

POLITECNICO DI TORINO
Master of Science in Architecture Construction City
Honors theses

A TERRITORIAL PROJECT FOR CUSCO'S FORMER AIRPORT

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Summary:

This Master Thesis is part of a bigger research project, carried forward by Professors Pierre-Alain Croset, Angelo Sampieri and Simonetta Pagliolico, on the city of Cusco. Started in 2013 with the railway as main object, it moved then on a more ambitious theme.

Today more than 120 hectares of the town centre are occupied by Alejandro Velasco Astete national airport. Its runway divides the city into two parts, a city grown longitudinally constrained by the valley. There is a debate going on about the strengthening and the transfer of the airport in a more suitable place for receiving international flights: its movement will release in the middle of the city a huge empty area, almost half a kilometer wide and more than four kilometers long. This territory is deeply damaged from previous use and it's the object of big and complicated property interests.



Image 1. Satellite Picture

This is the topic of our master thesis and our trip to Peru was the starting point.

The first volume contains a general analysis of Cusco, made with maps and graphs, and a sort of report of our experience in Perú.

We specifically deal with the theme of the airport: the debate on the disposal, the area and the immediate context of the existing airport, the possible future perspectives.

In the end of this volume we outline some guidelines for a possible future transformation of the area. In particular the redefinition of water and mobility systems becomes a starting point for the subdivision of the territory in three big areas of interests. These will be partially further examined with the design researches shown in the next three volumes: *A neighbourhood in the park*, *A shape for water*, *The threshold between park and city*.

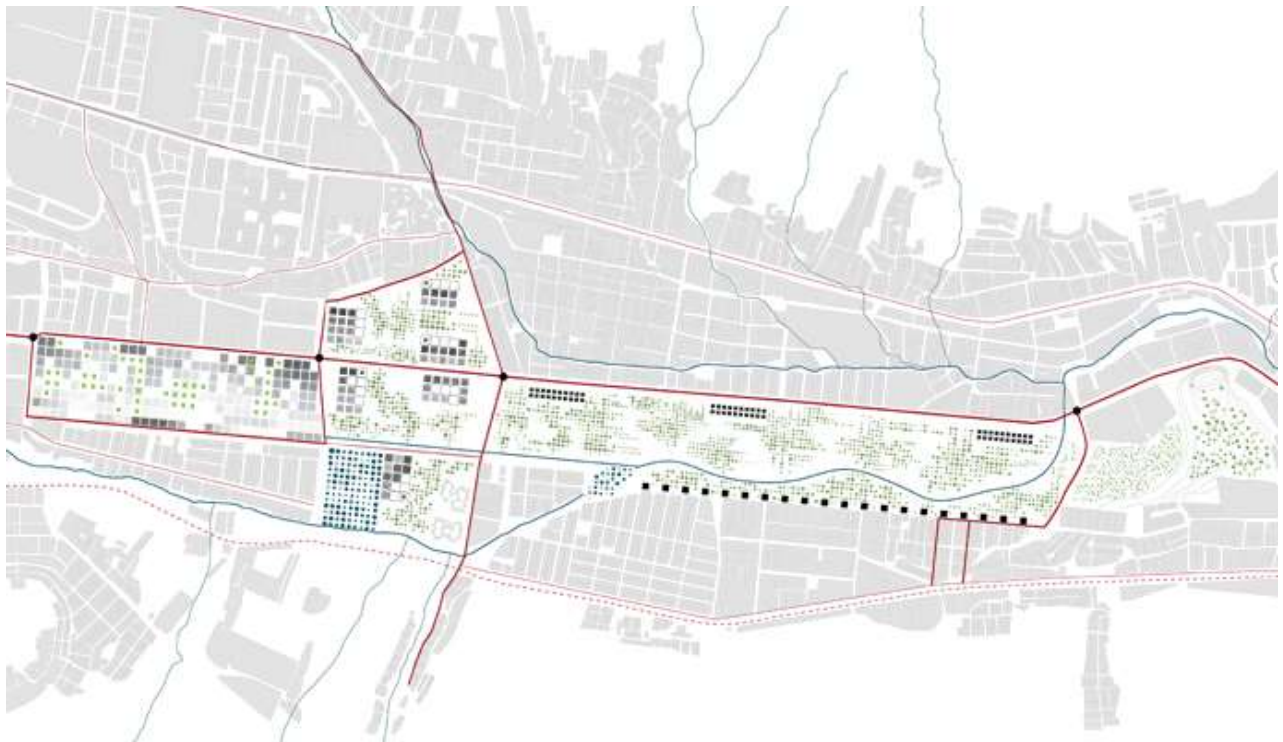


Image 2. Urban project: overall scheme.

The section “*A neighbourhood in the park*” is about the western part of the airport. The theme is the definition of a new settlement principle able to organize a new urban fabric characterized by high density and low index of covered area.

The park is “inhabited” and “inhabiting the park” means living in a space strongly characterized by the presence of nature, of public spaces, of common facilities and crossed by pedestrian paths. The goal is to give a try to an untraditional urbanity.

Into the section “*A shape for water*” is shown one of the most radical operation that we proposed: the reconfiguration of part of the existing fluvial system with the aim of reducing the flooding risk due to the Huatanay, the main river of Cusco.

We decide to insert an expansion basin that is able to catch part of the hydraulic volume of the river in emergency situations.

The main challenge was to transform an hydraulic constraint into an opportunity for the neighbourhood and into an interest point for the whole city: from an engineering element to a sort of valley with permeable soil, accessible in dry seasons.

Next to the basin there is an experimental low density district, organized in long and narrow volumes.

The last section of the thesis, "*The threshold between park and city*", is about the border between the east area of the airport, occupied by a big park, and the existing city.

The goal is a project that is able to link an area without physical constructions, delimited for a long period, and the adjacent districts, strongly urbanized but in bad conditions.

The project aspires to create an urban fabric that creates connections and spatial-social relations between the two parts. These parts will still have very different public and private functions, but they will interact.

The deep analysis on both questions, on the airport disposal and on the redefinition of the area, brings us to build a complex and accurate planning vision: acting on such a huge urban void is a rare opportunity for thinking about what is a city today.

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