

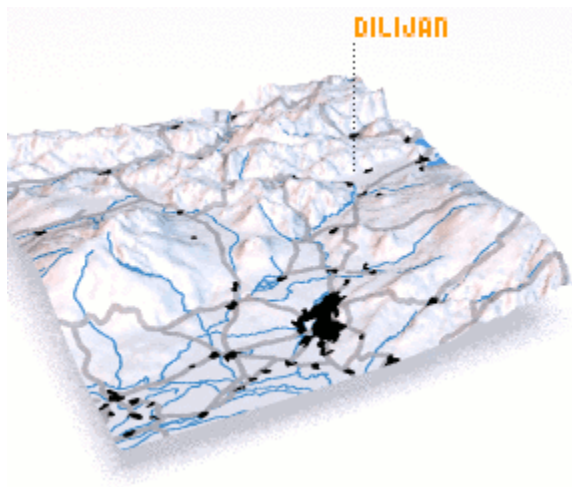
GSAAP Columbia University Fall 2012  
Advanced Studio V

Armenia Studio – Project Brief

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## Re-Creation: *Dilijan, Armenia*



### Studio Summary:

Armenia is in the process of strengthening its economic position leading to large developments in its capital city, Yerevan. Meanwhile, the picturesque city of Dilijan is facing its biggest development growth in centuries.

Known to Armenians as a resort, the historic city of Dilijan is about to develop into Armenia's new financial capital. Armenian Officials are anticipating moving much of the Central Bank to Dilijan in 2013.

The Studio will collect data on Dilijan and will interview urban planners, architects, designers, city officials, and residents. The data will become the basis for designing a Master Planning Methodology and an environment for a new neighborhood: A symbiotic or mutualistic relationship between resort and new development.

The studio will profit from a close collaborative exchange with Armenian born Troika Dialogue Group CEO, Ruben Vardanian. Mr. Vardanian spearheaded the creation of Skolkovo (designed by David Adjaye) in Moscow.

## **Background and Context**

Armenia, formerly part of the Soviet Union, is an independent and democratic nation with a rich ancient and historic cultural heritage. Today it is operating as a country within many political and economic constraints; being a Christian state it is surrounded on two sides by predominantly Muslim countries: Turkey and Azerbaijan.

Having no political relationship with neighboring Turkey (a large economy in the region) it relies heavily on investment from Armenians abroad. Due to the First World War and massacres of Armenians during the Ottoman Empire only 3.3 million Armenians live in Armenia, leaving some 7 million in Diasporas. Currently ranked as a developing economy, the country also benefits from different international investment and trade agreements.

Dilijan and Yerevan are linked with one problem: during the last decade Yerevan (the capital) was the focal point of all cultural, political, financial developments and became artificially very attractive for large construction investments. The latter resulted in an increase of residential developments in the historic center which in turn resulted in the destruction of many historic sites. Consequently the Armenian Government made a decision in 2011 to make Dilijan a financial center to transfer a particular sector from Yerevan to Dilijan for more equal and sustainable development of the region in general. Parallel to the relocation of the financial center, an interest arose to mine the forest not far from Dilijan for valuable minerals, ensuring a maximum economic outcome for the region: the decision is pending.

Schools, Universities and higher education in Armenia is in general very strong with almost 99% of the population being formally educated. The fostering of educational institutions acts as a catalyst for residential developments, which consequently results in further developments.

A large educational institution is currently planned in Dilijan, possibly turning the domino theory into a reality.

The problems and opportunities with any development in Dilijan will be linked to environmental, social, cultural, and fiscal sustainability. The city is located on the edge of a largest natural forest, the Caucasian mountains. With the task to preserve some of the historic sites of Medieval architecture and recreational Nature any future development will have to find the symbiosis or mutualistic relationship.

The Master-planning Methodology and Design Strategies will become architectural: The goal will be to create a new kind of neighborhood and a new model for development.

## **Studio Project:**

Designing the master planning methodology and informed built environment for a new financial capital within a recreational resort.

### **Phase 1: 2 weeks**

In the first phase of the studio, we will dive directly into developing a master planning methodology for a new neighborhood in Dilijan. This methodology will equip the studio to react, address and further the existing Urban DNA. We will look at the relationship between urban planning tools such as FAR, building height, street width, setbacks, etc, and the urban landscapes they create. We will visualize, concretize and test the results of different permutation of these rules with the generation of digital models and rapid prototyped physical models and animations. We will question the standard urban planning tools and when necessary create new tools and methodologies for ordering urban fabric.

### **Phase 2: 2 weeks**

The studio will come together and collaborate on a single set of integrated planning concepts that form a cohesive master planning proposal, with an emphasis on conceptual clarity and specific goals. This proposal will take abstract ideas for the previous phase and test them against the specifics of the site and its integration with the neighborhood. Zoning, traffic patterns and connectivity with the rest of the city will be organized and defined in preparation for the final phase.

### **Phase 3: 10 weeks**

In the third phase of the studio, we will break up the site into smaller parcels and the focus will be the implementation of goals developed in the first two phases at an architectural scale. The designs will manifest somewhere between the scale of a neighborhood and a building. The designs will be developed in detail and goals will be tested against the specifics of the site and context. Again, modeling and animations will be used to simulate and analyze the architectural proposal. The emphasis will be on the creation of a fully developed architectural scheme. Hauke Jungjohann of Knipper Helbig Engineers will act as the studio's civil and structural engineering consultant. Erik Olsen of Transsolar Klima Engineering will act as the studio's environmental engineering consultant.

**Program:** Phase 1 & 2: With a population of some 25,000, the new financial capital will depend on a balanced program, allowing for infrastructural systems. Diverse programming will be fundamental to its sustainable long term development, while being situated in one of the most striking scenic settings in Armenia.

**Site:** Students will select their own sites in Dilijan.

**Goals for the project:**

- A new typology of urban planning: An attempt at the redefinition of zoning to accommodate better living patterns
- A high/low density proposal: Negotiating tradeoff between density and livability.
- A "Net Zero" self-sustained project: Integration of sustainable technology for the future city.
- A neighborhood for the post industrial urbanite (living space for cultural producers) fit sensitively into/next to the historic city.

**Schedule:**

- 2 week abstract programming and massing
- 2 week developing structural/transport/social/environmental/etc goals
- 10 day Research Trip to Moscow and Armenia
- 2 week placement of program and massing on site
- Midterm Review (outlining findings, goals/ massing model studies)
- 4 week design: designing a typology and building
- 2 weeks final presentation preparation
- Final Review (animations, models, renderings & floor plans)

**Studio Research List:**

- Development Strategies
- Mobility
- Community engagement & Incremental growth
- Cultural, religious and social cohesion
- Spatial DNA of community and city
- Economic stability & Asset mapping
- Global exchanges and tourism
- Governance structures and decision making systems
- Availability and access to public space
- Urban narratives and memory
- Changing demographics and immigration
- New Technologies and Associated Livelihoods
- Food Supply and Demand
- Public Health and Socio-economic Impact
- Infrastructure and Economic Inter-dependence
- Educational Systems and Social Impact
- Waste Management
- Political Structure
- Climate and Ecology, especially earthquake protections

## Planning Considerations

- What is the relationship between Dilijan and the larger regional and global political economy?
- How do these issues intersect with social, spatial and environmental priorities?
- How can local needs be balanced against city-wide or global development pressures?
- How can we gather, document, and analyze a city's spatial, cultural, social, economic, and political DNA?
- Using this DNA, how can we enhance the found potential, and isolate the gaps in function without destroying the DNA itself?
- What possibilities exist for Dilijan? Can existing strategies be scaled up? Can the transformation of Yerevan provide models or learning lessons for Dilijan?