

Urbanizing the campus.

Student projects on EPFL spatial development.

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La rédaction d'EspacesTemps.net inaugure par cette publication une nouvelle conception de la rubrique Ressources. Celle-ci accueillera des textes de grand format (rapports de recherche, thèses, mémoires, essais, documents didactiques) qui seront proposés sous quelque forme que ce soit, allant du document éditable (format doc, rtf) au format presse (pdf, dwg, etc.). Ces textes sont évalués de manière rigoureuse par la Rédaction mais d'une manière globale, la validation entraînant une publication telle quelle, sans modification ni réécriture du document proposé. Le critère principal sur lequel se fonde cette évaluation est que ces textes constituent de réelles « matières à penser » (à la différence de rapports essentiellement statistiques ou descriptifs), contribuant donc réellement à enrichir, quelques en soient le champ d'origine et le motif de production, la réflexion des sciences sociales.

Nous avons le plaisir de présenter un vaste travail pédagogique mené en 2005-2006 sous la direction de Harry Gugger, professeur d'architecture à l'École polytechnique fédérale de

Lausanne ([EPFL](#)). Il s'agit d'une recherche sur différents scénarios d'aménagement du campus de l'EPFL. L'originalité de la démarche a consisté à prendre en compte le contexte urbain de cet espace, contexte suburbain de l'Ouest lausannois, au développement jusqu'ici désordonné et enjeu de débats publics intenses. Cette étude apporte aussi une contribution à une réflexion plus générale sur la relation entre établissements universitaires et production d'urbanité.

"There are cities which are not spoken of by many people from the outside. Cities which neither grow, nor get smaller. Cities which are so big that it is possible to spend your entire lifetime in them without ever moving, but so small that most of the people could be known to one another. These cities have populations of between 10'000 and 50'000 people. One third of the inhabitants of Sweden lives in them, in cities that most people are not even aware of."

Jonas Dahlberg, *Invisible Cities*, 2004.

Campus constitutions (Winter semester 2005-06).

Invisible campus.

The opening for our semester was the film "Invisible Cities" from the Artist Jonas Dahlberg. Following its screening the students had to create their own personal view of the existing campus, or a visionary campus of their imagination. The goal of this project was to allow each student to interpret the campus in their own highly personal and individual way. The final product and medium of the work was open, but had to be in some way dynamic and "presentable", so as to allow for others to reflect upon the work without explanation. No presenter was allowed to make any spoken comments on his work during the presentation. The selected medium, content, and presentation were therefore required to be self explanatory and specific for the chosen focus and interpretation.

Campus trajectory.

"Let us explore the reality of the campus and "see" this place again. Let us read between the lines and discover what we did not see, the specifics of place, the surprising and obvious: the campus revisited." This assignment had two principle goals: The first was to promote the exploration and comprehension of the spaces, topography, architecture, usage and context of the campus, in a way that extends beyond the typically limited experience. The second goal was to generate

reflection, analysis, and awareness for the daily movements, pauses, and rhythms of the campus. Each group had to develop and conduct a “trajectory”; a “choreographed tour” of the combined EPFL & UniL campus, and, if desired the surrounding local context. Each individual in the group was responsible for (at least) one location within the tour. The trajectory may have had its own theme, it may have told a story, it may have had events, but it should have been discernible as a unified experience. The design of the trajectory had to include reflection on the environment, atmosphere, time and other conditions under which the tour took place. The trajectory had to be “designed” to reflect equally on the progression through the campus, on designated stops in specific places of interest, and on the rhythm of the choreography as a whole.

Campus typology.

The third assignment was a case study of several significant campuses from around the world. They have been chosen as a representative set of different campus typologies and interesting planning schemes.

- Middle East Technical University / Ankara, Turkey
- Tsinghua University / Peking, China
- University of Cambridge / Cambridge, UK
- Illinois Institute of Technology / Chicago, USA
- Simon Fraser University / Vancouver, Canada

Each group was assigned one of the universities and required to research, analyze, and document the conditions and statistics relating to 6 important planning themes. To do this effectively, each member of a team became a “specialist” of one of the themes. The 6 themes of study were: architecture, landscape, circulation, environment, functions, and organization.

Campus strategy.

The final phase of the semester shifted focus onto our main topic: the development of a strategic urban plan for the future evolution of the campus. This topic was approached in two stages:

1. The development of planning strategies for the constituent components of the campus.
2. A group process of integrating the constituent parts into a whole: the campus constitution.

A development plan was composed of many constituent components, each addressing a specialized field yet also requiring proper integration with the others to create an intelligent tool for the evolution of our site. In this phase, individual participants resumed their role as “specialist” in architecture, landscape, circulation, environment, functions, and organization for the development of a strategic plan for the campus.

Campus constitution.

The final assignment for the semester was to amalgamate the development strategies from the different specialists within each design group to create a campus constitution. The constitution was a designed synthesis of the individual strategies, combined to be flexible and responsive to future influences. The goal for this project was not to provide a typical plan for future building, but to provide a logical set of guiding rules to allow for an appropriate, and consistent, response to the changing influences on the campus. Within each constitution there had to be a statement of general goals, or a thesis, for the development of the campus. This thesis combined the most pertinent statistical facts, the basic group predictions for the future of the campus, and also provided the basis for evaluation of each campus constitution. The constitution had to address the perceived needs of the campus in the short, medium, and long term, and represent a schematic strategy that integrates the multiple aspects of planning with a flexible methodology.

- [See student projects \(pdf, pages 1-66\).](#)

New Campus Zoning Plan (Summer semester 2006).

A new PAC was established to create the basis for the work of the summer semester.

It is based on the zoning systems, regulations, and definitions of the communities

that surround the EPFL/UniL campus, as well as the analysis and abstraction of the

common goals from the different “campus constitutions”. The proposed zoning plan sets the regulatory conditions for future construction on the university campus.

The urban constitutions transformed in to a new zoning plan.

The five proposals for an urban constitution that resulted from the winter semester formed the basis of our work in the summer semester. We incorporated the common and most convincing elements of these proposals in a new zoning plan (plan d’affectation, PAC) for the EPFL, the UniL and the adjacent communities of Ecublens and Chavannes. The proposed zoning plan is extending beyond the limits of the original PAC and is looking at the whole area within the Triangle that is defined by the Route Cantonale in the south, the Avenue du Tir Fédéral in the west and the autoroute E23 in the east.

The triangle as an obvious and symbolic urban figure.

The chosen extension of the proposed new PAC is not arbitrary. The three mentioned roads are acting as clear boundaries defining an obvious and symbolic urban figure that has the potential to become a prototypical environment for a true knowledge community that includes not only the usual stakeholders – Education / Research / Industry – but also the society as a whole. The masterplan “Lausanne Ouest” already proposes to transform the autoroute E23 in an urban boulevard allowing for a higher permeability and transforming what acts now as a boundary into an active linear interface between the Universities and the adjacent neighbourhoods. We proposed to apply the same principle to the Route Cantonale and the Avenue du Tir Fédéral. This creates the opportunity to make the triangle apparent on the ground and give it a distinct identity.

The void as a centre.

For the centre of the Triangle we proposed a park that results from the transformation of the existing sports fields. This leads to an extraordinary configuration where the centre of gravity is created by a void. Tokyo with the Imperial Gardens in the centre is the best known example of such a configuration and London’s Regents Park is a perfect reference for the design and function of the proposed central park. This void is a generous gift from the Universities to the society. In return the Universities will have to ask for a multi functional (including housing) and much denser environment on their current sites. They are surely well equipped with the necessary negotiation power through their gift.

The project interventions as a proof of concept.

The urban figure established on the basis of the presented urban constitutions forms only a first step. In this summer semester the students we required to create a “proof of concept” by developing a multi functional project on the basis of the new zoning plan. Through their projects the urban figure was tested for its viability, its qualities and its potential. The sites for their interventions were all located in neuralgic points of our urban figure – along the peripheral roads; on the boundary to the central park; within the existing structures of the EPFL, respectively the UniL – just to list some of them. The sheer number of interventions will allowed us to extrapolate the final stage of the “Triangle of Knowledge”.

The semester structured like a project.

Like the planning of an ordinary project the summer semester was structured by design phases – feasibility study; schematic design; detailed design; construction documents and presentation. We are convinced that this measure creates an efficient didactic framework that serves our ambition to make the projects as “real” as possible. It is not to say that we believe in this traditional design approach, on the contrary we want to challenge this outdated sequence model which will become more and more blurred or will be omitted altogether by the extensive use of Information Technologies. The digital chain allows us to make immediate jumps between concept and product and transforms the traditional layers of representation or makes them completely redundant. We find ourselves in the paradoxical situation where we use the traditional design phases as a didactic concept only to convince our students of the fact that the traditional design sequence is outdated.

Approach.

In the summer semester the students had to create a “proof of concept” by developing a multi functional project on the basis of the urban constitution. Through these projects the proposed zoning plan was tested for its viability. It was only after that proof, be it successful or not, that our program was fully accomplished.

Methodology.

In the summer semester the full planning cycle was explored in order to test the limits of the architects field of influence. An abbreviated run through all planning phases allowed the students to experience the full expanse of their profession.

- [See student projects \(pages 67-166\).](#)