

Lecture by Architect Nikola Maniero, Partner at KKAA, Kengo Kuma's Architectural Firm

Title: HOW WE DO IT:

Architect Nikola Maniero, Partner at the Renowned Japanese Architectural Firm Kengo Kuma and Associates (KKAA), Delivered a Lecture at the Faculty of Architecture, Union Nikola Tesla University

At the end of November, architect Nikola Maniero, a partner at the prestigious Japanese architectural firm Kengo Kuma and Associates (KKAA), delivered a lecture and presentation at the Faculty of Architecture, Union Nikola Tesla University. The lecture was organized with the aim of supporting the initiative of the faculty and Associate Professor Bojan Končarević to establish a continuous exchange of academic and professional experience with Japanese universities and firms.

His unique and special lecture was part of the educational module within the first- and third-year courses, namely Basics of Architectural Composition and Principles of Universal Design. Supporting the general interests of the architecture faculty students and particularly those enrolled in the two courses, the topic of Nikola Maniero's presentation highlighted the importance of the conceptual phase of design and project development.

Due to the insistence of faculty lecturer Associate Professor Bojan Končarević on these two subjects and the full support of architect Nikola Maniero, the lecture was aptly titled "How We Do It" (The Approach to Conceptual, Formal, and Project Tasks at KKAA)

Above all, the ultimate goal was to hold an open "round table" discussion after the presentation of several selected projects, enabling communication and numerous questions from students, who actively engaged with the speaker and the material he presented.

The students were presented with three projects by the Tokyo-based architectural firm, all of which followed a consistent approach in the formation of the informal/conceptual design phase, resulting in three entirely different processes of design and execution.

Presentation of Three Projects

ArtLab:

The first project presented during its conceptual phase and its relationship with numerous material and immaterial aspects of the natural and artificial environment was a new structure consisting of three interconnected buildings funded by Rolex Swiss Federal Institute of Technology in Lausanne (EPFL), titled ArtLab or "Under One Roof."

The architectural contents of this system follow the terrain's topography, a distinctly contextual effort that is evident in the 235-meter-long roof, which spans across three architectural boxes of content, also adapting to changes in the terrain's elevation with its

planar form. The orientation of the structure and the movement of users towards, along, and through the three boxes were predominantly determined by the most significant view toward the lake, which defines the macro-location.

There is a Japanese saying: “living under one roof.” Its architectural interpretation is reflected in the use of local wood in the form of ArtLab, which connects new users of the space through the newly built architectural system with the local community and their established physical and socio-cultural utilization of both micro and macro spaces.

Ummahat 9-3:

The second project presented was Ummahat 9-3, a complex located on the predominantly sandy island of Ummahat AlShaykh in the Red Sea, comprising rental villas, a restaurant, a café, and other service facilities.

The conceptual phase of the design, which was presented and adopted, derived from a direct spatial relationship with the material and immaterial elements of the unique location. The villas and other architectural forms had a direct relationship with the spatial characteristics of the island's land and sea. Through such environmental analysis, the typologies of the villas, their concentration, and orientation, along with the layout of service infrastructure, were determined.

The architecture of the land-based villas was guided by the placement of low, visually integrated units into the desert landscape, blending with the sensitive context through the choice of materials and shapes that formalize the form of sand dunes in a horizontal direction.

The second type, water-based villas, was conceived as a coral-like form that extends across the water surface. Their architectural system spirals upward from the water, creating a continuous spatial, functional, and visual orientation toward the water horizon.

A unique aspect of this project was that the architect was one of the contractor units managed by the project's general manager. This common contemporary reversal of organizational roles often affects the consistency of maintaining the conceptual framework. In this case, it led to significant changes in the final built state of the architectural units. However, such developments did not affect the dominant formal reminiscences of each conceptual solution when viewed through their constructed architecture.

Susa Station:

The Susa Station project in northern Italy represents the third example of project development, from the approval of the conceptual design in 2013 to the construction of the station, which was approved in a second tender ten years after winning the competition.

The formal concept of the project was coordinated through three clear environmental influences:

The Intersection of Transportation Routes: The station's architectural and functional determination was influenced by the intersection of several existing and potentially new routes for trains, vehicles, and pedestrians, which pass through and enter its volume.

The Valley: The station belongs to a valley near the Italian Alps and the French border. The volumetric system spirals from the zero point of the location, offering uninterrupted panoramic views and orientation towards significant landmarks.

The Elevation of 20 Meters: From this elevation, a hidden important peak of the Alps and the slopes of historical architectural heritage on one of the peaks become visible.

Above all, the station's architecture develops from the inside out, with multifunctional facade and roof panels designed in such a way that the station complex can generate a significant share of the energy it consumes.