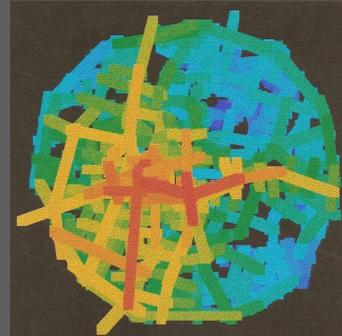


Nicosia : searching for the Centre



Seminar 4
CyNUM

Constantinos Kypris

If I ask you now to meet later in the centre of Nicosia. Where do you think should we meet ? In the north or in the south part? In the old historic centre within the walls or in Makariou area outside the walls which is characterised by the town plan department as the urban centre? In Stavrou area, full of traffic, shops and cafes in the south of Nicosia? I am afraid it is difficult to meet in the same centre. So, where is the urban centre of Nicosia and what has happened in the last 60 years and it is difficult to trace the centre.

60 years of changes in Nicosia's urban space and urban function

searching for the urban centre

Most of the discussion is about the south part of the city.



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introduction

Nicosia, our divided city, in the last few decades has seen dramatic changes which make it a unique example of continuous socio-spatial transformation.

This presentation will attempt a quick journey covering the last 60 years of changes in Nicosia's urban space and urban function, searching for the urban centre of the city in different periods. Most of the discussion is about the south part of the city.

Nicosia's urban space combines three major characteristics:

1. The old and contemporary structure as two distinctive parts.
2. The division of the city as two distinctive sectors.
3. The sudden growth and expansion of the city (due to urbanisation, settlement of refugees).



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introduction

Questions of the Study:

1. If a shift of the urban centre really exists.
2. What is the role of the spatial transformations in the changes of the functional pattern?
3. How does the new grid outside the walls affect the old grid within the walls?
4. Where could we find the urban centre in a scenario of a unified Nicosia?



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introduction

Methodology of the Study:

- Configurational analysis. (based on the theory and methods of SPACE SYNTAX) .
- Comparative analysis of the spatial properties and data about movement and land uses.

Nicosia



- 1957 (one system before the division)
- 1974 (division line after 1963)
- 1984 (settlement of refugees)
- 1994 (divided, urbanization, growing)
- 2016 (contemporary, open checkpoints,)
- Unified

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introduction

The study will examine Nicosia in 5 different time periods and a future scenario.

What is urban centre? (Jane Jacobs)

- Mixed primary uses.
- Higher encounter rates. (street network).
- A strong and inclusive central heart of a city.



Jacobs believes that urban centres should have mixed primary uses and also higher encounter rates, something that has to do with the street network.

Jane Jacobs writes about urban centres that “without a strong and inclusive central heart, a city tends to become a collection of interests isolated from one another”.

(Jane Jacobs “The Death and Life of Great American Cities, 1961)

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introduction

Spatial configuration and the relation to patterns of movement, retail and land uses.

(Bill Hillier)



Bill Hillier's team suggests that “ the configuration of the urban grid itself is the main generator of the patterns of movement. Retail and land uses are then located to take advantage of the opportunities offered by the passing trade and may well act as multipliers on the basic pattern of ‘natural movement’ generated by the grid configuration.

(Hillier et.al. , Natural movement: or configuration and attraction in urban pedestrian movement, 1993).

This study :

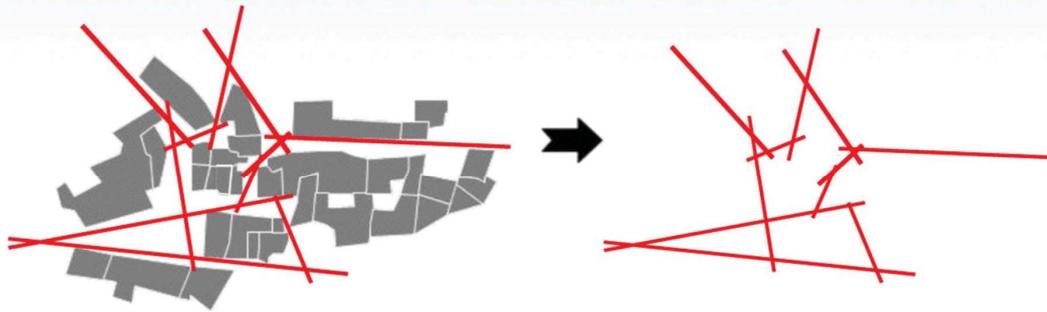
1. Configurational analysis.
2. Data about movement.
3. Data about commercial activities (primary uses).



SPACE SYNTAX

Axial map

Represents the impression that observers have of visibility and permeability as they move through the space looking at a distance, towards various directions. The axial map of an area is constructed by drawing the longest and fewest axial lines.



Γραφική μετατροπή ενός χάρτη σε αξονικό μοντέλο

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basic terms of Space Syntax

This study is using space syntax configurational analysis. The tool that is used is the axial map. Here I will explain some basic terms of the axial analysis.

Axial Map - Syntactic Analysis

The axial map is imported in software (axman, depthmap) that analyses the syntactic relations of its parts.

Every axial line is valued for its syntactic properties to the other axial lines of the system.



Συντακτική σχέση αξονικών γραμμών

Axial map
Graphic Representation.

Global integration

The global integration of an axial line expresses the mean number of axial lines and changes of direction that someone has to take in order to go to all the other axial lines in the system.

It is a global property of a line.

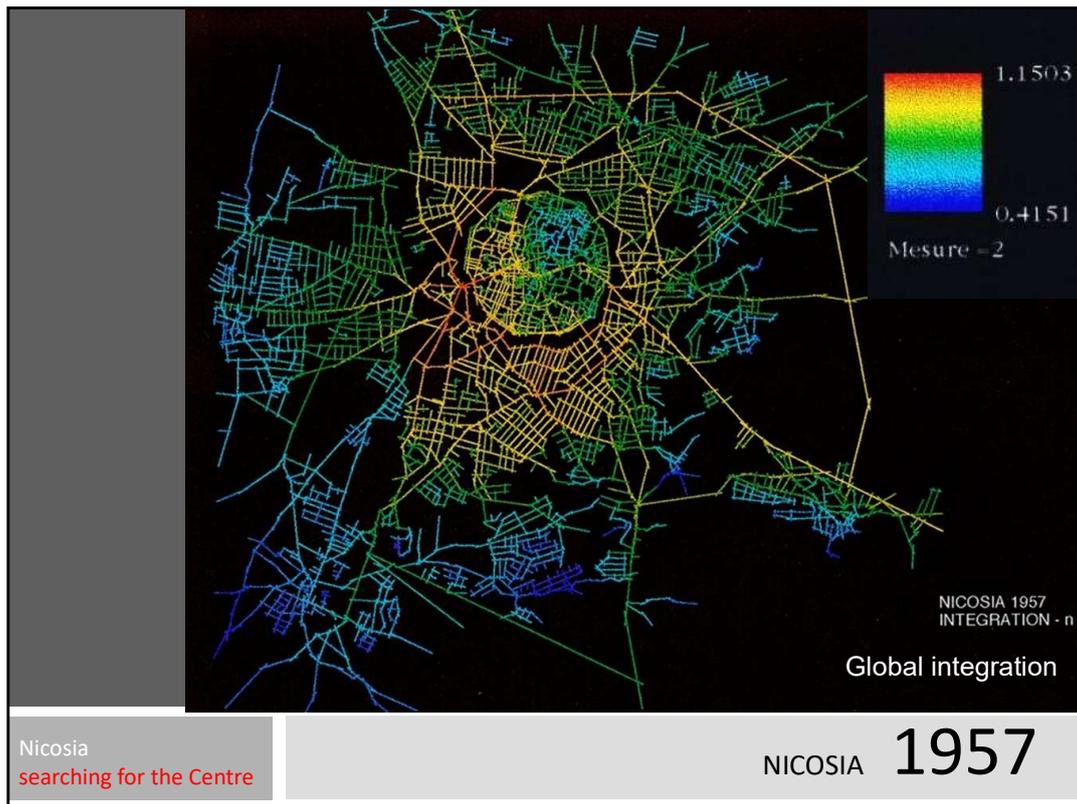
The most integrated lines are colored red, and the most segregated lines are colored blue. (and the in between colors).



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basic terms of Space Syntax

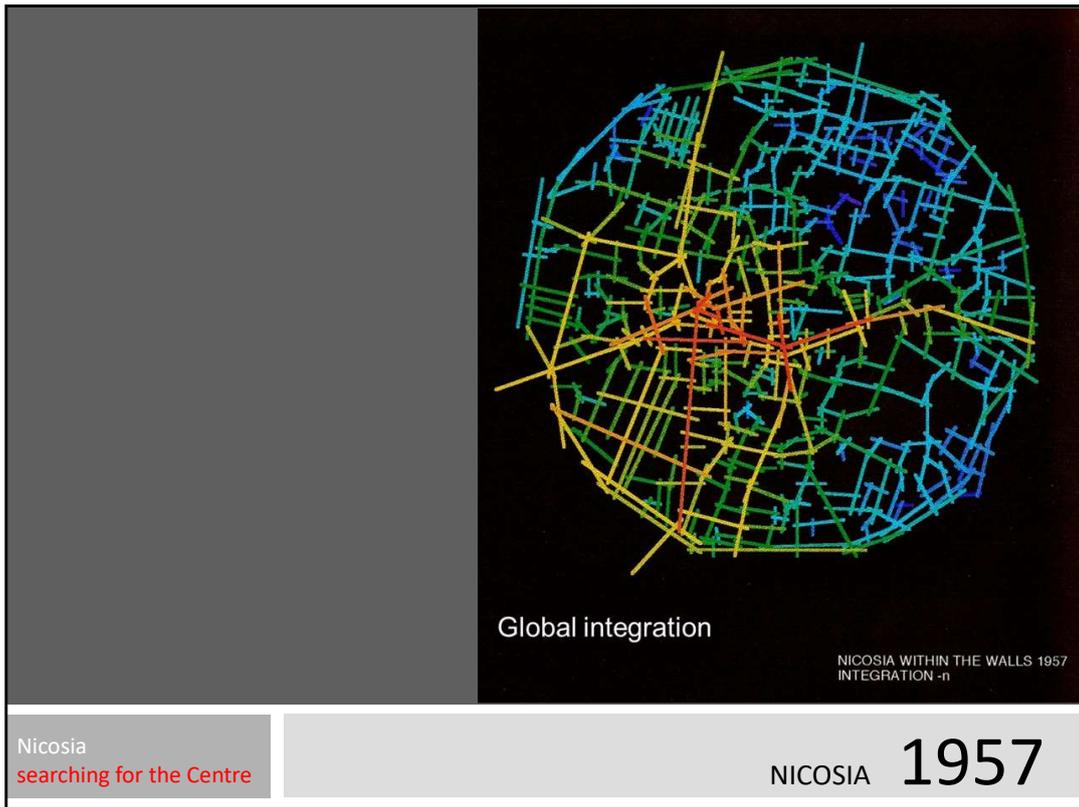
Here we see the graphic representation of an axial map. Global integration is the syntactic measure that is used in the study.



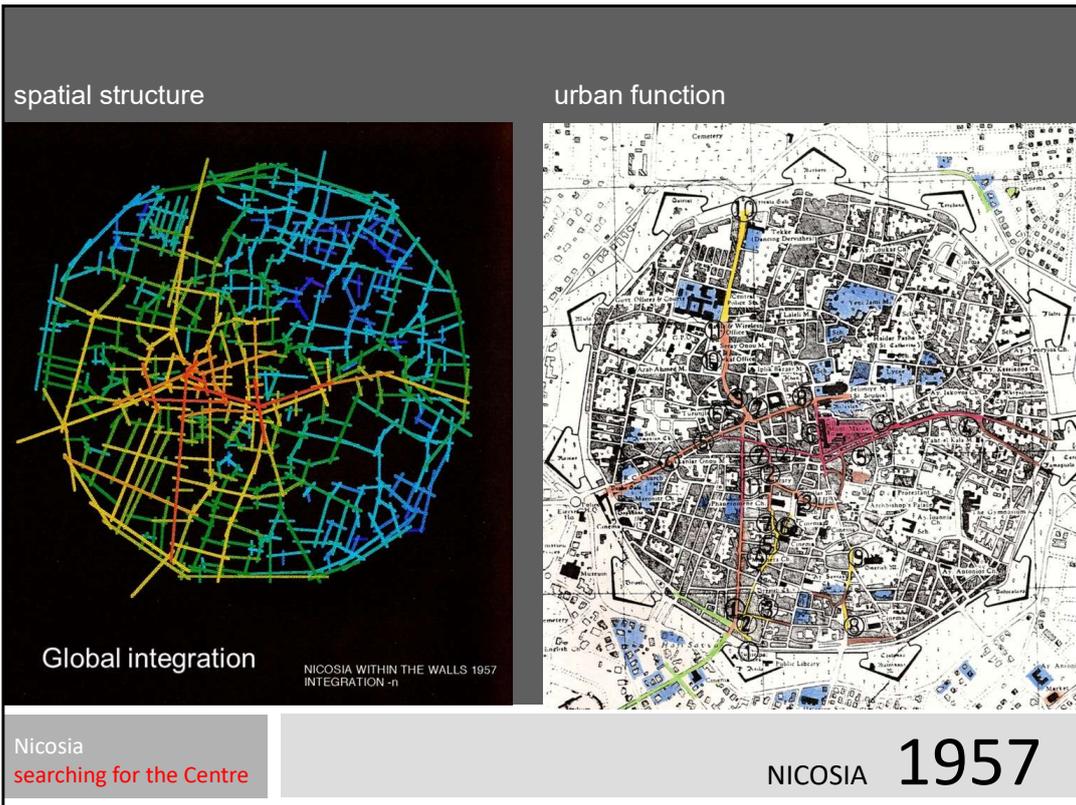
Most of the material of this presentation is taken from my MSc Thesis in UCL in 1994, and from a paper written by me a year ago in University of Cyprus.

Nicosia 1957. This was the period before the impose of the division line in which Nicosia was unified, working as one system.

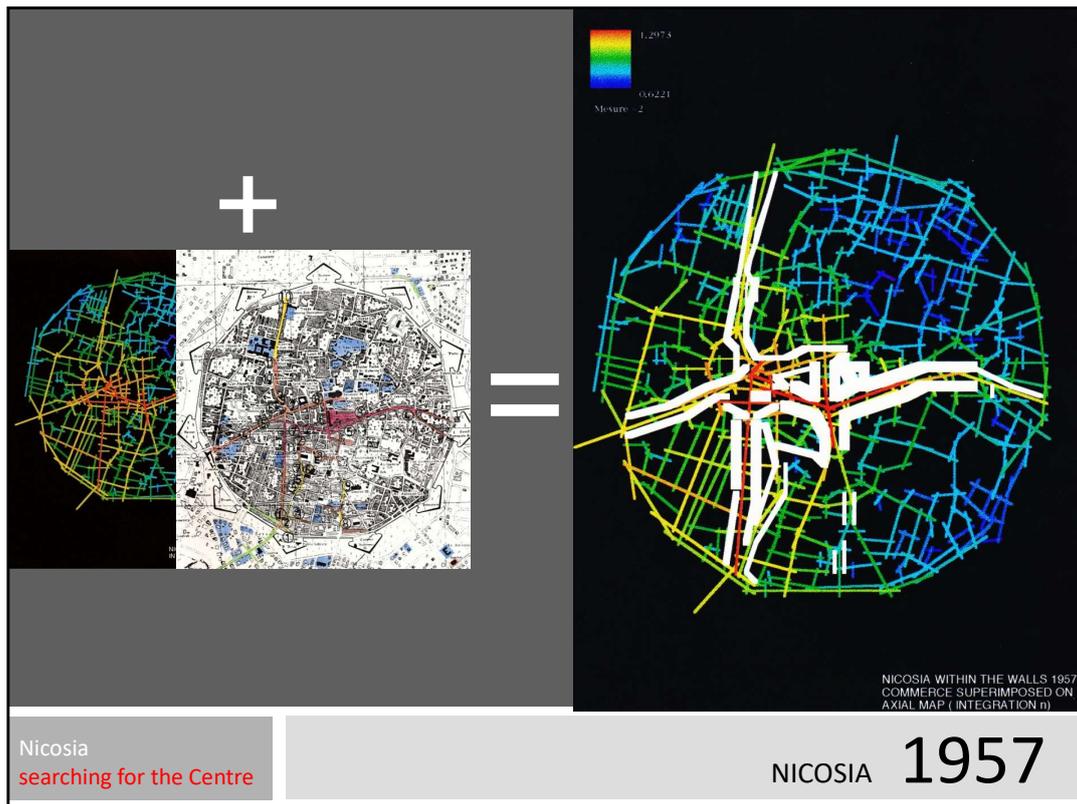
The axial map of this period representing global integration, shows that the new urban fabric around the old city is starting to 'absorb' the global integration of the system. The most easy accessible axial lines lie around the old city and a few of them intrude into the 'circle'. A relatively integrated area in the form of a cross is appearing in the old city. (Ledras and Ermou).



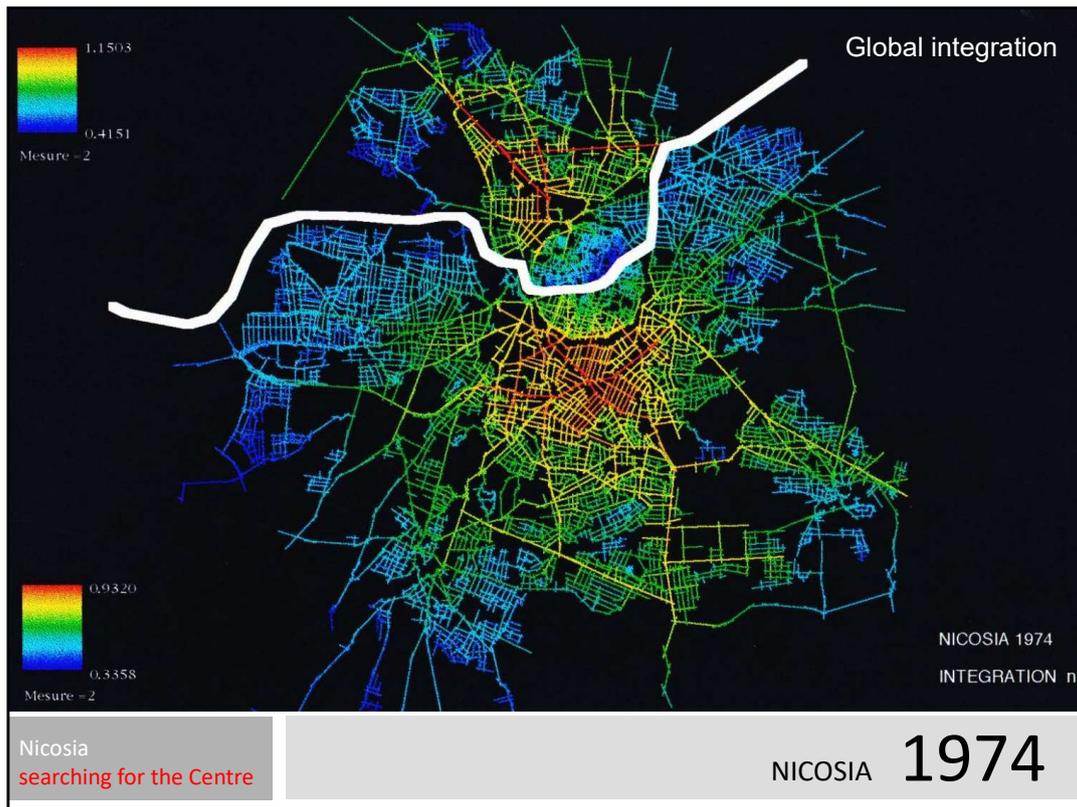
This is the axial model of Nicosia within the walls . The integrated area in the form of a cross is appearing again more clearly . (Ledras and Ermou).



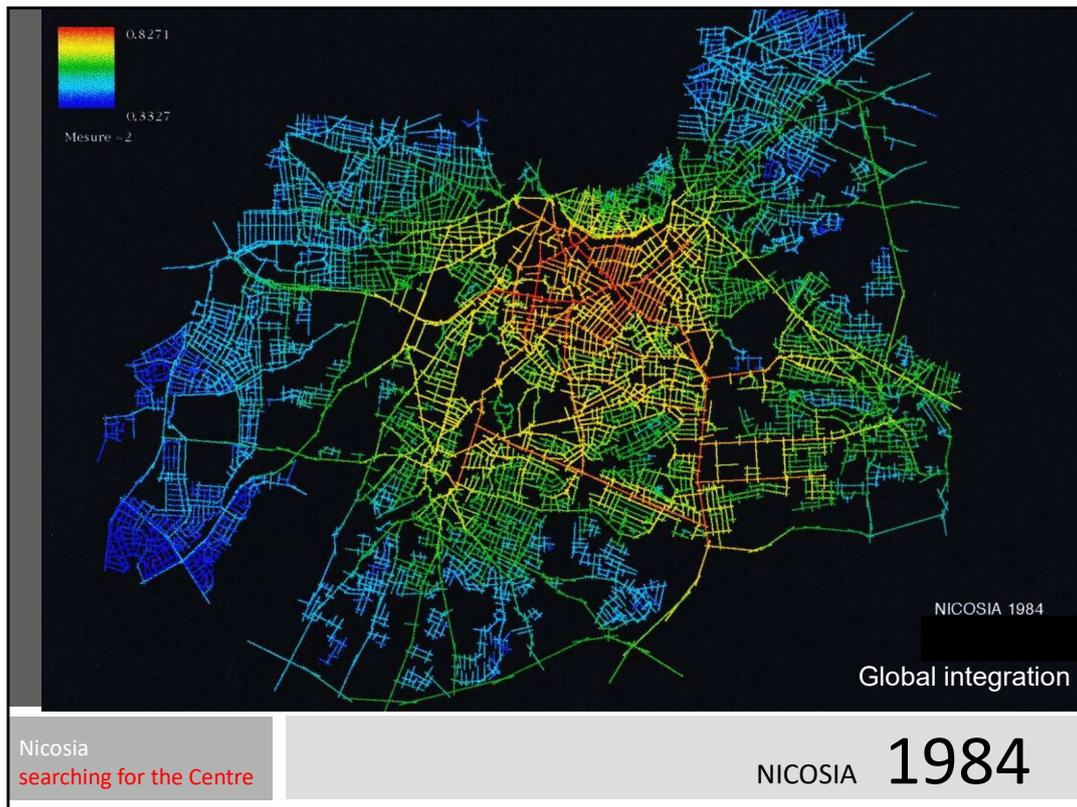
On the left is the axial model of Nicosia within the walls and on the right is a land use survey carried out by Morris in 1957 (by the Town Planning Department). The land use survey gives information about the retail and commercial activities where red colour expresses very high degree of commercial activity, orange expresses high degree and yellow medium degree.



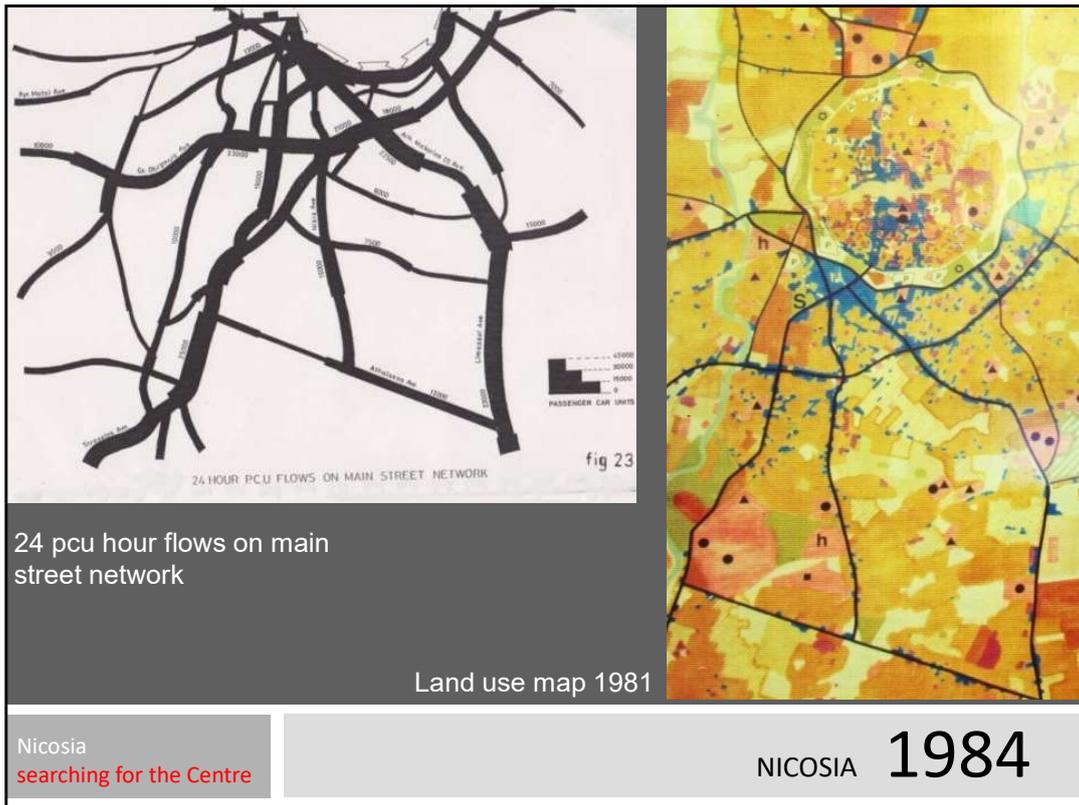
Here we see the commercial activities superimposed on the axial map of the old town. It was found that the best predictor of the commercial activities was the global integration of the old city. From the examination of the whole system of Nicosia and the system within the walls a conclusion was extracted. That the commercial streets of the old Nicosia were easily accessible from the outside but what distributed the degree of commercial activities in the old city was the configuration of the old city itself.



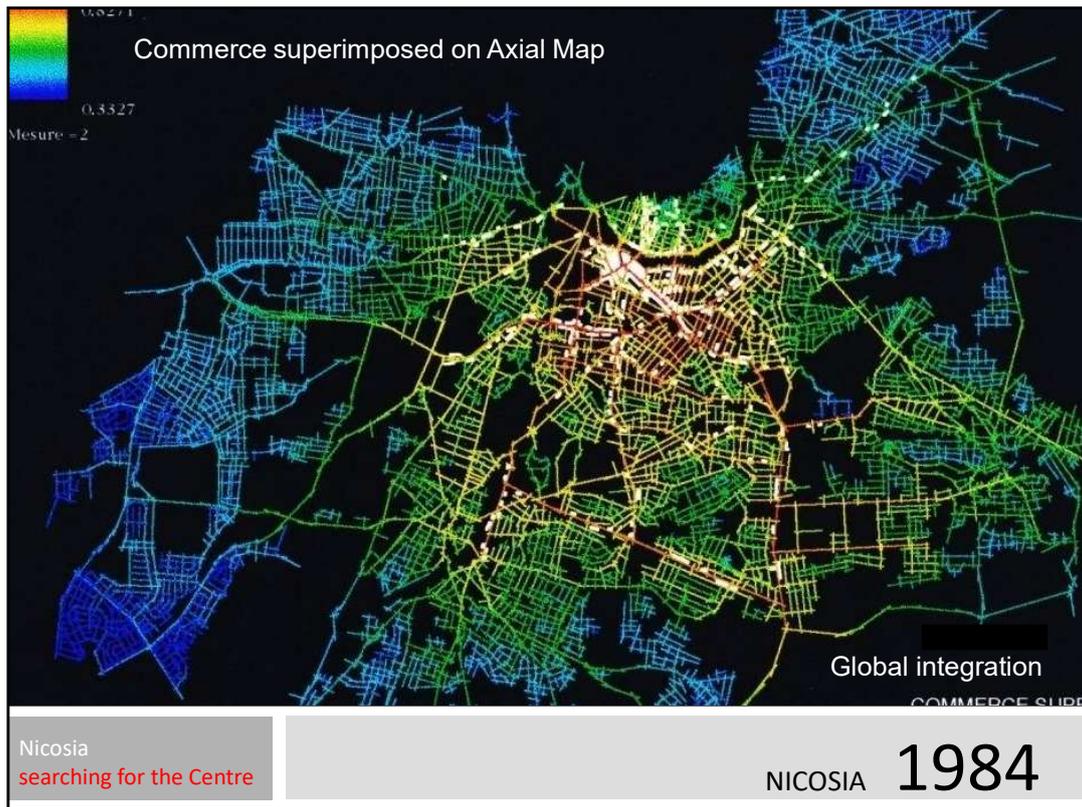
The introduction of the division line through the core of the city in 1963 divided the town in two sectors due to the very strict restrictions of free movement. From July 1974 the division line became for many years an impenetrable border with army in both sides. This led to a very dramatic transformation of the space of Nicosia. Two spatial systems were created. A very brief spatial analysis of Nicosia in 1974 was carried out as the transition to the more extended analysis of the other periods that follow. No information for the use of the city was found for that period. The syntactic analysis reveals the integration damage that was done in the old city and the new balances that were imposed by the division.



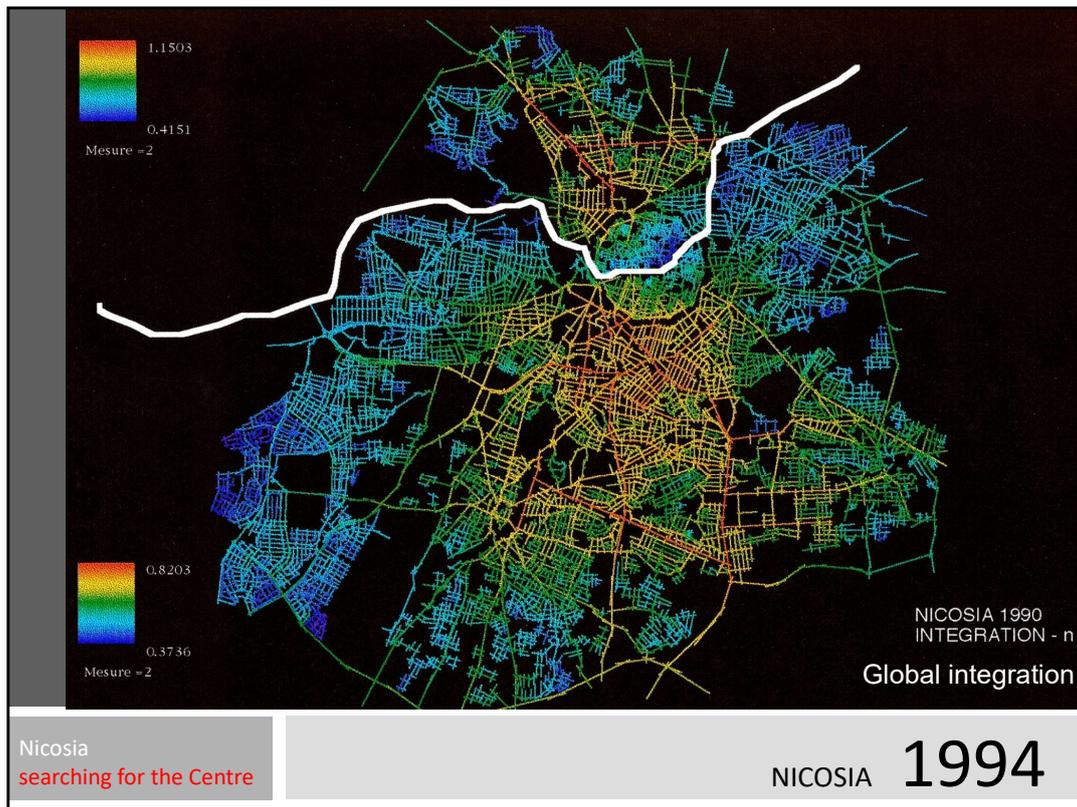
From the map of 1984 the axial model for the south part of Nicosia was created. Here the town has grown (settlement of refugees and refugee housing estates) and this growth affected the integration core which seems slightly more spread.



Data about the functional patterns of the south part of the town in this period was correlated to the configurational model. The pattern of 24 hour flows of vehicles on main street network was strongly correlated with the global integration values of the streets. Land use map of that period was correlated with the axial model. The colour blue represents commerce.



From the land use survey of that period commerce (in white colour) was superimposed on the axial model that represented global integration. This graphic representation gives a visual inspection of the strong correlation between spatial configuration and commercial activities. The concentration of commerce seems to be determined by spatial parameters which are related to the global. The area which has the highest degree of commerce concentration has shifted out of the old city in the new syntactic core of the town. Makariou area is the new urban centre. Some commercial activities remain in the old town which is relatively integrated to the global.



The axial map of Nicosia in 1994 shows the distribution of global integration. The syntactic core is placed around Makariou area. The changes on the integration core of the south part of Nicosia since 1984 appear to be minor but from a very close examination we observe that the core is still spreading towards the south.

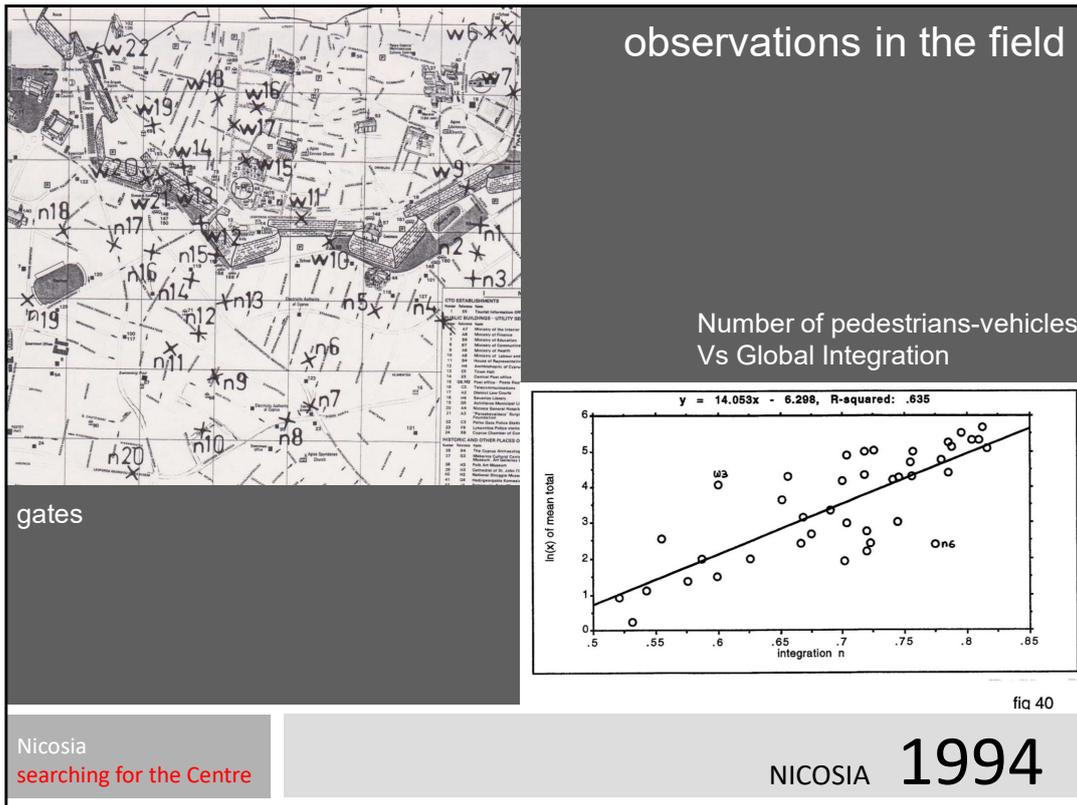
observations in the field



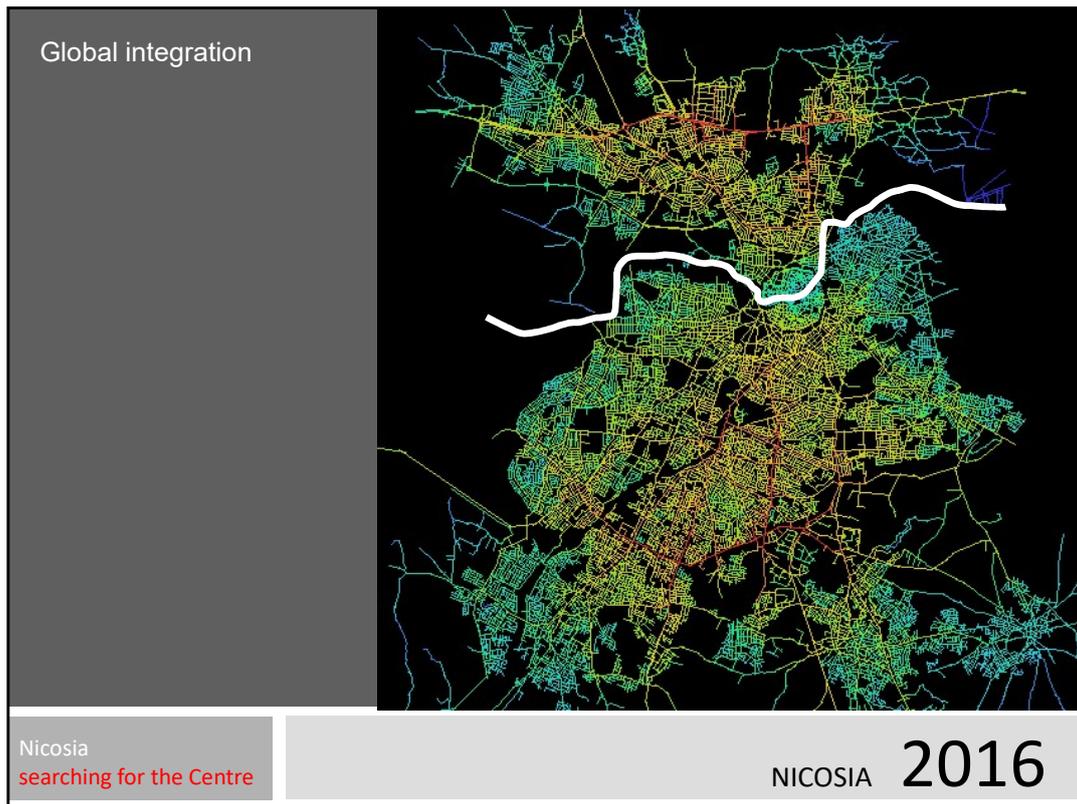
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NICOSIA 1994

During the summer of 1994 observations concerning the pedestrian and vehicular movement in the old and new core of the south part of Nicosia were carried out by the author. During the observations it was noticed that in the area of Makariou avenue in the new core, most of the ground floor uses were successful shops and all the ground floor premises were active. It must be noticed that during 1994 no crossing of the division line was allowed.



From certain points of 42 streets (that were called gates) in the old and new city the flow of pedestrians and vehicles was counted. The mean numbers of the counting were correlated to the values of global integration. The correlation was strong showing that global integration could be a reliable predictor for the patterns of movement and Makariou area was still the king, still the urban centre.



This is the axial map of Nicosia of 2016 representing global integration. Speaking with syntactic terms, the integration core of the south part of Nicosia has shifted and spread to the south. A super grid has arisen spreading the integration on main streets in a big area of the city. The compactness of the previous core seems to be lost. And probably this is what we feel today driving and walking in Nicosia. We have the feeling that the urban centre is not any more there. There are local streets in other parts of the town that collect more traffic, pedestrians and primary uses. An exception of this is the area in the old city around Ledra street. The opening of the checkpoints helped the area to become locally integrated and successful in recreational activities (recreational park-attractor). It was decided by the author not to include the crossings in the global model because there are restrictions of free every day movement by the whole population of Nicosia. (Natural movement as Hillier describes does not apply.) This is a kind of fault on the global model in Ledra area that needs to be repaired on the axial models.



Returning back to the scene of the crime, during autumn 2016 field observations concerning movement and land uses in Makariou avenue area were carried out by the author. Walking in the streets it was obvious that there was a big change from 1994. Less vehicles, less pedestrians and many shops were inactive.

summer 1994



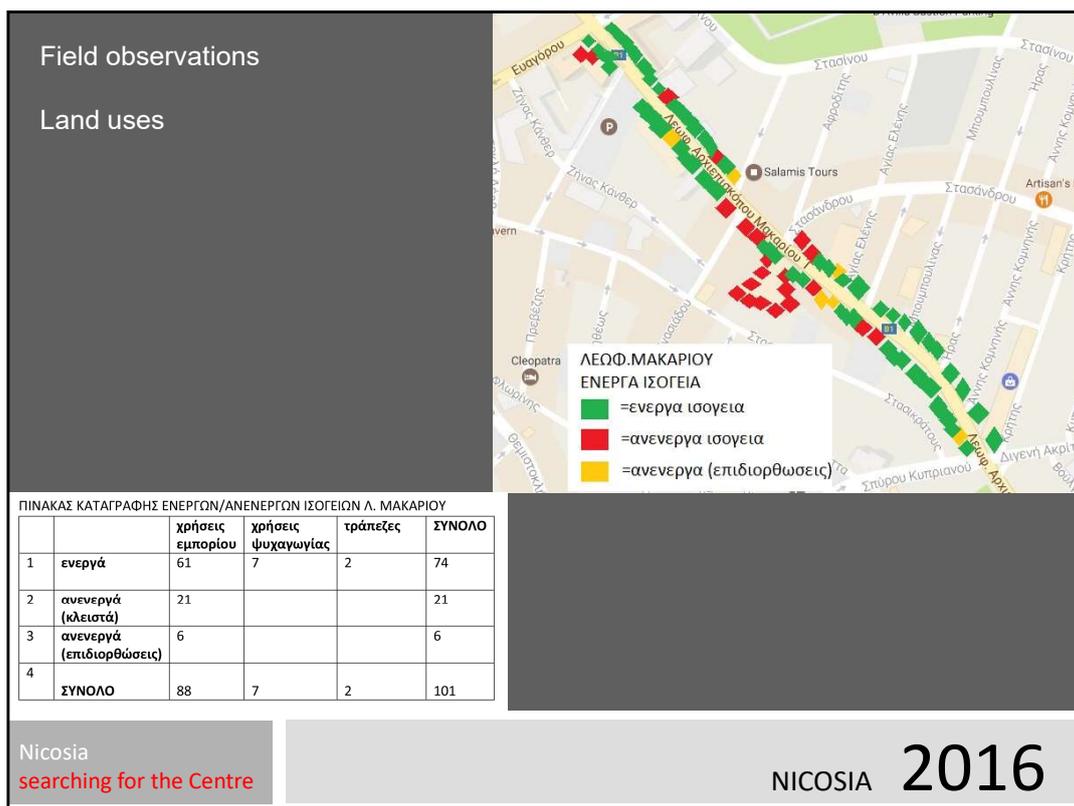
autumn 2016



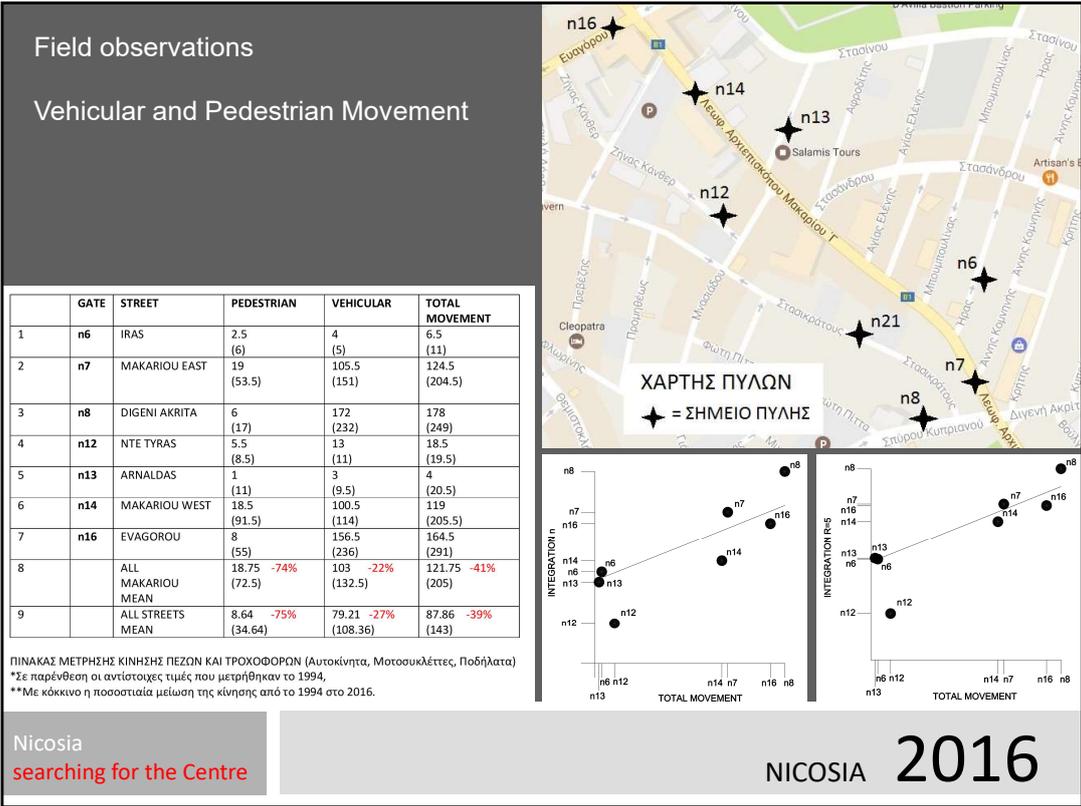
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NICOSIA 2016

During the summer of 1994, Makariou avenue and the area around seemed to be full of life with people walking and shopping. The same area after 22 years seemed to be abandoned.



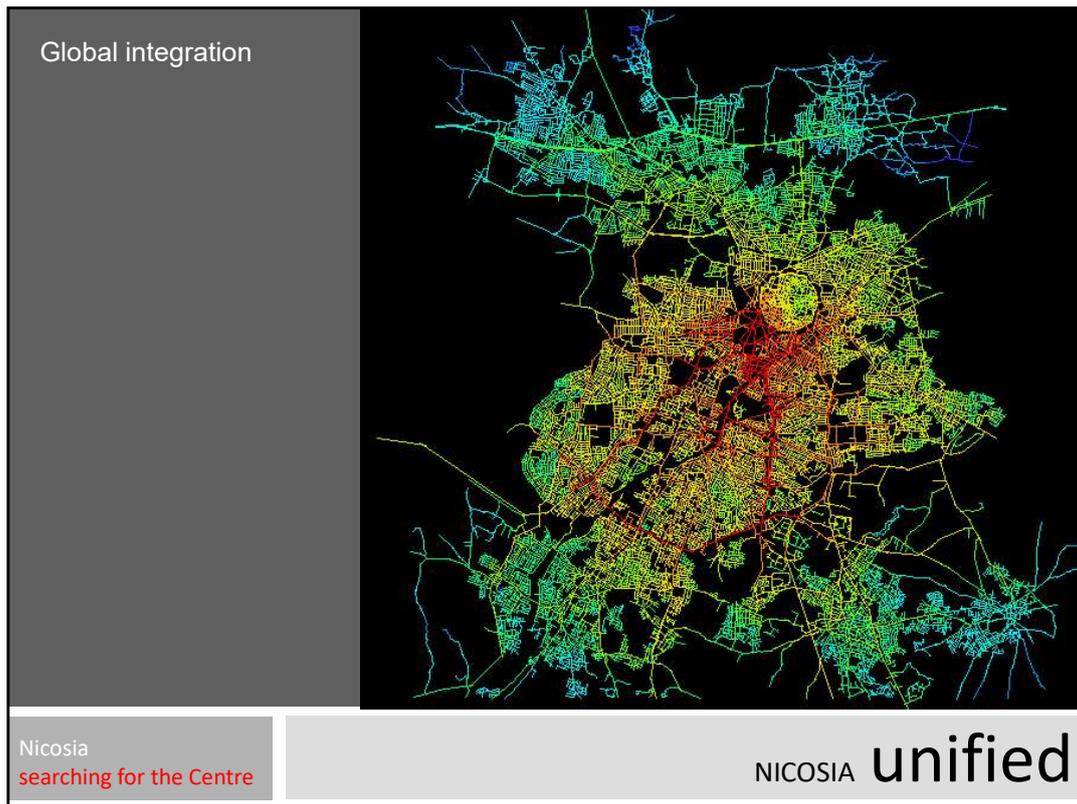
The first set of observations was counting active and inactive ground floor uses in a part of Makariou Avenue that used to be the most successful shopping road in the past. The active uses are shown in colour green. 1/3 of the ground floor uses were inactive.



The second set of observations was counting vehicular and pedestrian movement in points around Makariou avenue area. These points were called gates and were the same gates that were used in the observations made during summer 1994.

It was recorded that the mean number of pedestrians was 75% less than the equivalent number of 1994, and the mean number of vehicles was 27% less than the equivalent number of 1994.

The mean number of total movement (pedestrians and vehicles) was correlated to values of global and local integration. The correlation was strong showing again that global integration could be a reliable predictor for the patterns of movement. The urban centre was not there any more.

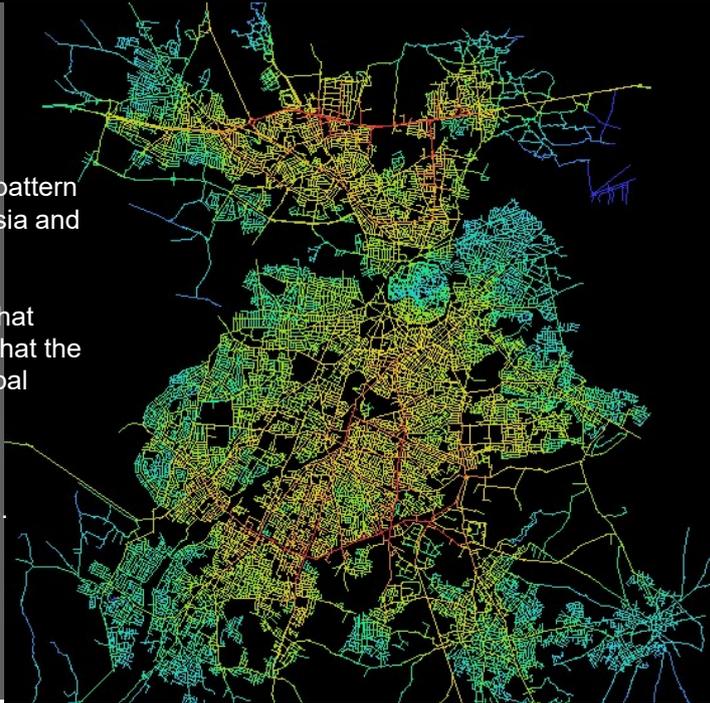


Attempting to speak about a future unified Nicosia is not easy. In spatial terms at least there is a tool that can help us imagine the new dynamics of the unified town. This tool is the axial analysis representing global integration of the Unified Nicosia. It has been shown in previous slides that global integration could be a good predictor for the patterns of movement and uses in the city. Examining this axial model we notice a compact integrated area around Makariou area adjacent to the old city. This could be the start for the regeneration of Makariou area and the regeneration of other streets in the old city. Makariou area could be again the urban centre and the old city could attract more primary uses, not only recreational.



The dramatic change from division to unification

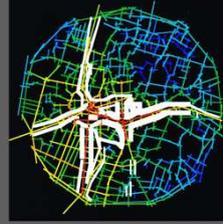
- Data about the functional pattern of the south areas of Nicosia and the north part of the city.
- Construct spatial models that represent the real impact that the crossings have on the global system.
- Explore other syntactic measures in axial analysis.



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MORE RESEARCH

□ **There is evidence that the functional pattern of Nicosia has followed the spatial transformations** in all stages of the contemporary history of Nicosia. The urban centre is shifting and following the configurational changes of the urban space.



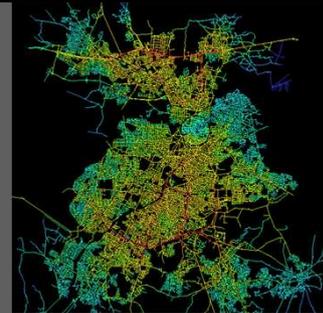
□ **The new urban fabric outside the walls has the ability to 'absorb' the integration out of the old historic fabric.** The shifting of the urban centre from the old city within the walls to the new grid outside the walls was going to happen anyway.



□ **The imposition of the division line in 1963 disintegrated and degenerated the commercial streets inside the old city.** This caused the immediate shift of the urban centre to the syntactically new core.

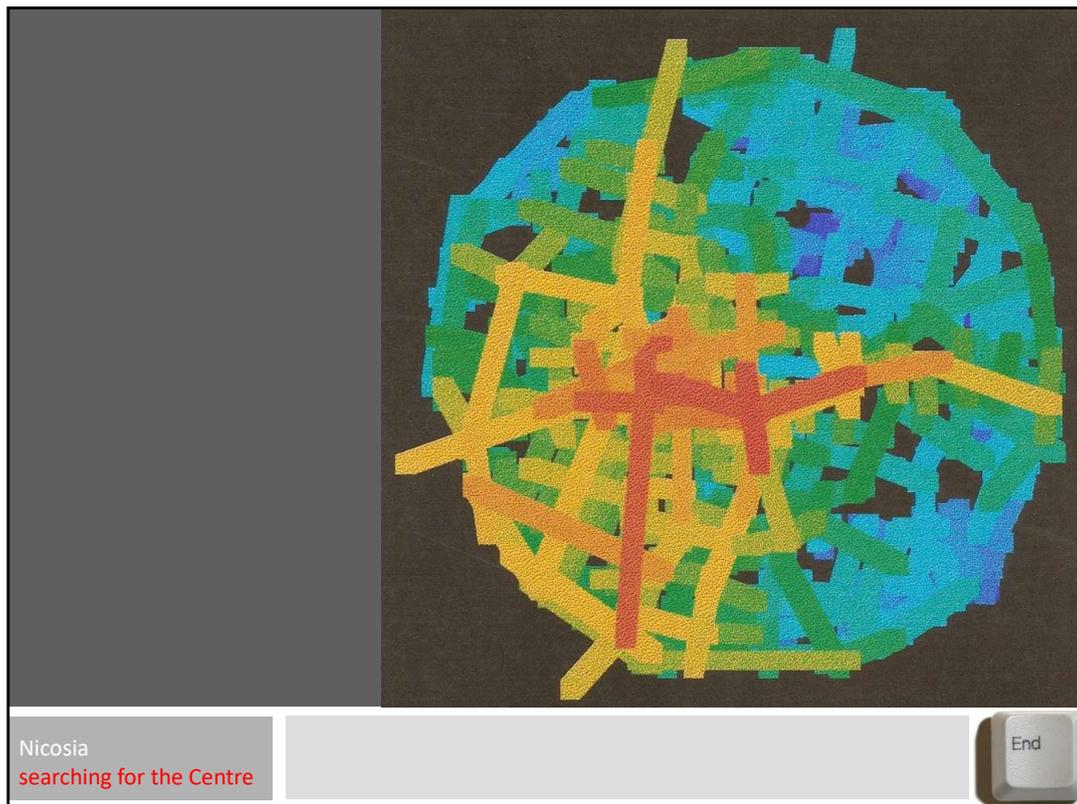


□ **The sudden growth of south Nicosia during the last decades pushed the syntactic core towards the south spreading out in a form of a super grid.** It was observed that Makariou area, the former centre of the city life has become more segregated in the axial models and in the real life. Nicosia, today, does not have a compact and homogenous urban centre.



□ **From the syntactic analysis it seems that in the case of reunification the new configurational core will shift again just outside the walls** helping Makariou area and part of the old city to be strongly integrated. It is possible that the functional pattern will follow again the spatial configuration giving to Nicosia what Jacobs described, “a strong and inclusive central heart”.





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