Applying a new urban philosophy to Baku: aligning Swiss expertise and the Azerbaijani history to retrofitting

ALIYEV, Tural
Applying a new urban philosophy to Baku: aligning Swiss expertise and the Azerbaijani history to retrofitting

Tural Aliyev is one of the brightest emerging stars of Azerbaijani architecture and urban planning. Currently completing his Ph.D. at the University of Geneva, his philosophy of architecture and the urban landscape is in marked contrast to that of the Soviet past. His fascinating new thesis now applies the latest concepts of urban retrofitting to his home city. Neil Watson caught up with him during a scientific conference in Baku to find out more:

What stimulated your interest in architecture and the built environment?
I originally viewed architecture as a creative career that would also result in designing quality accommodation that would be affordable for citizens. In the first instance, my main objective was to serve the people and to create constructions with a positive social impact. My studies began in 2005, when architecture and urban planning were underdeveloped in Azerbaijan, lagging considerably behind European countries and Turkey. I became aware of the necessity to construct more sustainable houses with the lives of citizens at the core, taking their role into account during urban planning.

When we come to see the environmental perspective, we must remember that Baku is an oil city. There was considerable exploitation of oil reserves over more than 150 years. This had an overwhelming impact, both on the environment and social health, including air pollution and water quality. These aspects have become imperative when seen from a global perspective that takes into account the contemporary dynamics of climate and environmental change. The UN has designated 17 sustainable goals, one of which is to enhance the green values of the contemporary cityscape, and many directives focus on this. This shows that sustainability should be a key element for projects.

In that regard, it is essential to understand the environmental and social perspectives of Baku, and to realise that the built and natural environment must work together. In fact, today's trend is to broaden the interface of the built and natural environment in a way that satisfies the needs of citizens. This approach is starting to emerge in Azerbaijan and in all post-Soviet and post-Socialist countries. These often have particular problems related to the past political and economic system. Socialist cities were developed without a free market, with everything being developed under state control. The authorities were less interested in the environment, demonstrating less desire to enhance the attractiveness of the city to the urban population, and reducing energy usage to make them a more clean and healthy place in which to live.

In Azerbaijan, many of our issues are inherited from the former Soviet Union. For example, there is a huge brownfield site near the city centre in Baku. Such an environment would be unthinkable in the heart of a city that developed in the capitalist world, where there is a free market and public sector, where small-scale brownfield sites are located far from the city centre. In the past, environmental and social questions had less priority. However, our approach, which is focused on urban sustainability and retrofitting, is the reverse of the Soviet ethos, where people were basically just cogs in an enormous economic machine. Unlike the Soviet period, there is no longer any requirement to wait for the capital city to issue directives in terms of sustainability, social cohesion and other elements.

In the contemporary world, we are increasingly working with the municipalities and the cities. These are now the engines of the sustainability concept and environmental programmes. Today we are speaking to a greater than ever extent about cities, which mean that the ability to restore, recover and prepare for future shocks is far greater than in the past, both in terms of economics and the environmental issues of climate dynamics.

Cities need to have the ability to restore, recover and promote sustainable development, including growth. They need to be more for people and promote social cohesion, which has decreased, despite the fact that average disposable income has increased considerably. This has happened as cities become increasingly large, where the social and environmental elements of the city have been reduced. In my opinion, urbanism is the engine of the city, determining the creativity of its citizens, and this new sensibility is the reverse of past policy. It is imperative to achieve a sense of community in the modern city. The urban conurbations are under pressure from investors to construct new buildings that meet their needs, but that may compromise the human element. In my view, the priority is to create a better sense of community in the city, which gives value to dwellers.
We must think of how to restore brownfield sites, make cities more convivial and produce new values. This is known as urban retrofitting, and serves to create new trends for cities, not merely retrofitting the territory that was impacted by industry and the heritage of industrialisation. Such brownfield sites are without function in contemporary cities. Retrofitting is a key element for public spaces, but we also need to look at existing buildings to see how they can be retrofitted and become more energy-reduced, thereby developing a more functional and sustainable approach.

Retrofitting is now receiving increased scrutiny from governments across the world, and urban retrofitting is one of the key aspects of my Ph.D. thesis. We are not just considering new buildings—we are addressing the pre-existing urban conurbations. Many experts have now turned against urban sprawl occupying large amounts of natural territory.

Furthermore, ideas of demography now rank amongst the key aspects that we must take into account. Modern cities have increased traffic, and half of the world's population are city-dwellers. In a few years, the urban population will account for over 70% of the world's population, with different needs and requirements to previous generations. Despite densification, it is essential to create good conditions for urban-dwellers. We must think about how to address the concept of the city and promote many aspects of sustainability, including environmental elements and social cohesion, reducing the impact of the city on the health of the population and factoring in the aspects that were ignored during past urban planning.

**Did you study such topics when you were studying at the Azerbaijani University of Architecture and Construction?**

My education at the Azerbaijani University of Architecture and Construction provided me with a solid foundation. During the four years in which I studied (2005–09), I obtained a good technical, practical and theoretical knowledge of architecture and urbanism. Moreover, I was more interested in understanding how architectural theory was developing and changing. I wished to study the history of architecture in each country, comprehending how it was impacted by the social and political systems and predicting the future in terms of architectural style and approach. I also wanted to explore the concept of architecture in relation to the collective memory of the city. However, the abovementioned topics and city challenges were less addressed.

**What led you to study in Montpellier?**

Montpellier is a city in South-Central France, the home of one of oldest medical academies, where Nostradamus studied and worked. This is also a city of medieval architecture and the home of the École Nationale Supérieure d’Architecture Montpellier. As you will be aware, Baku has a rich heritage of French architecture dating from the time of the first oil boom in the late 19th and early 20th centuries, constructed prior to the subsumption of Azerbaijan into the Soviet Union. Bakuvians see these buildings constantly and are fascinated by their practical and technical structure. A Memorandum of Understanding between my university in Baku and that in Montpellier facilitated my study there.

In Montpellier, I particularly focused on architecture, rather than urban planning. However, the technical approach was different, and in France it was more natural to consider sustainable, economic and environmentally-friendly concepts with a social context. For example, I was positively shocked when I discussed my project for the first time, and the question was posed as to how disabled persons could gain access to my buildings. In reality, people who have ability problems must be taken into account. If you are unable to answer any question, your project will not be approved. In Western Europe, the key aspect is the social and environmental. Projects are primarily aimed at people.

The second question concerned the optimal use of materials for each building and the incorporation of initiatives to reduce electrical usage and maximise the extent and amount of natural lighting. If people are happy in their environment, they tend to be more economically efficient, and such issues as 'sick building syndrome' are neglected. City-dwellers do not want to escape their environment, as is so often the case, and will be more productive. A more humane city is actually better for the economy too.

My scholarship at Montpellier was covered by an Azerbaijani government scholarship for the first academic year (2009–10). Then I continued my studies at the University of Montpellier and thereafter I undertook an internship in Paris for six months, and I noticed a stark contrast, as Montpellier is a provincial city. It was considerably more challenging to consider a sustainability project relating to Paris. The city of Paris was also unique as there was a complete renewal of the city in the 1870s under Baron Haussmann, the Prefect of Paris, at the behest of Napoleon III. In fact, Napoleon III had visited London to evaluate its development, and this stimulated him to rework the French capital.

Another important issue is that, in Paris and other western cities, the government preserves historic buildings, although retrofitting is permitted. It is very important to them that the heritage is retained, whereas in Baku we have had a tendency to tear down old buildings without too much...
thought, as that can appear to be an easier option. Many of the large-scale urban projects in my home city have destroyed everything that previously existed. In my view, it is necessary to retain the historical and heritage elements of buildings and retrofitting does not necessitate replacing everything. It is imperative to retain the heritage of the city and maintain the collective memory of the cities, as reflected in our built environment. It is sad to see a city that is completely devoid of all historical and heritage elements. Naturally, there are many debates to this effect across Europe.

In Baku we need to establish expert groups focusing on this topic. We must carefully consider the plans for new projects and see how heritage and collective memory can be factored into these. For example, in Geneva, change is quite slow, and small constructions can take up to a decade to complete. The Swiss authorities are very keen to retain historical buildings and the fabric of the city, although such a pace of change would be inappropriate for Baku. It must not be forgotten that the fabric of the city impacts the psychology of every citizen.

Jane Jacobs' book on *The Death and Life of Great American Cities*, which speaks on urban planning policy being responsible for the decline of many cities, together with the well-known article by Jean Baudrillard on *The City and Hale*, warned us about the situation in modern cities. According to Baudrillard, industrial territories, highways and transport play an indispensable role in the growth of social tensions in cities.

Another author, Sebastian Marot, speaks about each part of a city having a nostalgia and heritage for someone, and they become accustomed to this space. If we destroy everything, we completely lose the soul of a city. Only by undertaking interviews with the people who actually live there can we begin to comprehend their emotional response to their environment. Then urban retrofitting and planning can be undertaken through a kind of consensus, as they need to have a transdisciplinary approach. As mentioned by Edward Soja, the reflection on urban spaces has become important in urbanism and today, more than at any time in history, at least during the last two centuries, reflections on urban space have become transdisciplinary.

What is your topic of research in Geneva?

I am currently undertaking Ph.D. research at the University of Geneva in the Institute for Environmental Science under the supervision of my professors Alexandre Héjazi and Laurent Matthey. I am working on large-scale retrofitting and am trying to find a new way or interface between the built environment and natural environment, as in the case of the Baku Metropolitan Area.

Indeed, there is an historical, economic and cultural centre in the west of Baku. Furthermore, in the East, you have the Soviet part of Baku. In the middle, you have a hybrid territory, but predominantly industrial, from the lake in the north up to the Caspian Sea. No clear vision has been decided upon that affects all the territory. Some sections are still used as storage for lorries and cars, but it remains impossible for people to actually stay there. This is not a place of social cohesion. It is necessary to retrofit this entire territory and create an interface between the western and eastern part of the city. We are trying to conjure a separated city and transform it into one single organism. I am looking at an area of the city that remains untouched by urban regeneration, and is mostly occupied by industry. There are railway stations and brownfield territories.

It is true that a project of renovation is currently underway, particularly along the Heydar Aliyev Avenue, which goes along the side of the Baku airport to Baku. There is also a retrofitting project of the boyuk Shor Lake to the north of Baku, and the project for Baku White City. However, there is no clear vision for all the perimeters of the territory and different challenges.

There is a specific challenge for Baku, as it aspires to be a global city. Many international events have been organised in Baku and it has become a cultural centre and home to many sports competitions. Furthermore, Baku wants to become a central location for the world's greatest architects. We see that Baku aspires to be original, whilst becoming a city of global importance, hosting global sports and cultural competitions etc. Baku should take its place by becoming a city that promotes stability and social cohesion, with a reduced environmental impact. It wants to set an example to the world, and it needs to think about this so it becomes a benchmark for post-Soviet and post-Socialist countries in terms of planning, organisation and social cohesion. It needs to pay particular attention to social phenomena.

The city should not destroy the environment – instead, the environment should become the matrix of the projects and the territory should define its future, based on its natural resources. Azerbaijan needs to be seen to create a city that takes people and their humanity into account.

From Baku, I went to Montpellier, but then I wanted to find a more global city where I could have greater connections with academic and other stakeholders.
Being supported by the Swiss Government Excellence Scholarship Programme took me to Geneva – often called the smallest global city. If your work or study is there, it is possible your ideas could go across the world. There are many international organisations in Geneva, some of which work on social or environmental issues, including those founded under the auspices of the UN. It is beneficial to meet their representatives and to attend their conferences. It is also pivotal to remain aware of the cutting-edge developments in relation to Sustainable Development Goals (SDGs) and to see the key elements they are speaking about.

Are you receiving a positive response at a governmental level to your suggestions?

We are currently undertaking consultations with the Azerbaijani authorities and other stakeholders. I am currently undertaking consultations with the Baku White City project, the Ministry of the Environment and Natural Resources and the Committee of Architecture and Urbanism. On the next step, I hope to take consultations from SOCAR’s Environmental Department, and the Executive Power of Baku City etc.

It is important to recognise that we have been creating American-style high-rise buildings such as the Flame Towers, Zaha Hadid’s Heydar Aliyev Centre, Port Baku and new highways and concreted areas. We completely understand that Baku is a capital city with pre-eminence in various fields (social, economic, sports, etc.) and has always had a considerable impact on the country (even more than in the Soviet period). Urban projects or retrofitting in a capital city must always factor in the political and economic dimension of the country, that is to say, the projection of power, economic success and urban realisation that must be reflected in the programme. We should know that environmentally-friendly projects can consider the aforementioned elements. We should remember the examples of the Hammarby Sjöstad Eco-quartier in Sweden and the Masdar Sustainable City project in UAE.

It’s sad to say, but Baku is pursuing the same approach as many American cities after World War II to some extent. These constructions were entirely made from concrete as architects and engineers saw this as the only way forward. We now need to think about destroying the concrete, reclaiming nature, uncovering rivers and creating value for people to make their lives in the city.

For example, Los Angeles was formerly one of the most polluted cities in the US, and today it is one of the cleanest. We saw how they planned the city and created a new harbour, located some distance from the urban areas. We saw, during our stay in UCLA, how they made the critical infrastructures – the airport, the hospitals and the universities – into sustainable engines of the city. We saw how they reduced the impact of aircraft noise, for example, and improved air quality.

Sustainability has three pillars – economic, environmental and social – and there has to be balance in urban planning. Nowadays each country has sustainability standards, and each new building must comply with these. Modern buildings are in close proximity to each other, as developers try to maximise revenues. This serves to eliminate sunlight and make each apartment reliant on artificial lighting. We need to understand the problems of the past, and embrace the new, natural and humane.

As we all know, the Azerbaijani economy has taken a downturn over the past two years, and costly projects are inappropriate for the current economic situation. Instead, sustainability, both during construction and regarding energy use, needs to be our watchword. I hope that I will receive some positive feedback in the coming years, particularly after I have completed my research and in the light of the crisis due to the decline in the oil price.

I would like my research to be presented at universities, as it is designed to benefit all of society – stakeholders, public and private sector representatives, NGOs, and academics. All of these players have their role to play in the underlying decision-making and development of urban projects.

This is a very long-term project, and the next stage will involve applying my practical ideas to society, as those who live amidst the built environment are directly impacted by it. I want my ideas to play a significant role in transforming Baku from being an industrial city to a smart and sustainable city.