Politecnico di Milano, Facoltà di Architettura e Società
Corso di Laurea Magistrale in Pianificazione Urbana e Politiche Territoriali
Master of Science in Urban Planning and Policy Design
Urban Planning & Design Studio, a.y 2009/2010

Exploring by Transects

17.03.2010

Professors:
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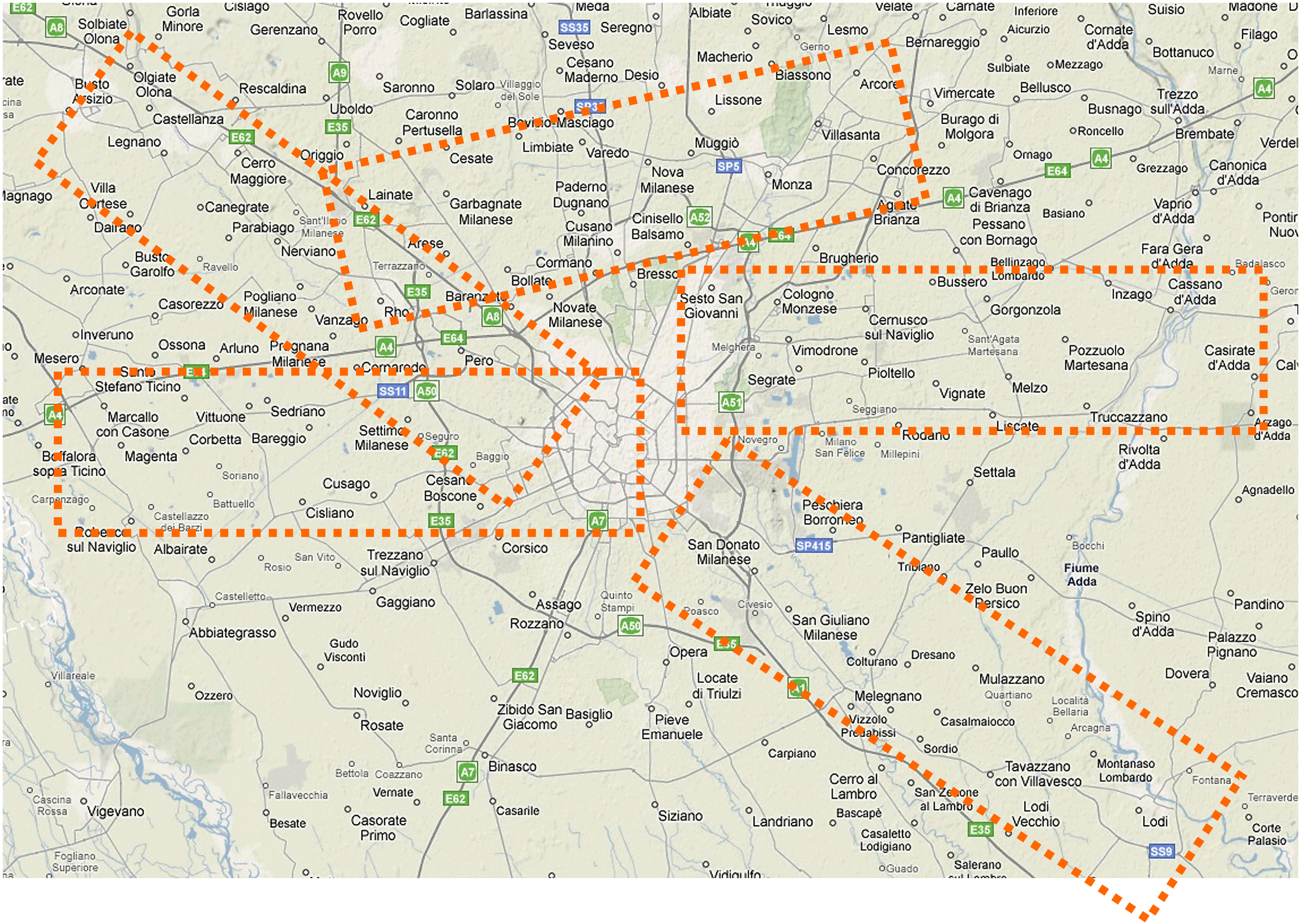
Tutors:
Giulia Fini, Federico Zanfi



Solbiate Olona
Gorla Minore
Cislago
Gerenzano
Rovello Porro
Cogliate
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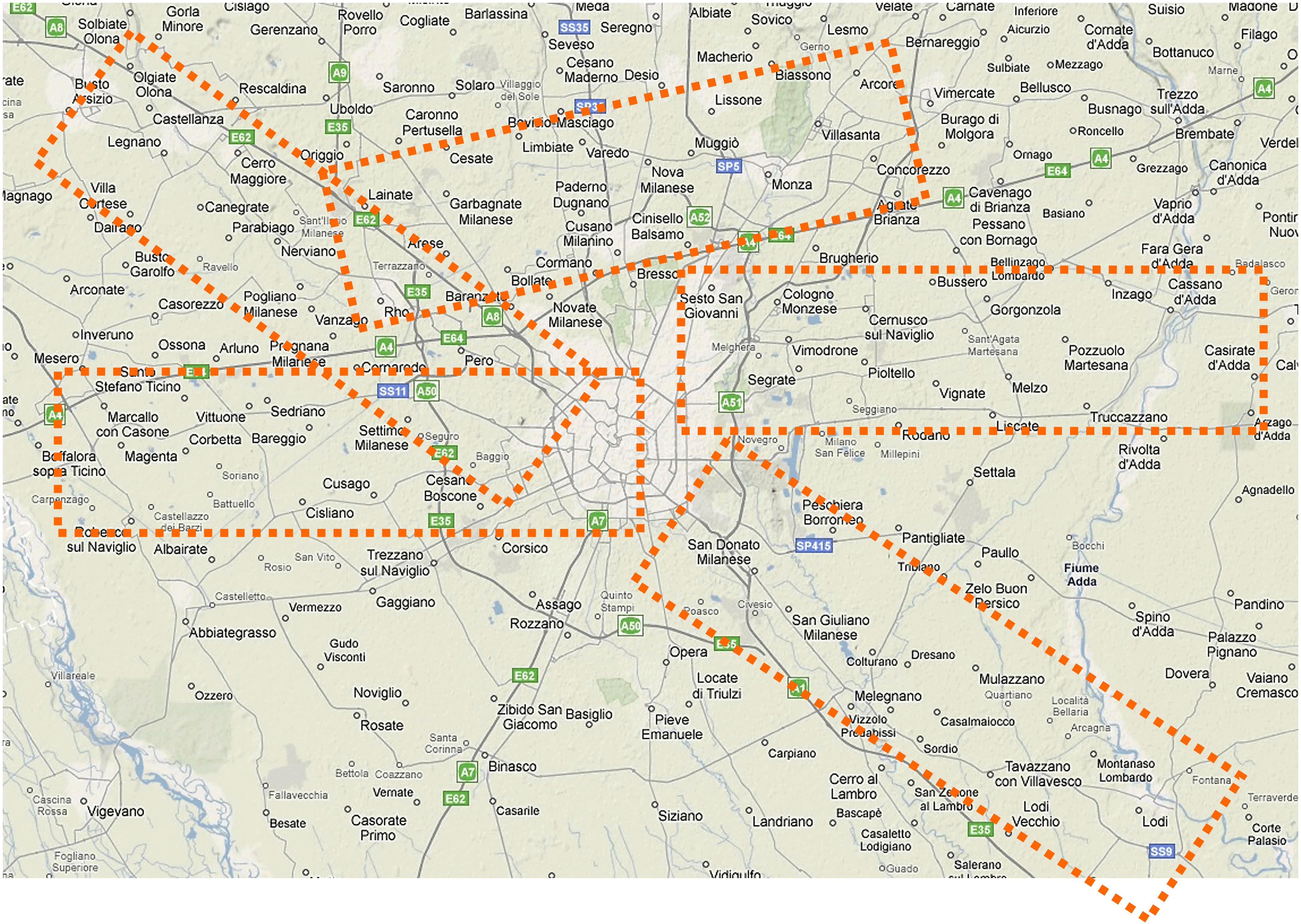
Sovico
Lesmo
Velate
Carnate
Inferiore
Aicurzio
Cornate d'Adda
Suisio
Madone
Filago
Bottanuco
Busto Arsizio
Olgiate Olona
Rescaldina
Saronno
Solaro
Villaggio del Sole
Cesano Maderno
Desio
Macherio
Biassono
Arcore
Bernareggio
Vimercate
Sulbiate
Mezzago
Bellusco
Marne
Trezzo sull'Adda
Castellanza
Uboldo
Caronno Pertusella
Bovisio-Masciago
Lissone
Burago di Molgora
Busnago
Roncello
Brembate
Verdel
Legnano
Cerro Maggiore
Origgio
Cesate
Limbiate
Varedo
Muggiò
Villasanta
Concorezzo
Omago
Grezzago
Canonica d'Adda
Magnago
Villa Cortese
Canegrate
Lainate
Garbagnate Milanese
Paderno Dugnano
Nova Milanese
Monza
Agrate Brianza
Cavenago di Brianza
Basiano
Vaprio d'Adda
Dairago
Parabiago
Sant'Ilario Milanese
Nerviano
Arese
Cusano Milanino
Cinisello Balsamo
Pessano con Bornago
Busto Garolfo
Ravello
Terrazzano
Cormano
Brugherio
Bellinzago Lombardo
Fara Gera d'Adda
Badalasco
Arconate
Casorezzo
Pogliano Milanese
Vanzago
Rho
Baranzate
Bollate
Novate Milanese
Bresso
Sesto San Giovanni
Cologno Monzese
Bussero
Gorgonzola
Inzago
Cassano d'Adda
Inveruno
Ossona
Arluno
Pregnana Milanese
Cornaredo
Pero
Cernusco sul Naviglio
Sant'Agata Martesana
Pozzuolo Martesana
Casirate d'Adda
Mesero
Santo Stefano Ticino
Melghera
Vimodrone
Pioltello
Segrate
Vignate
Melzo
Marcallo con Casone
Vittuone
Sedriano
Settimo Milanese
Seguro
Seggiano
Truccazzano
Liscate
Rodano
Arzago d'Adda
Boffalora sopra Ticino
Magenta
Corbetta
Bareggio
Baggio
Novegro
Milano San Felice
Millepini
Rivolta d'Adda
Soriano
Cusago
Cesano Boscone
Settala
Agnadello
Carpenzago
Battuello
Castellazzo dei Barzi
Cisliano
Peschiera Borromeo
Robecco sul Naviglio
Albairate
Corsico
San Donato Milanese
Pantigliate
Paullo
Bocchi
Fiume Adda
Rosio
San Vito
Trezzano sul Naviglio
Tribiano
Zelo Buon Persico
Pandino
Castelletto
Vermezzo
Gaggiano
Assago
Quinto Stampi
Poasco
Civesio
San Giuliano Milanese
Spino d'Adda
Palazzo Pignano
Abbiategrasso
Rozzano
Gudo Visconti
Opera
Colturano
Dresano
Dovera
Vaiano Cremasco
Villareale
Ozzero
Noviglio
Locate di Triulzi
Melegnano
Mulazzano
Quartiano
Locallità Bellaria
Zibido San Giacomo
Basiglio
Pieve Emanuele
Vizzolo Predabissi
Casalmaiocco
Arcagna
Rosate
Santa Corinna
Sordio
Carpiano
Binasco
Tavazzano con Villavesco
Montanaso Lombardo
Fontana
Bettola
Coazzano
Cerro al Lambro
San Zenone al Lambro
Terraverde
Cascina Rossa
Vigevano
Fallavecchia
Vernate
Casarile
Siziano
Landriano
Bascapè
Lodi Vecchio
Lodi
Corte Palasio
Besate
Casorate Primo
Casaletto Lodigiano
Guado
Fogliano Superiore
Salerano sul Lambro
Vidigulfo
A1
A4
A7
A8
A9
A50
A51
A52
E35
E62
E64
SS9
SS11
SS35
SP5
SP415

In the first workshop step an **artificial device** is used to identify and describe the composed physical character of the urban field.

The territorial fields to be considered are “in-between cities” of the Milan urban region:

1. from Magenta to Milan/da Magenta a Milano
2. from Legnano to Milan/da Legnano a Milano
3. from Rho to Agrate/da Rho ad Agrate
4. from Treviglio to Milan/da Treviglio a Milano
5. from Lodi to Milan/da Lodi a Milano



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Cerro al Lambro
Vigevano
Besate
Casorate Primo
Casarile
Siziano
Landriano
Lodi
Lodi Vecchio
Corte Palasio
Vidigulfo

The sampling work is an artificial construction: the **territory** of the new “in-between cities” and of the project is not done, has not sure boundaries, but it is necessary to recognize it.

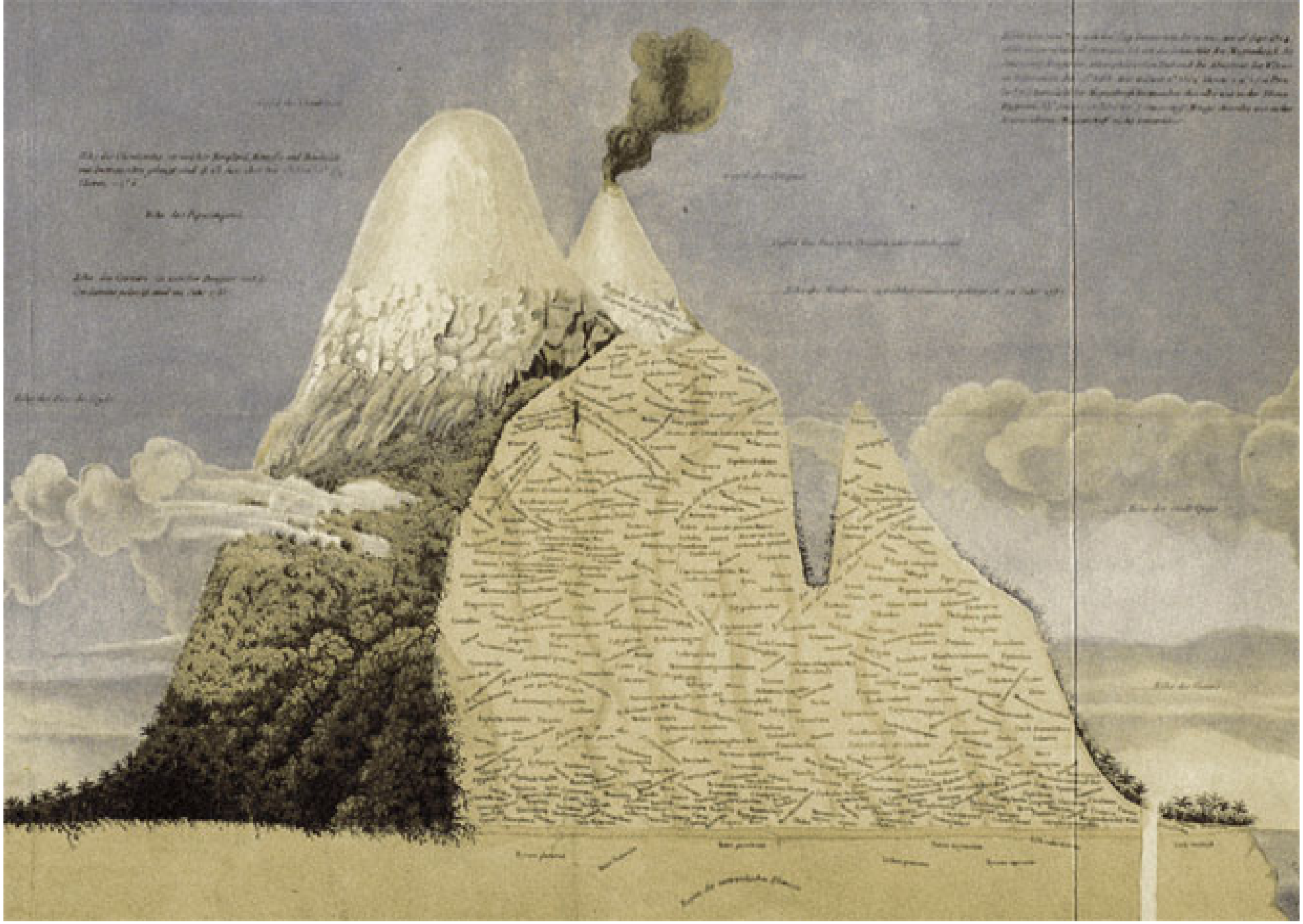
This is the **result of an operation** which describes and interprets the physical and social phenomena of the urban field

A Virtual Exploration

Transects as survey tools

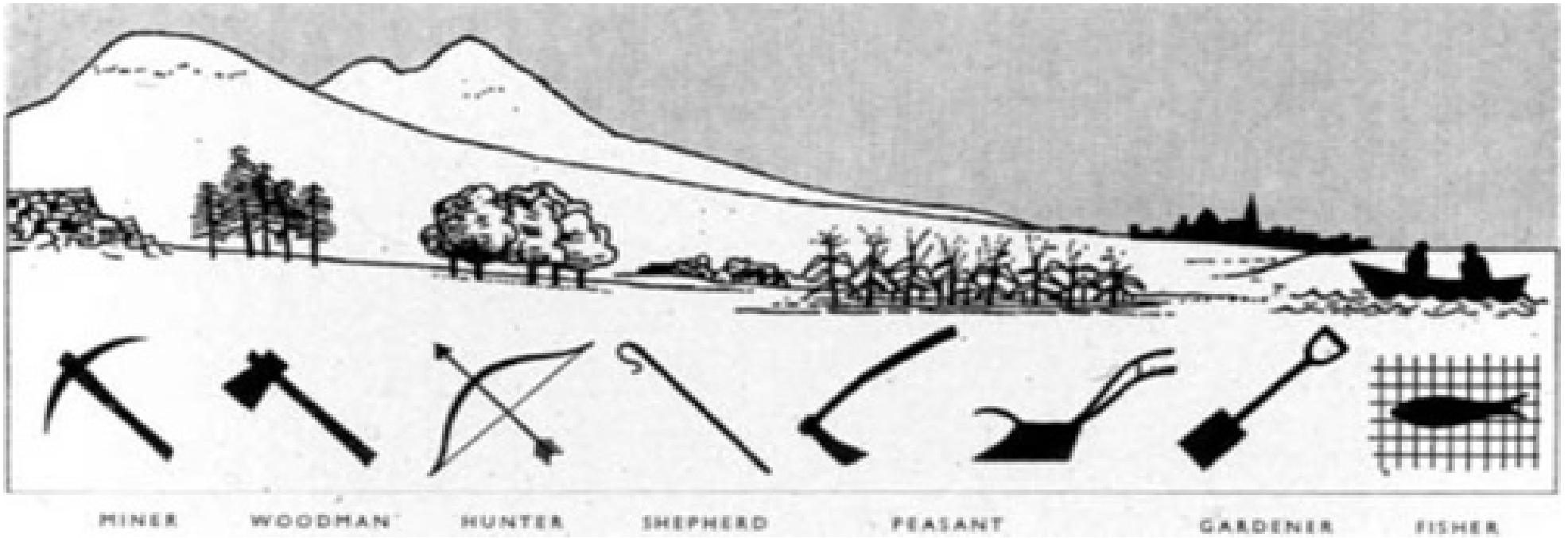
In the geographical and bio-ecological sciences the transect method (according to Alexander von Humboldt example) is an artificial device to recognize environmental differences and recurrences.

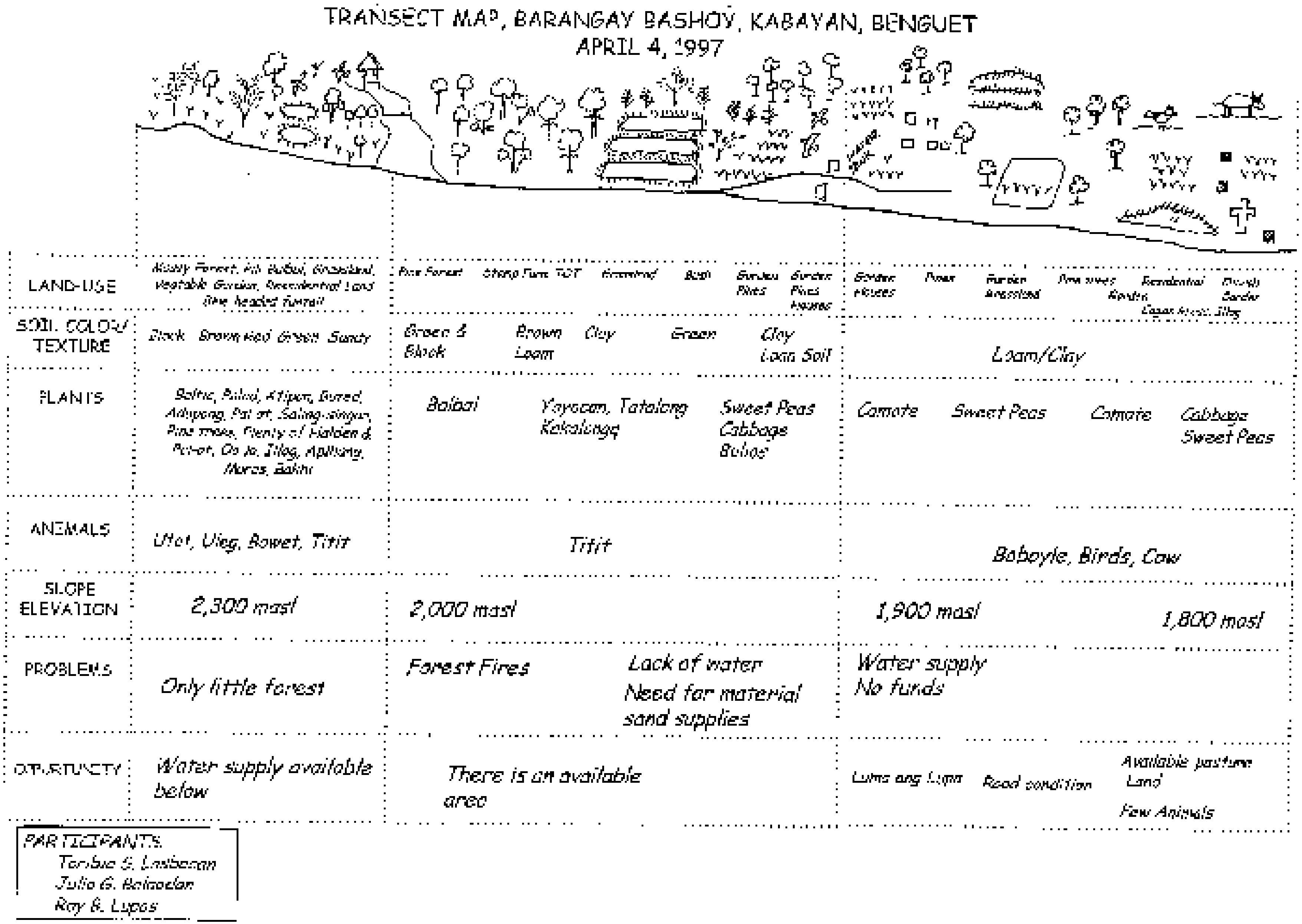
Strictly related with the cultural legacy of von Humboldt is the “valley section” by Patrick Geddes: both used sections, perspectives, samples in the description of the biological sense of the territory.



Alexander von Humboldt - The results of the transect analysis of a vulcan in South America are notated with the names of the biological world of the mountain: a new biological field in substitution of the apparency of the mountain.

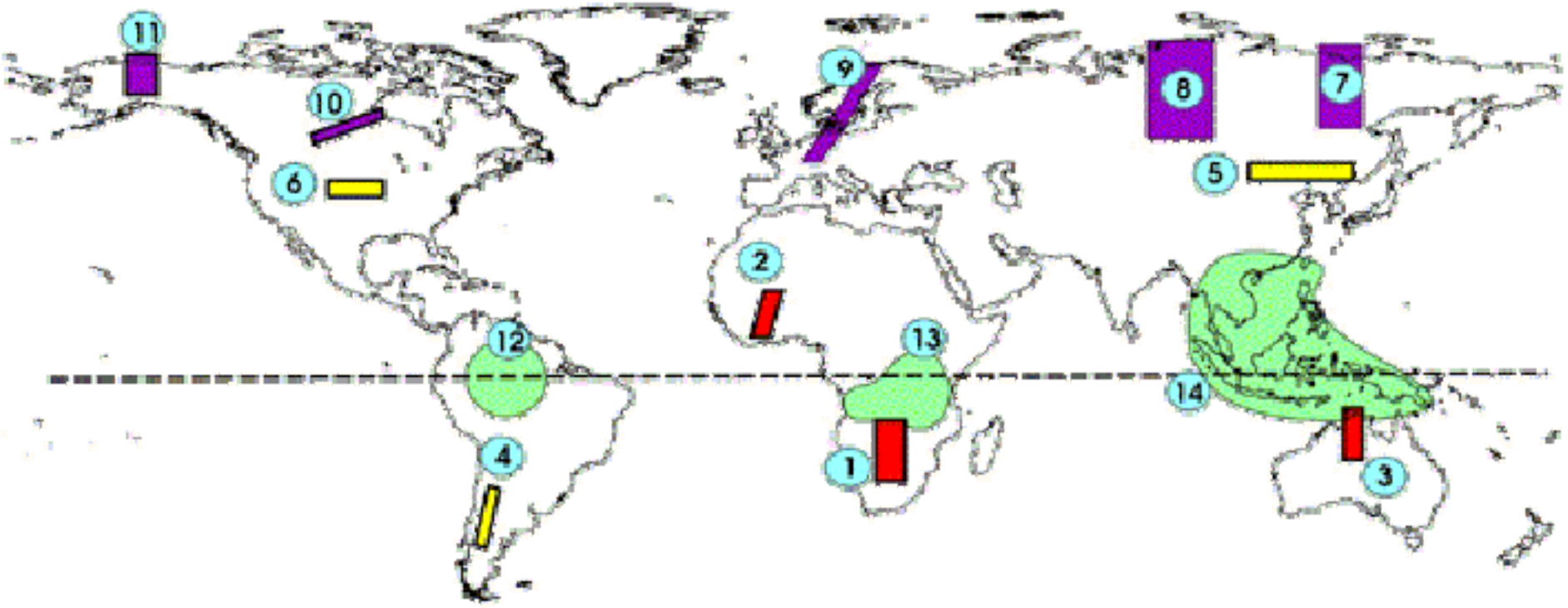
The evolution represented with the tools of the valley section by Patrick Geddes.





A contemporary transect operation made by a team of anthropologists and geographers.

IGBP Terrestrial Transects: Operational or Advanced Planning

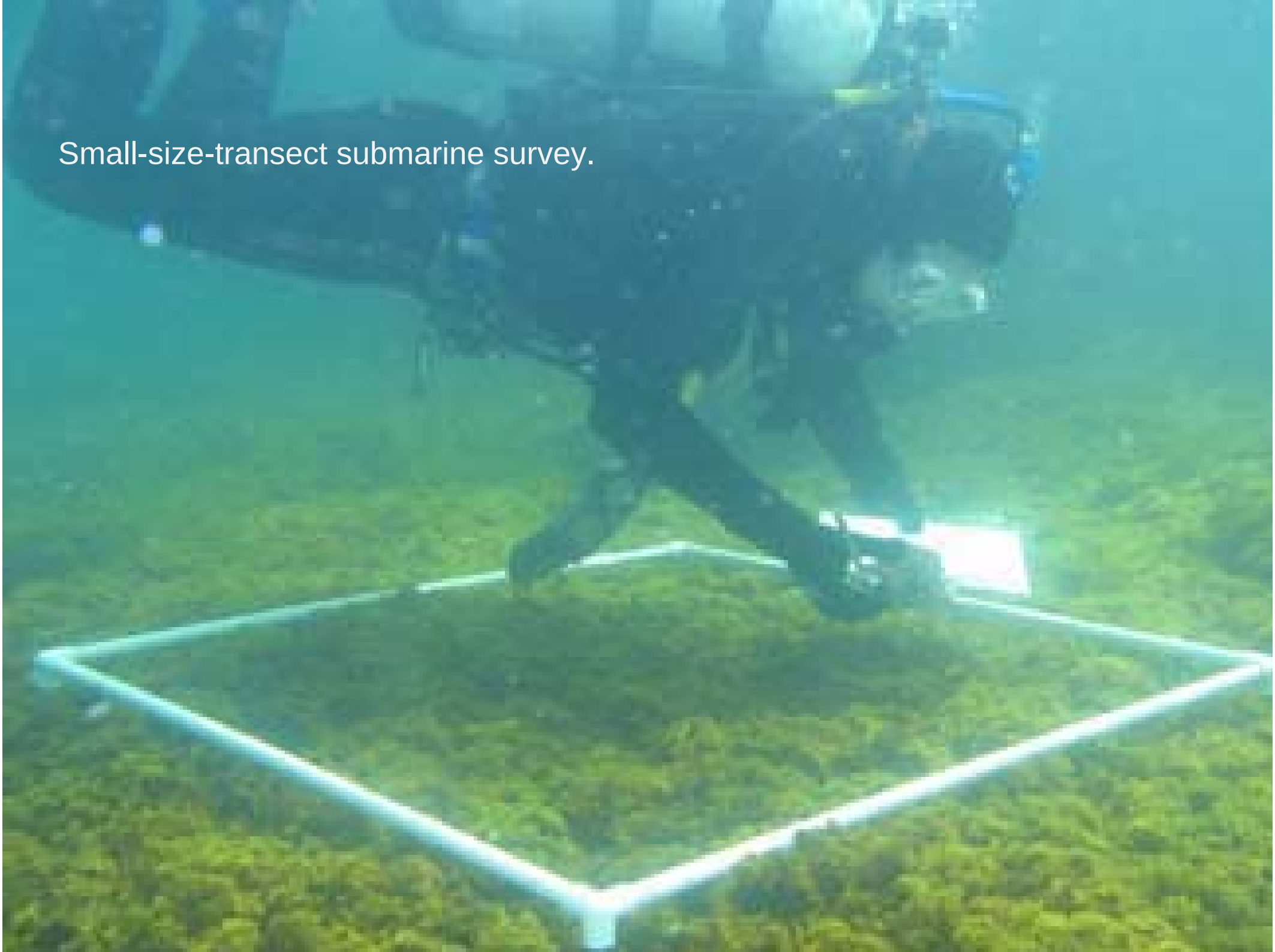


high latitude mid latitude semi-arid tropics humid/sub-humid tropics

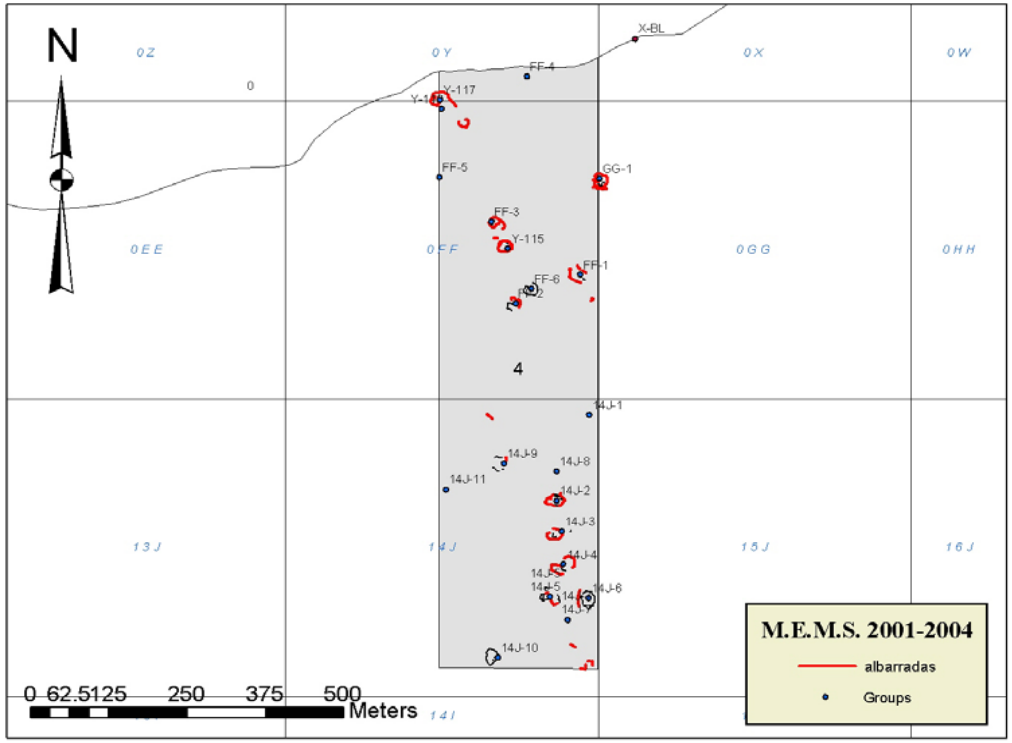
1 = Kalahari Transect (KALA)
2 = Savanna on the Long-Term (SALT)
3 = North Australian Tropical Transect (NATT)
4 = Argentina Transect
5 = North East Chinese Transect (NECT)
6 = North American Mid-Latitude Transect (NAMER)
7 = Siberia Far East Transect (SIBE)
8 = Siberia West Transect
9 = Europe Transect
10 = Boreal Forest Transect Case Study (BFTCS)
11 = Alaskan Latitudinal Gradient (ALG)
12 = Amazon (LBA)
13 = Miombo Woodlands Transect
14 = SE Asian Transect

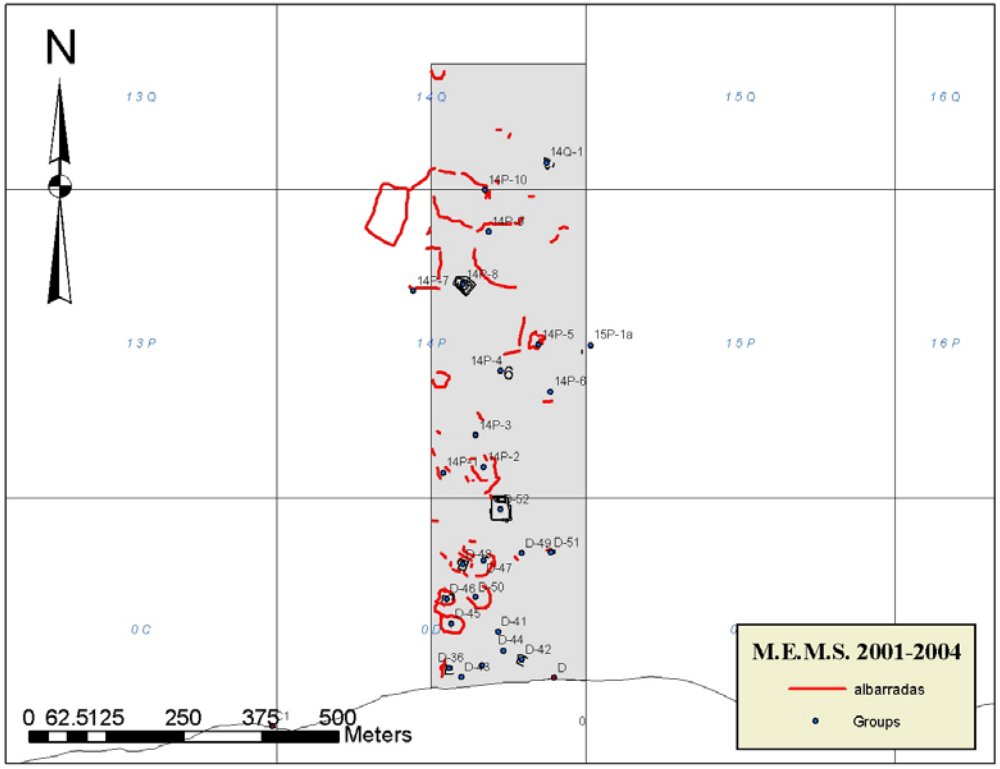
Note: Transects 12-14 are based on a conceptual gradient of land-use change intensity.

Wide geographical and ecological transects.



Small-size-transect submarine survey.



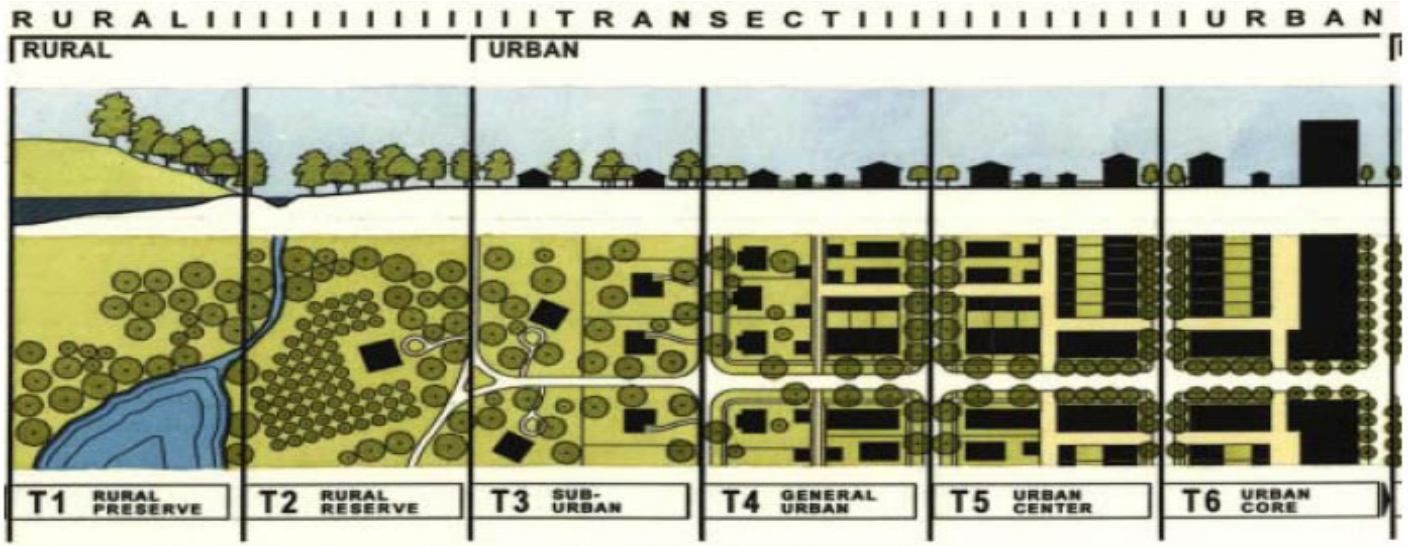


Transect analysis of two archeological sites.

Eastern transect: patterns and perceptive analysis of the townscape of San Francisco (Berkeley University – workshop).

Zipped sequences of samples

In the meaning of our work the transect in not related with a specifically interpretation of the urban filed: in the New Urbanism school is deeply used with the aim to find and demonstrating the relationship between city and nature, between develop and natural evolution of the town.

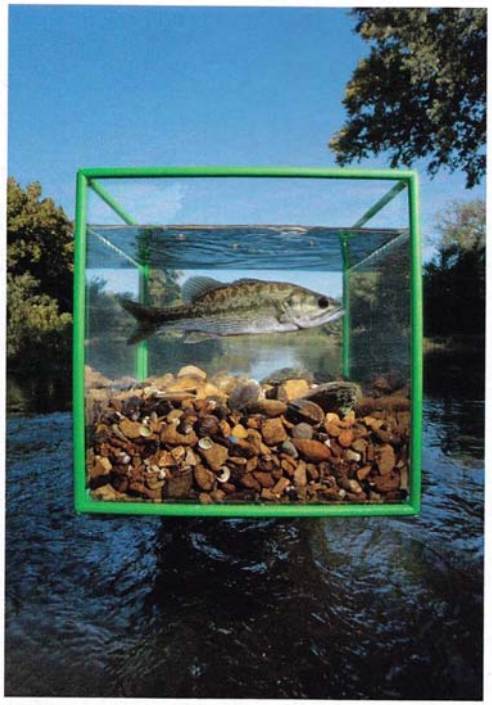


Dauny and Plater Zyrbek (APA Journal, 2002).

within

ONE CUBIC FOOT

Miniature Surveys of Biodiversity



Duck River, Tennessee

It's one of the most biodiverse waterways in the U.S., and it harbors several endemic species—animals found nowhere else on Earth. Why such wealth in central Tennessee's Duck River? Time, says Don Hubbs of the Tennessee Wildlife Resources Agency. Part of an ancient, sprawling watershed, the 290-mile Duck River has streamed over its limestone base for millions of years. The mineral-rich geology favors creatures that are, in turn, vital to the river—including the 54 mussel species that filter the Duck's waters. The survey spot was at Lillard Mill, about 15 miles east of Columbia, Tennessee. After days of working in swirling waters turbid from rich crops of algae, the team lifted a sample into a tank (left, with spotted bass) for clearer access. The surveyors noted a bigclaw crayfish (opposite) and several turtles, including one sporting a flamboyant coat of algae (following pages). Evidence of 32 fish species, more than a hundred non-native Asian clams, and seven species of mussels, three of them endangered, further hints at the prosperity of this old man river. *—Photo text by Jennifer S. Holland*

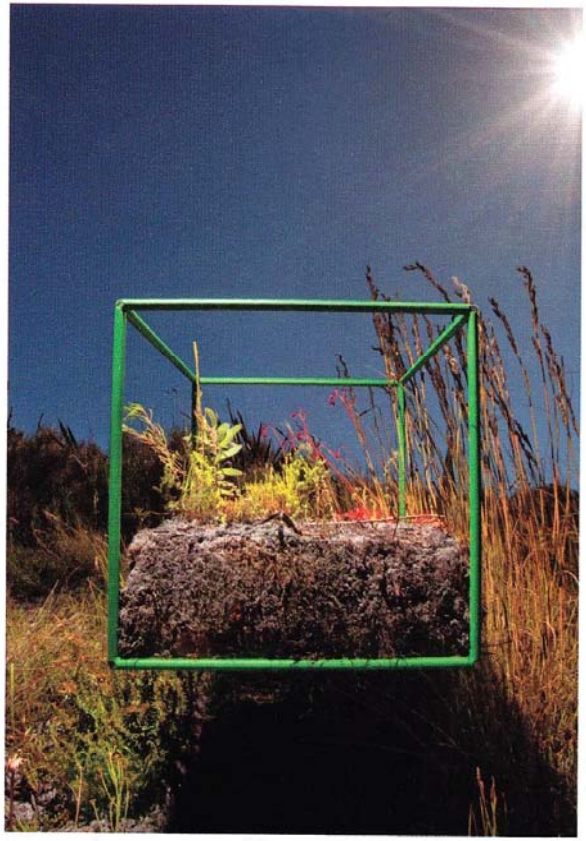


Table Mountain, South Africa

Fynbos, derived from Dutch, refers to the fine-leaved vegetation that grows in the mountainous areas of the Cape Floristic Region (CFR, as botanists call the unique area of floral diversity at the southern tip of Africa). The soils here are rocky and nutrient-poor, the scrub prone to going up in flames. Yet adversity has fostered one of the richest concentrations of plant diversity in the world: Some 9,000 native species live in the CFR—many of them evolved here and live nowhere else. Liittschwager's shovelful of fynbos came out of Table Mountain National Park, the monumental mesa that towers over Cape Town. Sifting through samples (following pages), the photographer counted 90 separate species, including 25 types of plants just on the soil surface, along with some 200 seeds representing at least five of those species. Root masses held a host of crawlies, and the sticky leaves of a carnivorous sundew plant (opposite)—looking too pretty to be predatory—offered another fistful of insects to the tally.

90 m


N
26 m
©2009 Google
Data di acquisizione delle immagini: 4 Mag 2008
45°37'09.48" N 9°15'36.21" E 0 m elev
89 m Alt

350 m


N
100 m
©2009 Google
Data di acquisizione delle immagini: 4 Mag 2008
45°37'09.54" N 9°15'36.23" E 0 m elev
354 m Alt

700 m


N
200 m
©2009 Google
Data di acquisizione delle immagini: 4 Mag 2008
45°37'09.43" N 9°15'36.23" E 0 m elev
724 m Alt

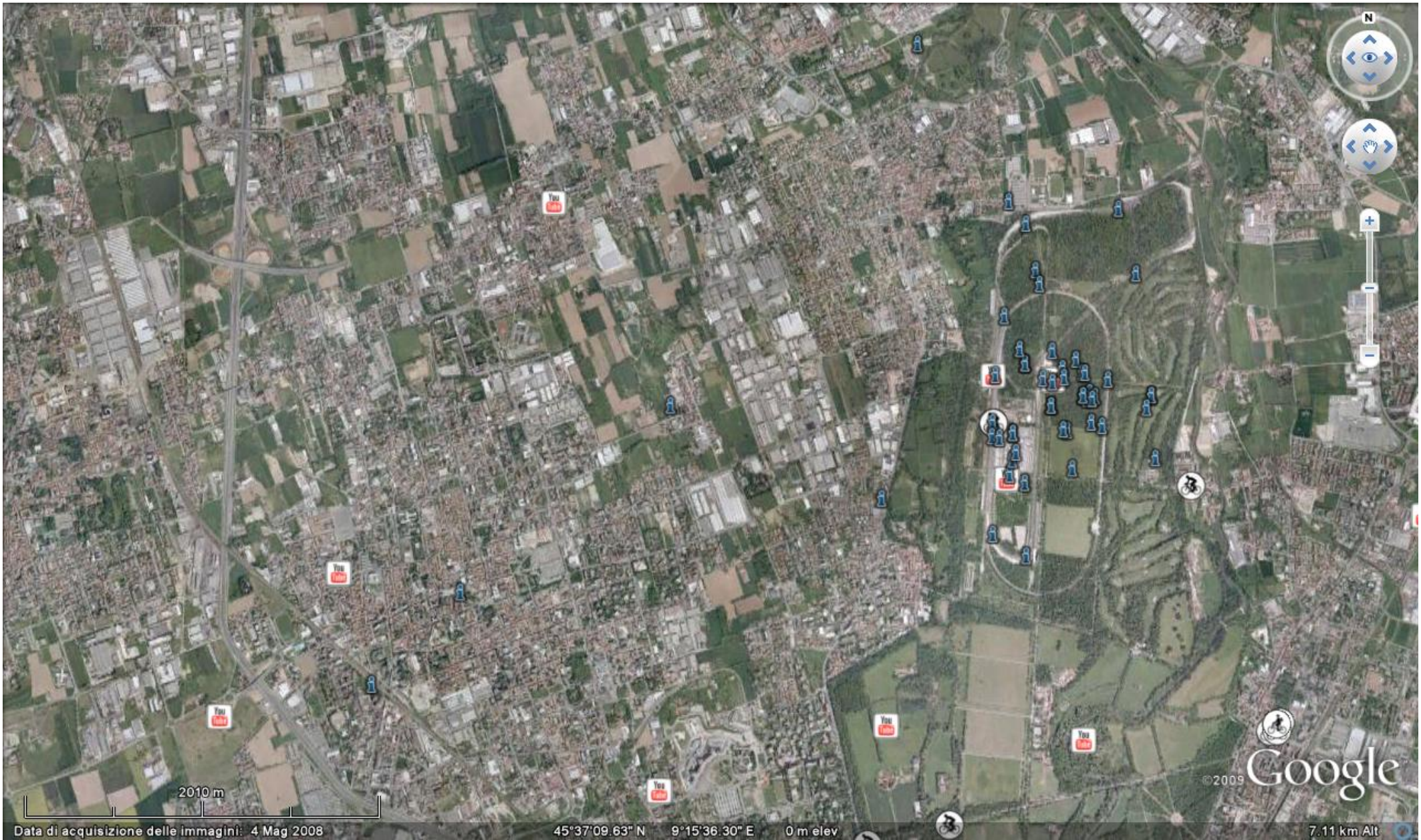
1000 m


300 m
©2009 Google
Data di acquisizione delle immagini: 4 Mag 2008
45°37'09.37" N 9°15'36.24" E 0 m elev
1.08 km Alt

3500 m


1003 m
©2009 Google
Data di acquisizione delle immagini: 4 Mag 2008
45°37'08.99" N 9°15'36.25" E 0 m elev
3.61 km Alt

7000 m


2010 m
Data di acquisizione delle immagini: 4 Mag 2008
45°37'09.63" N 9°15'36.30" E 0 m elev
7.11 km Alt
©2009 Google

Start

Google Earth as a survey tool

The work space is Google Earth:

different height, movements, measures, possibility to print and take screen shots, reading geographical information's, possibility to read a post local and special information.

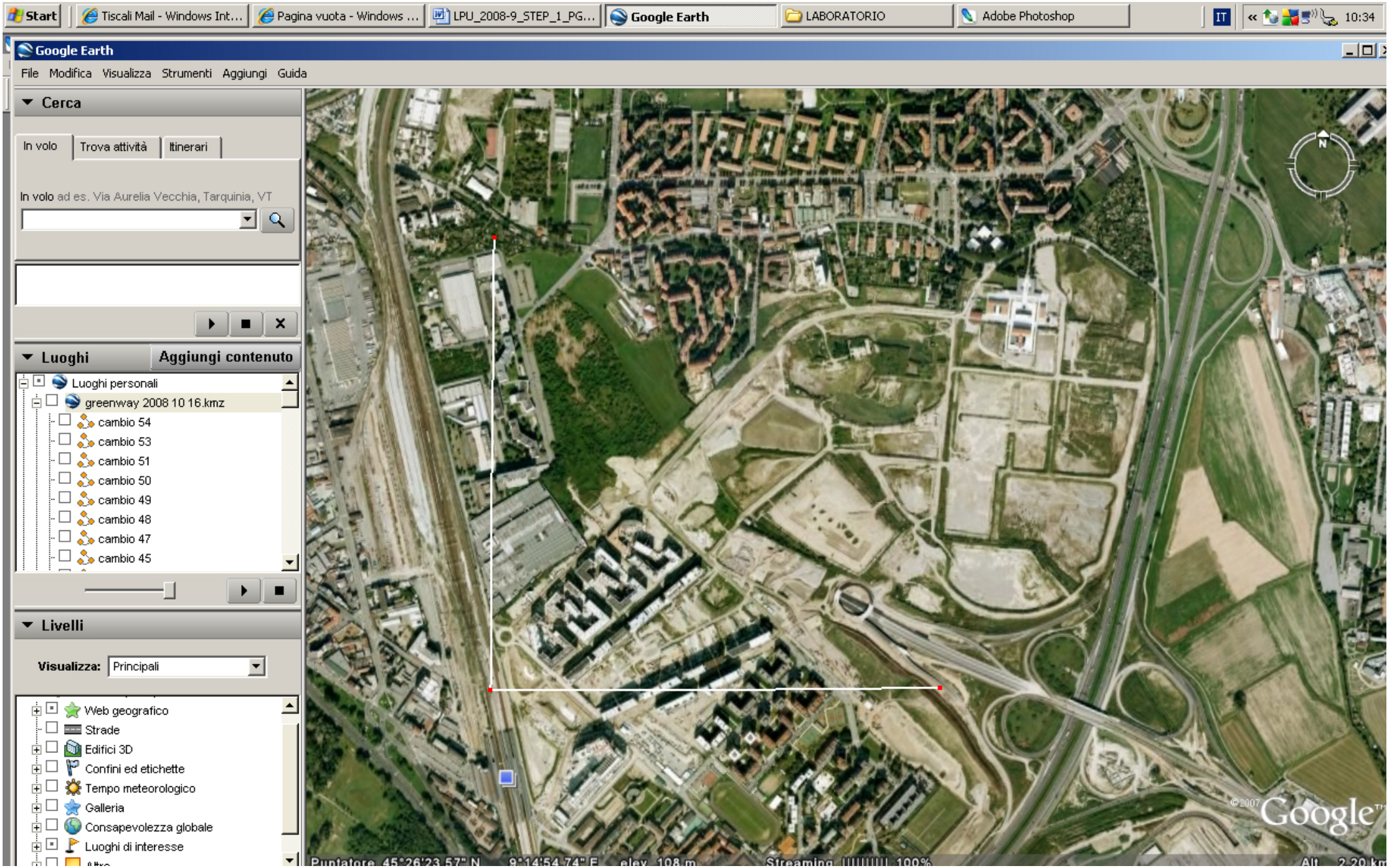
First of all, territory have to be surfed, zooming in and out. After this exploration, transverses have to be traced and square samples have to be chosen.

The aim of the operation is describing different and significant visible territorial features: significant are the density of different micro patterns, recurrences and exceptions, presence of parts or elements of big territorial patterns, recurrences of path, shapes and dimensions, character of the surfaces…

Interpreting transect survey suggestion in the workshop activity

1. trace the “between x and x” field

2. choose 1000x1000 square metres with the aim to catch distinctive territorial features (for about 20 samples complexively selected).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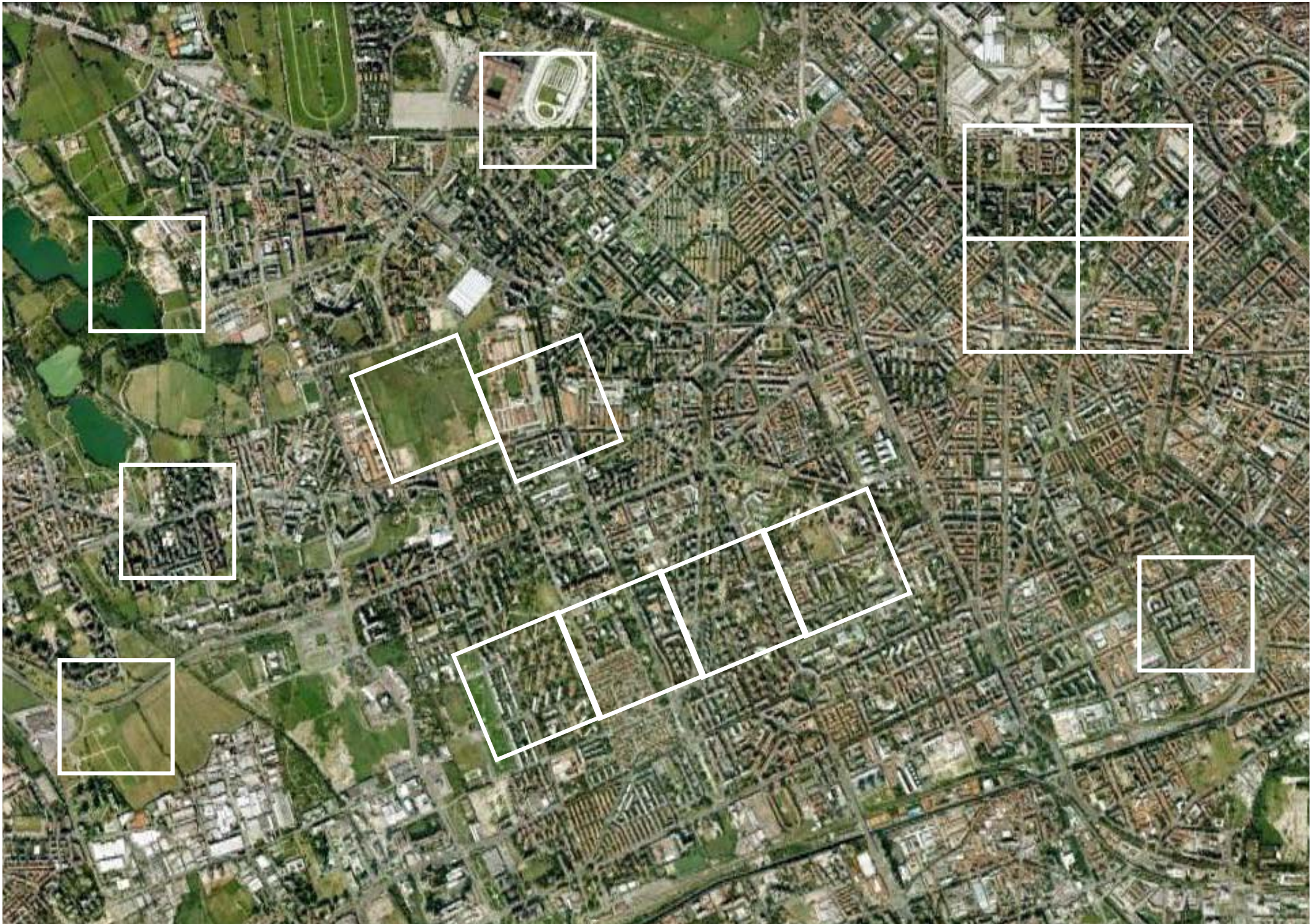
cambio 47
cambio 45
Livelli
Visualizza: Principali
Web geografico
Strade
Edifici 3D
Confini ed etichette
Tempo meteorologico
Galleria
Consapevolezza globale
Luoghi di interesse
N
©2007 Google
Puntatore 45°26'23.57" N 9°14'54.74" E elev 108 m Streaming 100%
Alt 2.20 km


real scale: 1000 m = 20 cm : scale 1:5000
Puntatore 45°26'23.57" N 9°14'54.74" E elev 108 m
Streaming 100%

1000 x



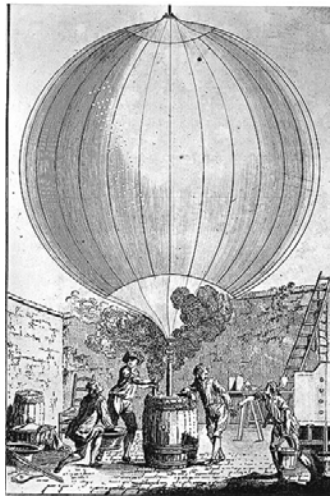
Memo

Some technical steps to be considered:

- to compose a wide photographic basis of the territorial field by a sequence of screen shots to be elaborated with Photoshop (colour correction, crops…)

- to name and order the square samples, preparing their catalog;

- to write notes and sketch drawings to fix the essential features recognised in the survey.



Laboratorio di Progettazione urbanistica

Urban Planning & Design Workshop: have a good journey!