

## The social - cultural ecosystem of the neighborhood in Athens, the children and the bicycle

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### 1. INTRODUCTION

The city as place and social ecosystem is experienced by the children in a special way, determined by the psychosomatic scale of children's age. The present research focuses on seasonal movement by bicycle in the neighborhood as well as on the impact it has on everyday routine, the level of familiarization with space and the suitability of the built-up frame, as regards the needs of children.

The innate need of children for seasonal movement, which achieves greater speeds than walking, is presented diachronically and cross-culturally. The catholic character of this phenomenon, recorded in literature and illustrated works, is empirically confirmed when somebody observes the games of children in the communal spaces. Children use anything that ensures movement, such as rollers, go-carts, sledges. The instrument, however, judged by them themselves as corresponding perfectly with their wishes, is the bicycle.

Cycling offers children fast locomotion with the least muscular effort. It contributes to their intellectual and biological growth as it allows the exploration of distant parts of the neighborhood, parts which they would difficultly attempt to approach on foot. The characteristics of environment can have repercussions in such an extension of action. Moore and Young [ 1 ] described the cycling routes of eight-year-old children in Berkley, California, as a formal transgression of the familiar limits of residence and space. On the contrary, Hart [ 2 ] noticed that in a small town in Connecticut which was divided by one of the busiest streets in the state, the cars prevented cycling, making it dangerous. The children moved carefully along the street covering smaller distance by bicycle compared to the one covered when they walked. The researcher observed that, up to the age of ten, children realize their abilities concerning the use of bicycle in relation to the favourable or unfavourable environment they act in.

Cycling provides unique experiences which help children to impress in their memory the characteristic traits of their environment. It reduces the effort for the localizations of distant points, objects and events, while it contributes to the acquisition of information on the activities that take place in these regions. When the route is easy then the children are encouraged to reach continuously even further destinations. It has been found that with the bicycle they reach destinations that are 2,5 times further, related to those they approach on foot. Still cycling presents to the eyes of children the objects and events that take place in these routes in a different way, since the quality of observation is completely different when compared to that through a speeding car or slow walking. The children moving by bicycle on a path that they have first crossed on foot will have a new experience of the space. They discover landmarks [3] that define space in the basic ancient relation "inside and outside" where "the existential inside" of the familiar is structured along with "outside" which does not belong there and is alien. [4] The outlines and the forms of self-knowledge and layout are defined from space which becomes place. This variety allows the intensification of perception and the discovery of immutable attributes of the environment.[5]

Because learning via the exchange of many opinions and aspects produces more bonds between notions, facilitating thus the future retraction of recollections, those children that have walked and crossed a space by bicycle, are expected to recognize more environmental characteristics when compared to children who have only walked.[6] Even if it is expected for the riders to continuously focus their attention on the street and not on the byways and the details of streets, however it was proven that the children that walk and go around by bicycle in a region know in-depth a lot of environmental details.[7] At first, they use the bicycle in order to explore the distant regions and then in order to have frequent and direct access to the regions of game. The passage to the seasonal movement comes little by little. The phase when the child feels strong enough to walk on his own in exterior public spaces precedes all these, and is followed by distant walks and later on cycling routes to distant destinations. Usually, however, the distant destination has first been discovered on foot and was then easily approached by bicycle. [8]

Through cycling, different qualities of space are presented which the child necessarily becomes aware of. Such is the bent of ground, even if she is slight, bumps on the street, the corners of turns, the winds that blow in the region depending on the season and the hour of day, hot and chill points of the neighbourhood, and the points of reflection of solar light. The cyclists, while crossing the streets, stop to check for cars and observe all the background and the landscape in his depth, further familiarizing with that.

A basic characteristic of childhood is the thirst for ecstasy and admiration, the search of adventure and limits. Cycling affects the feelings of children that often seek danger in order to learn the limits of the objective world and their body. The will for surmounting of these material limits that nature has placed for the child, is inherent in their nature. Space and time, the basic factors of existence that are presented together bringing each entity in "being", are exceeded by the human spirit and its aim which is to dominate the universe. In this will for the surpassing of time and space, in the child's scale, he bicycle helps as a suitable vehicle. Despite all, it offers psychological relaxation mainly in urban locations of residence.

The use of bicycles creates, for the young cyclists in pre-adolescence years, intense excitement and the sense of identity that they belong in the homeland of neighbourhood and in its race. The groups of children - cyclists that go around in the neighborhood and in the surrounding regions are of a raiding nature. The speed and change of place, the chance to run fast without they being discovered or trapped in a place, suit the instincts of the hunter which actively appear in the child who has still not become a full participant of culture. Cycling can simply be a form of exercise, without planning or could be planned by the group by processes appointing of heads, followers and loyal companions. As in team sports, played in specific places, thus through seasonal cycling certain function become obvious which prepare the integration of children in the social form of region-residence. Besides, the additional information of anthropologic data and geography makes possible the maturation and growth of skills in children. The roaming in spaces which they would not approach with other means strengthens the autonomy and self-confidence and renders the city to friendly surroundings for them. [9]

The way from home to school becomes a daily routine for many years throughout the life of children. Usually the school is in a short distance or in the neighbourhood for primary school students. According to the European Committee for Environmental Issues [10] 50% of the children want to go to school by bicycle. Cycling the distance takes at about 10 minutes.

The present work researches the degree of satisfaction of children for seasonal movement via bicycle in the neighborhoods of Athens. The intensive urbanisation that takes place in the last decades degraded the scale of structured space. The traditional neighborhoods disappeared by the manufacture of motorways which split, with the speed of vehicles, the everyday life patterns. It is attempted to present the current situation of living conditions for children in the city concerning the quality of game in exterior spaces, as the children are a numerous and sensitive group of residents.

## 2. METHOD

The research was carried out with the method of questionnaire. The three questions that are unified in an interrogative proposal are of closed type, concerning the first one, and of two open type, regarding the other two.

The question "Do you have bicycle, and if yes where and when do you have a ride?" has three parts. To the first part, the students answer positively or negatively if they are holders of bicycle or rollers. To the second part, the question is open and the parts of the neighbourhood where one has the possibility of being enjoying seasonal movement, are mentioned. To the third part, which is also an open question, children are asked about the time, the particular days and hours. From the answers, it appears how much the structured environment of modern Athens is shaped in a way that allows the children to satisfy the biological and psychological need of seasonal movement.

## 3. SUBJECTS

209 students took part in the research, both boys and girls, aged 10-12 years old, attending 10 primary schools in municipalities of the Greek capital. The neighbourhoods of the selected schools were chosen according to the physiognomy of the typical neighbourhood of a Greek city with the disappearance of all natural elements, the serious problems of accessibility and transport and the absence of open public spaces that could be used for playing and recreation from the underage students. The schools are the following: 8th Municipal School, Vironas, 15th Municipal School, Galatsi, 19th Municipal School, N. Erithrea, 19th Municipal School, N. Ionias, 2nd Municipal School, Pefki, 6th Municipal School, Perissos, as well as 1st, 8th, 22nd and the 40th Municipal School, Peristeri.

## 4. DISCUSSION

The research showed that in the congested capital most children are bicycle holders.

161 (percentage 80,4%) answered positively that they have a bicycle while 41 (percentage 19,6%) answered negatively. The results showed that only when the environment is excessively structured with heavy traffic and without free public spaces, can the children be not holders of bicycles. A typical example is the neighbourhood of the 6th Municipal School in Perissos where 9 students out of 19 do not have a bicycle. The density of blocks of flats combined with the movement of cars make seasonal movement difficult for children. On the other hand, in the 2nd Municipal school in N. Erithrea and the 2nd in N. Pefki, only 2 students out of 17 that were asked in each one of the schools does not have a bicycle. It is obvious that the spaciousness of thin layout gives children the chance to use the neighbourhood space for cycling.

To the question "where do you cycle" 163 students answered focusing their answers on 8 places.

Where you ride bicycle?

Everywhere	17,7%
Country	17%
School	6,1%
Sidewalk	11,6%
Square	22,4%
Street	13,6%
Pedestrian street	6,8%
Park	4,8%

33 (22,4%) students declared that they cycle in the square. The square of the neighbourhood is a meeting place and a playground for children. Children prefer it because the open space allows cycling. 20 (13,6%) students cycle in the street near their house, 17 (11,6%) in a park with vegetation. Pavements (7 percentage 4,8%) and the pedestrian streets (10 percentage 6,8%) are not attractive to children for cycling or roller-skating. It is important that students do not prefer school ground for cycling. Only 9 (6,1%) children claimed to cycle in the school yard. Students have a code of behavior which orders not enter the space where organised games with ball are carried out. Basketball courts in the school yard are in a lot of cases the only ones that exist in an extensive urban surface. 17,7% (26 students) cycle anywhere in the neighbourhood. They feel comfortable and familiar with the environment so they move with self-confidence and safety in the neighbourhood. 25 (percentage 17%) of them cycle in the countryside and not in the city, where they permanently live. Others cycle when they go to their country houses and others only in summer time when they go to their village.

41 students out of the 209 subjects of the research, who study in 10 schools of the capital, do not have a bicycle or rollers. If we also add here the 25 that are holders but use it only away from the urban environment, it seems that the modern configuration of neighbourhood and city creates problems for the children. 31,57% of children do not experience the joy that seasonal movement offers. They are deprived of chances for self-activity and familiarization with the vital space of neighbourhood with consequences for the sentimental and social constitution of their personality.

The frequency and the time allowed for the children to cycle or rollerskate shows the quality of everyday routine and their free time. The following table presents the percentages of students that stated the time and the frequency they used their bicycle.

When you ride bicycle?

Every day	4,2%
Weekend	38,3%
Often	16,7%
Rarely	40,8%

Out of 209 students, 120 answered (percentage 57,42%). The low percentage of children that answered shows that it is difficult to evaluate the relation of child-bicycle-time. As it appears from the following analysis of results, the children believe that they do not have frequent contact with their bicycle. 49 of them (percentage 40,8%) consider that they seldom cycle, 20 (16,7%) believe that they often do so. 46 children (38,3%) cycle only during the weekend while 5 cycle every day (4,2%). The 79,1% of students (seldom and every weekend) although they possess a bicycle, they do not use but occasionally. It is also worrying that only the 4,2% plays with the bicycle.

## 5. RESULTS

The research showed that the children of Athens desire to possess a bicycle. Despite the high rate of possession, half of the children do not satisfy the biosomatic need of seasonal movement in the environment of modern neighborhood as it appears in our days. Many of them exercise only when they go on an excursion or short breaks to areas away from the city while a great number seldom cycles in public spaces, such as squares. Only a small percentage of children has the opportunity to go around in the neighborhood streets, which is indicative of the worrying urban reality of Athens. The existing situation is due to historical, economic and mainly cultural data and makes the structured environment inadequate for cycling, as a pastime, not only for minors but also for the mature residents. The city deprives this joy from the children, the demographic category that needs most to familiarize with the environment of the neighborhood and city. The deprivation of cycling in combination with the lack of the sufficient feeling of safety, green and open spaces influences negatively the quality of life of children and reverses vital functions of children's neighborhood biotope.

The possibility of use of bicycle which is part of the game is a reliable indicator of suitability of urban environment for all the population. For this we propose the "Children Seasonal Movement Indicator" (DPEK) as an additional useful tool of measurement of viability of built space and viable mobility. The presence of children with bicycles in the neighbourhood means that the serious problems that threaten modern cities such as traffic, criminality, noise, pollution and others are in low levels. The children who play in the neighbourhood while cycling declare that the neighbourhood is alive. The interaction and communication are not only among the children but also exist among parents and other adults. The health of the social ecosystem of the neighbourhood is confirmed when the bond of present with the future, that is the children, are present in the neighbourhood.

## 6. REFERENCES

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