

POLYTECHNIC OF TORINO
FACULTY OF ARCHITECTURE
Degree in Architecture
Honors theses

Strate College Paris and Renault: a projectual experience

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Our dissertation was developed at Strate College in Paris, a private school of industrial design with which an exchange channel is now open for all of the Polytechnic students. Our task concerned the implementation of a new bus service in Paris proposed by Renault. The main themes developed were: - exploitation of the waiting time - punctuality - retraining of space inside the vehicle – better accessibility - safety – relationship with the personnel - design for a better integration in the city - anti-pollution policy – an improved service offering wider choice opportunities with respect to the citizens' different ways of life.

Our answer: First of all we decided to locate our bus line in a proper site so as to create a valid alternative to underground transport. The choice was made on the use of a protected run, so as to avoid the hectic Parisian traffic and to obtain running speeds similar to those of the métros: the Petite Ceinture, an abandoned ring for years now but still intact in all of its run.

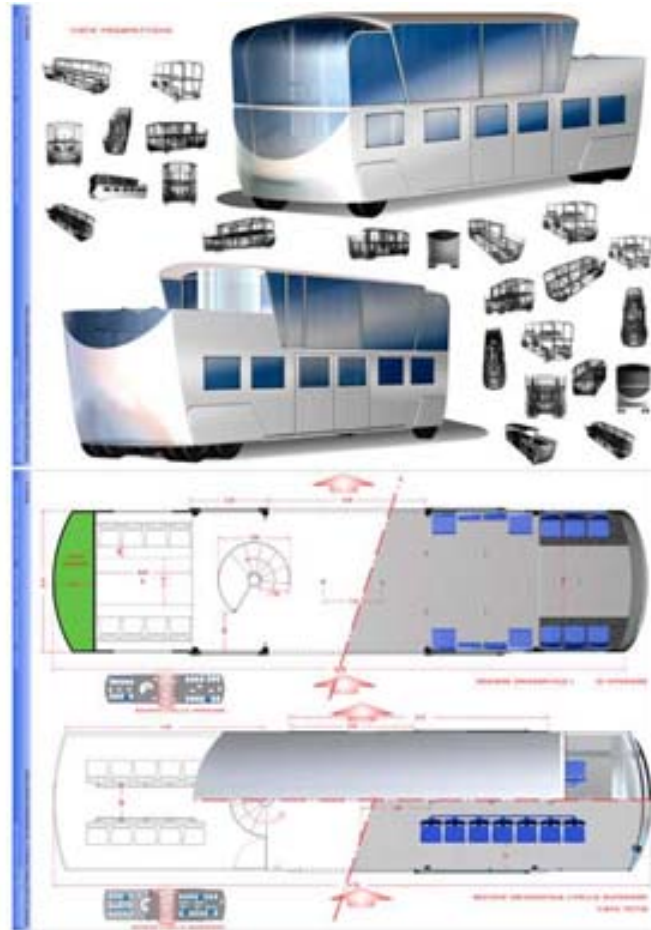
The analysis of the spot provided us with crucial elements for the planning phase. A band about ten meters wide that develops in a circular way embracing all Paris and crossing areas of different interest (historical, environmental and economic); furthermore, there were also quite regularly spaced areas, i.e. where the road of the Petite Ceinture widens in correspondence of old railway points. Bus stops could be placed there. After these researches, the planning phase began.



Our idea was to plan a bus of exceptional dimensions with an upper floor devoted to tourism and a lower one for daily transport.

At the same time we also worked on the very planning of big-sized stops suitable for such vehicles.

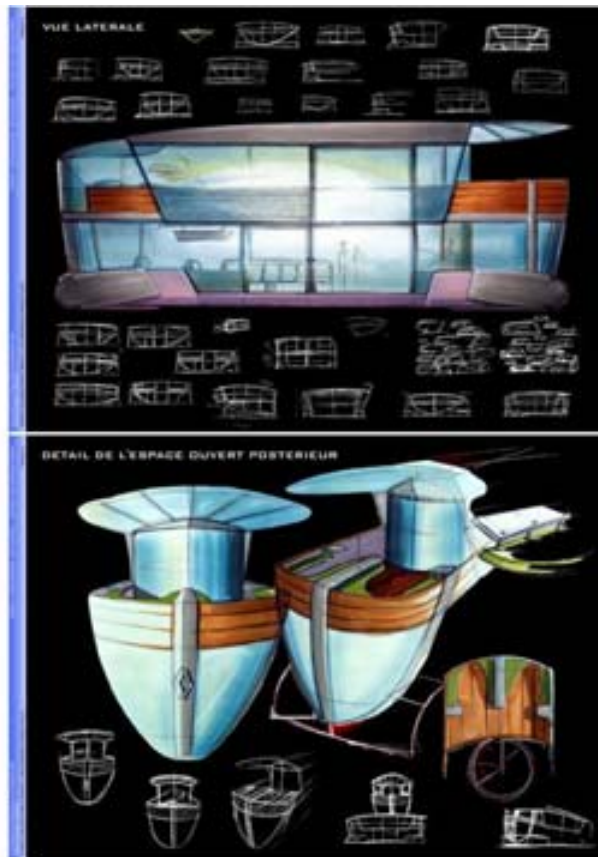
Starting from the analysis of the flow of people that might use this bus line, we wanted to offer a valid alternative to the collision of hasty people going up and down. We came up with the idea of two separate platforms on opposite sides of the bus, one for those waiting to get on and a smaller one only to exit.



The idea of a two-storey bus stop was the answer to the utmost need of making the bus easily accessible to everybody, as well as to our purpose of dividing the two storeys according to their different functions: the lower floor is located underground at métros' level while the upper floor is accessible from ground level.

For both projects we presented at Renault models in 1:20 scale, of which only the bus model is in our hands because of the huge dimensions of the bus stop model.

We chose a completely automatic driving system to meet Renault's requirement for a vehicle projected in the future. Our bus works by means of a driving system called ADV (Automatically Driven Vehicle). A copper thread located a few millimetres underneath the asphalt marks the route network programmed for ADV. A computer manages: - traffic of the various vehicles running on the line – alternate enter in stations - maintenance for battery recharging.



The bus is an answer to and fosters the different needs that, in our opinion, our means of transport had to meet. For the upper floor with "Tourist" use: comfort, great visibility towards the outside coupled with the least possible overcrowding not to miss the pleasure of the trip, creation of a characteristic, privileged point of view and exploitation of the waiting time. For the lower floor with "Daily" use, great capacity, rapid transport, easier and faster access, direct and quick connections with the métros.

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