A lighting project for the historic centre of Moncalieri
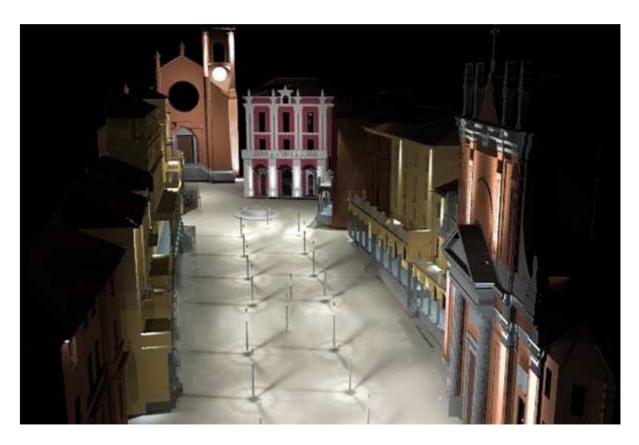by Flavia Cavallaro
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The subject of my degree thesis is a lighting project for the historic centre of Moncalieri. In this short summary I want to explain the several planning stages and the methodology employed to complete the project. The essay was organized into three sections.

The first section deals extensively with the theoretical fundamentals of urban lighting. This part is the basis for the development of the theme. Moreover I have treated briefly the P.R.I.C., or the City Lighting Master Plan, that is today the principal tool of planning and management for the city lighting system. Finally I have explained as examples two urban lighting project that are case studies for this essay.

In the second part I have analysed the project area's features. Several characteristic have been considered for the study. The site was described thoroughly from urban, historical, cultural, social point of view. Moreover it is also described by the survey of the present lighting and by a photo-reportage that reports the feelings conveyed from the places and the critical state of the present urban lighting.

Finally in the third part I illustrate the lighting plan. From the several analysis performed I deduce the social activities that take place in the study area. Consequently I outline the requirements and the lighting performance to fulfil and the Standard Community Rules to observe. In this section I explain the design concept and I show the project thanks to several technical boards. In this are illustrated the luminaires' arrangement, the verification of the lighting system by a computer-based lighting calculation software called Dialux 4.9 and finally various render made by Pov Ray, a plugin of Dialux.

Render of Vittorio Emanuele II Square, Moncalieri, made by Dialux 4.9

Render of Moncalieri Castle, made by Dialux 4.9

Render of Saint Francesco's Church, Moncalieri, made by Dialux 4.9

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