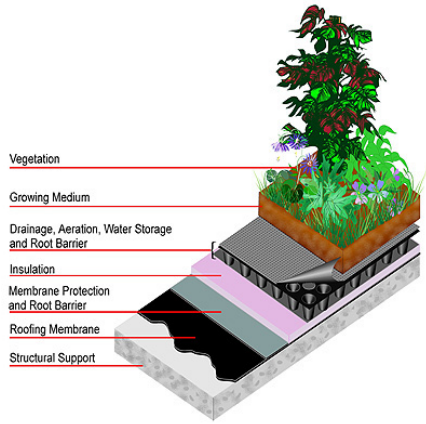


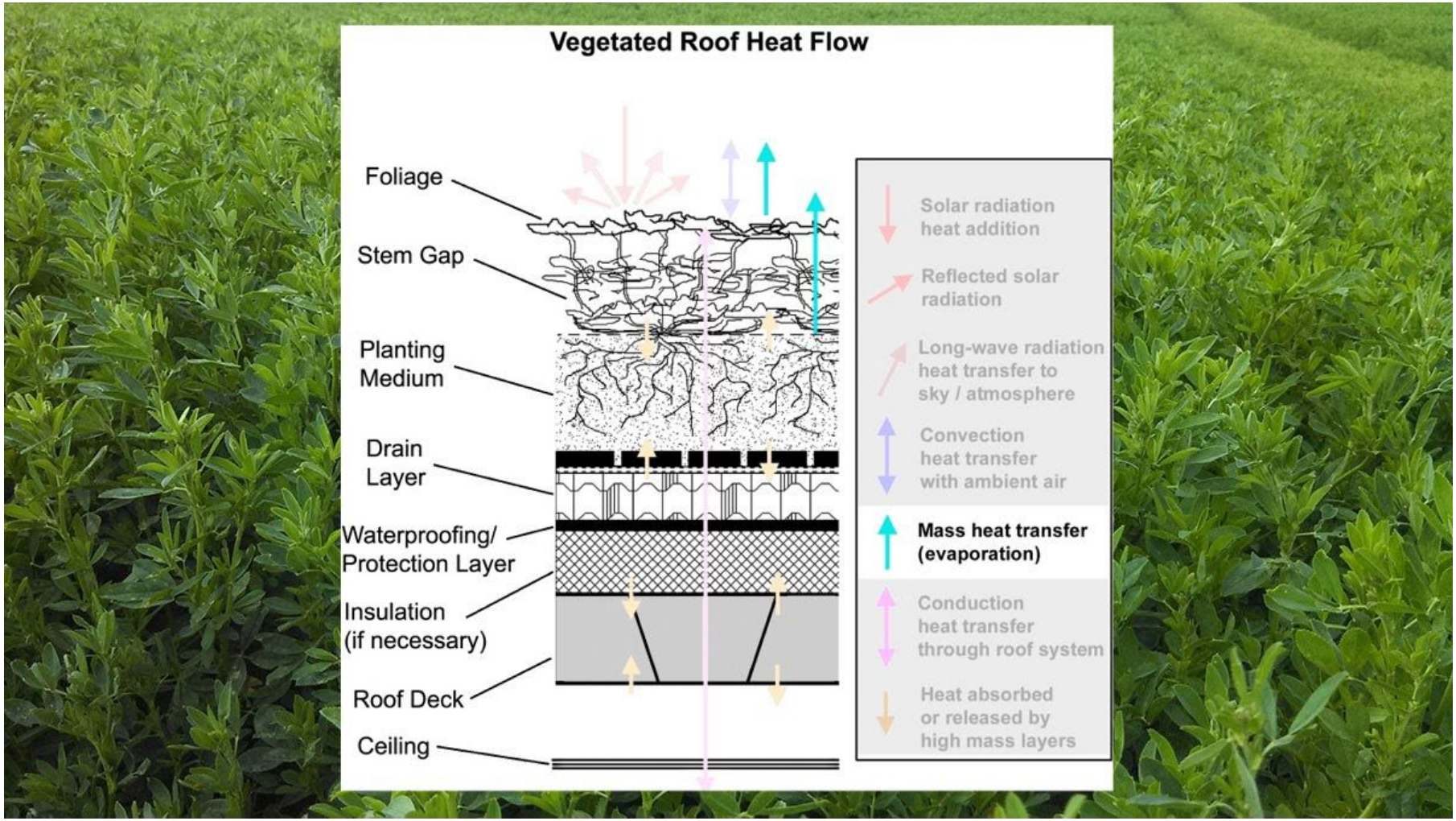
Table 1
Classification of green roofs according to type of usage, construction factors and maintenance requirements

	Extensive Green Roof	Semi-Intensive Green Roof	Intensive Green Roof
Maintenance	Low	Periodically	High
Irrigation	No	Periodically	Regularly
Plant communities	Moss-Sedum-Herbs and Grasses	Grass-Herbs and Shrubs	Lawn or Perennials, Shrubs and Trees
System build-up height	60 - 200 mm	120 - 250 mm	150 - 400 mm on underground garages > 1000 mm
Weight	60 - 150 kg/m^2	120 - 200 kg/m^2	180 - 500 kg/m^2
Costs	Low	Middle	High
Use	Ecological protection layer	Designed Green Roof	Park like garden



Green roofs:

- Reduce “urban heat island” effect
- Reduce CO_2 impact
- Reduce summer air conditioning cost
- Reduce winter heat demand
- Potentially lengthen roof life 2 to 3 times
- Treat nitrogen pollution in rain
- Negate acid rain effect
- Help reduce volume and peak rates of stormwater


Vegetated Roof Heat Flow
Foliage
Stem Gap
Planting Medium
Drain Layer
Waterproofing/ Protection Layer
Insulation (if necessary)
Roof Deck
Ceiling
Solar radiation heat addition
Reflected solar radiation
Long-wave radiation heat transfer to sky / atmosphere
Convection heat transfer with ambient air
Mass heat transfer (evaporation)
Conduction heat transfer through roof system
Heat absorbed or released by high mass layers

בנין פורטר ללימודי הסביבה, אוניברסיטת תל אביב

Chicago City Hall Green Roof, 2001
Architect: William McDonough and Partners,
Landscape architect: Conservation Design Forum, Atelier Dreiseitl

A pilot study to address urban heat island problems after a heat wave in 1995 killed several people.

The planted side of the roof registers 3-4 degrees C cooler than the unplanted side, and captures some 75% of rainwater (stored in a cistern in the penthouse below). The growing medium varies from 76 mm (extensive) to 600 mm (intensive) in depth