

LANDSCAPE PREFERENCE ANALYSIS



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LANDSCAPE PREFERENCE ANALYSIS

1. How can we know the importance of the different elements
2. Direct assessment
3. Delfy process for landscape assesment
4. Preference analysis
 - Making format
 - Significant effects
 - Landscape preference

How can we know the importance of the different elements ?

1. BY SUBJECTIVE AND DIRECT ASSIGNMENT
2. BY SUBJECTIVE BUT SHARED METHODS (DELFY METHOD)
3. BY SURVEYS AND SAMPLES INTO THE AFFECTED HUMAN POPULATIONS

DIRECT ASSIGNMENT

- i) We suppose that the three quality maps (Stand QM, Surroundings QM and Viewshed QM) are been making before and they have the same strength to doing a overall quality map
- ii) In the construccion of the stand quality map generally exist a arrangement of elements in order to their importances and loads:
 - Water
 - Vegetation & lithology
 - Geomorphology
 - Slope
 - Aspect
 - Human elements
- iii) This arrengement can derive in a array of load for each element by standardization.

DELFY METHOD

- i) It is a shared responsibility method which everyone establishes his or her class arrangement and load for each landscape elements.
- ii) In a secret and impersonal way, every one explains the reasons of his criteria and these explanations are read by the other partners.
- iii) The process is repeated until the arrangement of every one is the same.

PHOTOGRAPHIC SURVEY

- i) First of all we have to analysis the landscape and obtain the elements and classes that form the landscape.
- ii) We have to take enough representative photos of the countryside.
- iii) A representative set of the population scores each one of the photos (From 1 to 10).
- iv) By means of an analysis of the variance (ANOVA) we can obtain the contribution of each component in the total record.

SELECT THE SURVEY PHOTOS

PHOTO	VEGETATION	GEOMORF	SLOPE	TOWNS	ROADS
1	2	2	2	1	1
2	1	1	1	1	2
3	1	1	1	1	1
4	4	2	2	1	2
5	4	2	2	2	2
6	4	2	2	2	1
7	4	2	1	2	1
8	2	1	1	2	2
9	2	1	2	2	2
10	1	1	2	1	1
11	4	1	2	1	1
12	3	2	1	2	1
13	3	1	1	2	2
14	3	1	2	2	1
15	1	2	1	2	2
16	3	2	2	1	1
17	3	2	2	1	2
18	1	1	2	1	2
19	4	2	1	2	2
20	1	2	1	2	1
21	2	1	1	2	1
22	3	1	2	2	2
23	3	2	1	1	1
24	3	2	1	1	2
25	2	2	1	1	1
26	1	2	2	2	2
27	2	2	1	1	2
28	2	1	2	2	1
29	1	2	2	2	1
30	2	2	2	1	2
31	4	1	1	1	2

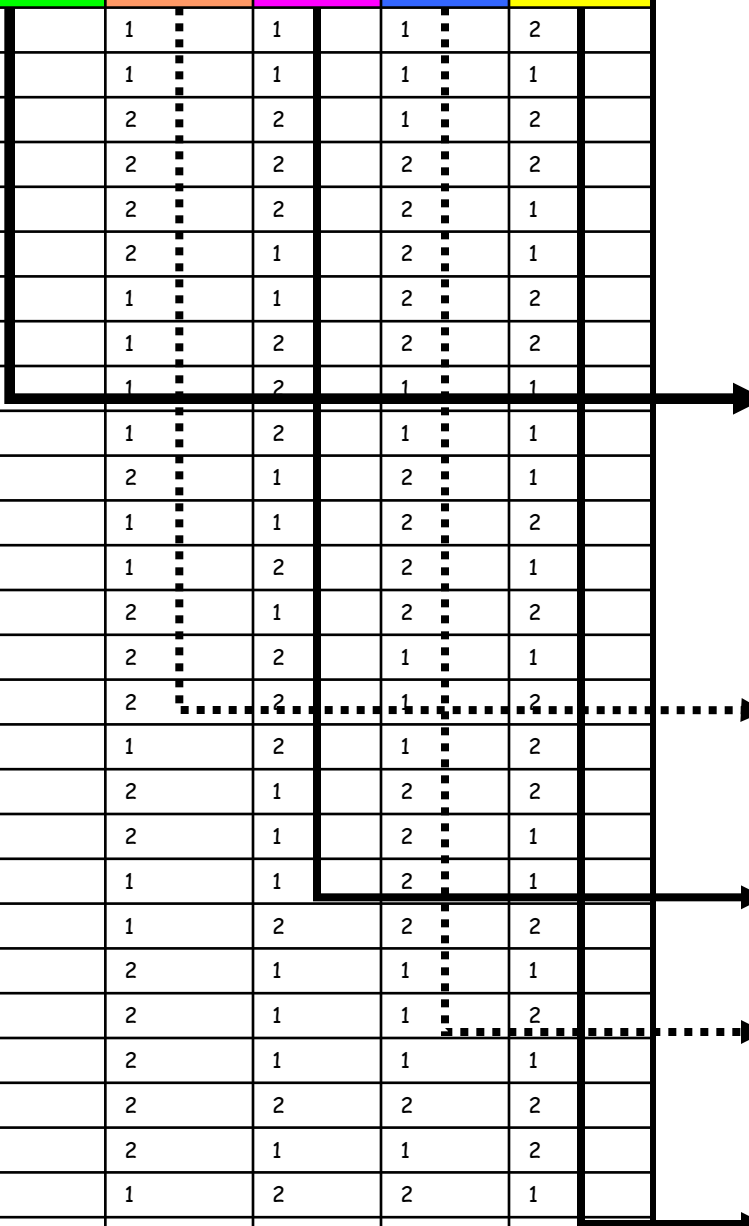
VEGETATION	
1	Trees
2	Bushes
3	Meadows
4	Crops

GEOMORFOLOGY	
1	Deepy valley
2	Hill

SLOPE	
1	$\geq 30\%$
2	$< 30\%$

TOWNS	
1	No villages
2	Villages

ROADS	
1	No roads
2	Roads



SCORE THE PHOTO



Photo 1

Score: ?

PHOTO	VEGETATION	GEOMORF	SLOPE	TOWNS	ROADS
1	2	2	2	1	1

Photo 2



Score: ?

PHOTO	VEGETATION	GEOMORF	SLOPE	TOWNS	ROADS
2	1	1	1	1	2

Photo 3



Score: ?

Photo 4



Score: ?

Photo 5



Score: ?

Photo 6



Score: ?

Photo 7



Score: ?

Photo 8



Score: ?

Photo 9



Score: ?

Photo 10



Score: ?

Photo 11



Score: ?

Photo 12



Score: ?

Photo 13



Score: ?

Photo 14



Score: ?

Photo 15



Score: ?

Photo 16



Score: ?

Photo 17



Score: ?

Photo 18



Score: ?

Photo 19



Score: ?

Photo 20



Score: ?

Photo 21



Score: ?

Photo 22



Score: ?

Photo 23



Score: ?

Photo 24



Score: ?

Photo 25



Score: ?

Photo 26



Score: ?

Photo 27



Score: ?

Photo 28



Score: ?

Photo 29



Score: ?

Photo 30



Score: ?

Photo 31



Score: ?

Photo 32



Score: ?

RESULTS OF ANOVA

VEGETATION

COD	LEYEND	MEAN	SIGNIFICATIVE DIFFERENCE
1	Trees	6.37	1-2
2	Bushes	6.12	2-3, 1-2
3	Meadows	6.42	3-2
4	Crops	6.27	

SLOPE

COD	LEYEND	MEAN	SIGNIFICATIVE DIFFERENCE
1	$\geq 30\%$	6.55	1-2
2	$< 30\%$	6.03	2-1

ROADS

COD	LEYEND	MEAN	SIGNIFICATIVE DIFFERENCE
1	No roads	6.55	1-2
2	Roads	6.03	2-1

TOWNS

COD	LEYEND	MEAN	SIGNIFICATIVE DIFFERENCE
1	No villages	6.22	1-2
2	Villages	6.42	2-1

GEOMORFOLOGY

COD	LEYEND	MEAN	SIGNIFICATIVE DIFFERENCE
1	Deepy valley	6.42	1-2
2	Hill	6.17	2-1

RESULTS OF ANOVA

QUALITY OF LANDSCAPE ACCORDING WITH THE SAMPLE:

VEGETATION: Meadows (+41%) > Trees (+25%) > Crops (-8%) > Bushes (-58%)

SLOPE: Slope more than 30% (+26) > Slope less than 30% (-26)

ROADS: Not roads (+4%) > Roads (-4%)

TOWNS: Villages (+2%) > Not villages (-2%)

GEOMORFOLOGY: Valleys (+2%) > Hills (-2%)