



Transformation of the Nineteenth Century Urban Fabric in Istanbul's Historical Peninsula: Storari Grid Layouts

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There are numerous reasons of transformations in the physical structure of the cities through history. Economy has always a primary role as a generating source of them. However it cannot only be limited with economy. Several natural disasters, remarkable amount of fires, technological developments, communal movements, etc. are the other reasons of the urban transformations. Cities are the most important cultural artifact of human kind. They have the traces of every urban transformation in their physical form occurred in time. We can realize the content of the transformations which the cities have suffered by following them. Usually they refer us to the reasons revealed before. Architectural artifacts and related townscapes constitute the part of the collective memory of the society. As a part of the memory cities are full of historical planning layers and buildings which are built in different architectural styles. City of Istanbul has an urbanistic character which is the reflection of its deep historical past. It enables us to read the different cultural traces which exist for two thousand years. Roman, Byzantium, Ottoman and Republic periods leave its marks in the physical space of the Istanbul. All the periods had generated its architecture and urbanism in accordance with its social life. In nineteenth century, transformation of the urban fabric of the Istanbul depends on two distinct reasons. One of them is the westernization will of the Ottoman authority and the other is the great fires seen particularly in the historical peninsula. These great fires caused to burn huge areas in the urban fabric and changed the face of the city dramatically. Ottoman government accepted the disasters as a chance to organize the cities fabric with new planning systems. Government commissioners who are sent to different countries of the Europe brought important views about architecture and the planning characteristics of the cities. As a consequence, "grid" planning system is chosen after important observations. Application of the grid system in the burnt areas for the first time is by the Italian engineer and architect Luigi Storari. After planned the Aksaray in 1854 he also practices the same planning system in Selma Tomruk, Küçük Mustafa Paşa and Imrahor region of the peninsula.

Differentiation of the Storari grid layout is the enlargement of two main street axes and at the crossroads beveling the corners. This characterizes the junction as a square and makes explicit from others. This new grid model designed by Storari is accepted and used different regions of the Istanbul such as Kadıköy, Yeldeğirmeni, Kıztaşı and Aksaray. The tradition created by Storari leaved mark on nineteenth century urban fabric and became the part of the Istanbul's memory.

The aim of this study to analyze the morphological characteristics of the grid layouts designed by Storari and to prove the differentiation from other grid layouts applied in nineteenth century so far. During the analysis criteria of the urban morphology will be considered, such as, land use and street patterns, lot-building relation, relation of buildings with the public space and geometric properties of lots and blocks in layouts.

KEY WORDS: Urban transformation, Luigi Storari, grid layouts, urban planning, great fires.