

This is my ninth book published on architecture. I begin with an indescribable enthusiasm and unasked questions are posed or, it is better to say, closed windows are opened to me after publication. What may be found inside the building makes me excited. The excitation and curiosity direct me to create novel works. It comes back to 2002-03 when I was working on my M.A. thesis. It was really difficult to access high speed internet (32kb/s) and foreign books especially about museum design. I spent several hours to search for materials about modern art and museums. My thesis was about "Modern Art Museum". I intended to connect architectural design and painting-which gradually became more serious- and take benefit of thought and attitude of modern artists toward the space in choosing main concept of my plan. Considering limited resources, it deemed really difficult. However, it was very exciting for me. Spending several months to study west art history, I began my work with etudes of different art styles. I wanted to assay myself and embody my perceptions. The way- which was later named "conceptual sketch"- was very helpful in recognizing of my mental space and my perception from modern art. A complex, curious, and sometimes, disturbed mind became clear gradually. To begin architectural design of the project, I re-experienced conceptual sketches on the project site. I tried to coordinate restrictions and objectives of the project with avant-garde and complex space of my mind. I designed freely and edited the sketches carefully to enclose myself in the frame of the physical plan. The process was continued until I began to model the designed forms. I began a new challenge in learning and experiencing curved and broken volumes using Auto CAD and 3Ds MAX software, a beginning not lasted by now!. At that time, 3D software was often used for drawing in Iran rather than for desig. In simple words, no one thought parametrically, i.e. playing with parameters to create new form and space or develop the form animatedly. The materials will be seen in coming pages and animation of the project design process, Museum of Modern Art, may be found in YouTube.

My M.A. thesis reminded me two important points:

- It should have a specific, extensible, and scientific design process and be able to offer creative responses.
- Role and importance of computer and software in design process

After two years of continuous work on my thesis, I found so many things that I do not know. Although I passed my thesis with excellent grade, the two above-mentioned points involved my mind and resulted in many sketches, models, computer forms, and books two of which were translated to and published in English by Supreme Century Press:

- Conceptual sketches in architectural design (2014)

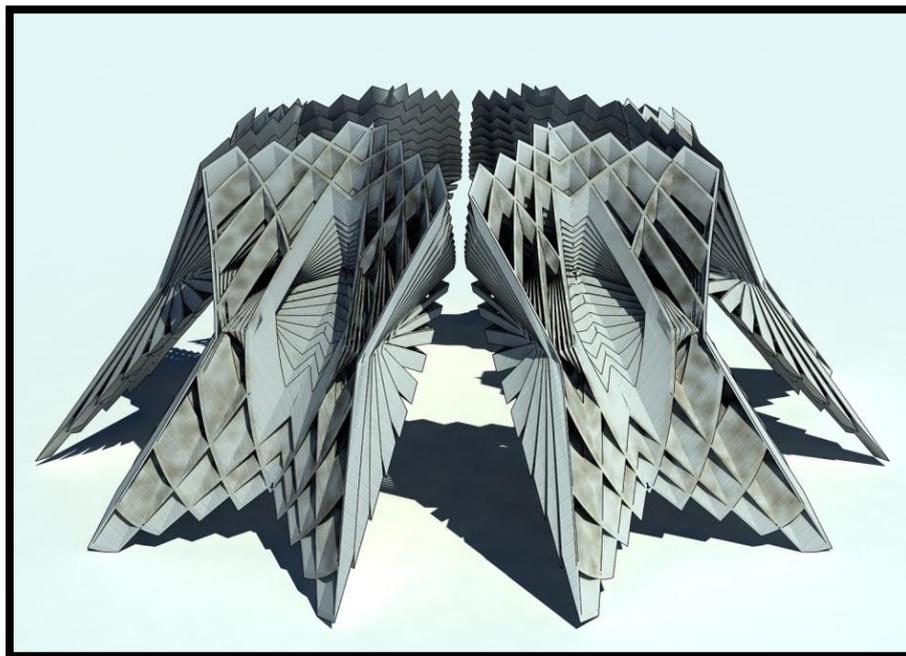
- The role of brain hemispheres in architectural design (2015)

The problem did not stop. My interest in color and form attracted my attention to Iranian art and architecture. Here, a question affected my achievements:

What was the relation between the designed buildings and Iranian local culture and architecture?

The process was continued until 2010 when I seriously began to practice architectural design using 3Ds MAX software in Islamic Azad University of Tabriz. The practices were completed and held as workshops in Inter-discipline Architecture Office. The outcomes encouraged us to name our design method and the created form and space as "parametric design".

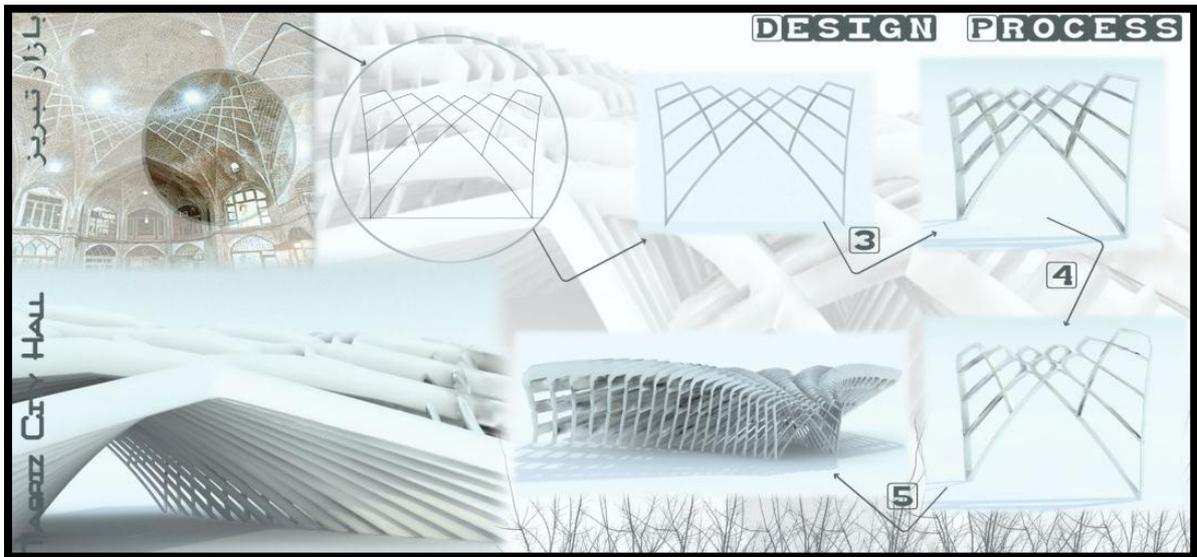
Since there were few Persian resources about parametric design, I involved in translation and research about the subject in addition to scientific experiences. I tried to express Iranian drawings, patterns, and architectural space in a modern language. The studies resulted in compiling of a book: "The role of creativity in architectural design process with parametric approach" In the ceremony of Iran Architecture Luminaries Association (2013), this book was introduced as winner of the book reward of Dr. Mazini. Some designs of the book are presented here and it is hoped that it is translated into English as a complete collection.



After publication of the book, I put the obtained experiences into effect in M.A. theses with more power and organized plan, the projects such as museum, city theater, and cultural center designed in chapter one of the book and I was their advisor or supervisor and helped students in parametric design or computer modeling. As it will be seen, sketch is one of the important

tools and stages in design process of the projects. The spaces designed without maquette and sketches are demonstrated in other chapters. I convinced the students to design with software and become familiar with thought and design method of computers.





Chapter two contains design of conceptual spaces and forms with subjects of projects of the previous chapter. It includes practices helping in more understanding of design using computer and creation of new spaces in addition to better recognition of exhibition and museums space.

Contents of chapter three were not specified from beginning. During compiling the book and considering that pattern design is an important stage in parametric design and we are faced with a diversity of patterns in most projects of the book, I decided to add the practices I did with my students at the beginning of the way.

While writing this preface, it seems that the book should be studied from the end.

The book contains general descriptions about features of museum design as well as a summary of project design process which was selected and rewrote from M.A. thesis of the students. There are several books about museums and cultural spaces design and very important works have been made during years. However, what was important for me was attitude of architecture students of Tabriz (as one of the metropolises of Iran) toward museum and cultural spaces design. Although Tabriz is enriched culturally and artistically and has introduced globally famous artists in poem, music and visual arts, it has very few museums. Importantly, how students may have creative and accurate attitude, experience parametric design using architectural software, transfer their attitude and approach, if possible, to Iranian genuine architecture, deal with perception and recreation of Iranian architecture relying on a parametric tool and language, and localize it while using west technology in a world full of diversity of architectural styles. For this reason, a trace of Iranian genuine architecture

especially in details of façade and color of glasses is found in the projects and exercises which was created by attitude and space provided by computers.

It is rarely seen in Iran universities. There are two dominant thoughts in Iranian architecture training, i.e. biased and inflexible attitude toward Iranian past architecture and a modern approach fondly looking at west architecture events. There is not any specific syllabus for design aimed at interacting between local architecture and global events. For this reason, most projects are designed and completed as thesis in my private office without any assistance of the university. It is a very difficult and challenging subject in design for which there has not been found any specific solution except to some important and creative works designed and made by Houshang Seihoun, Hossein Amanat, Darab Diba, and other outstanding architects since 1970s which were not repeated within the last 30 years.

However, computers and design software within the last two decades in Iran has opened new horizon for the architects to recognize Iranian architecture and approach European and American designers' thoughts and processes. Parametric architecture empowered the subject during recent years especially in design and probability of enforcing quick and easy variations of the patterns forms and dimensions. Obviously, patterns play a significant role in Iran art and architecture. There are various abstract forms in Iranian carpet, tiling, and decorations using mirrors in mosques and houses. The forms are repeated using symmetry technique and their form and dimensions change considering space structure and form of wall or dome.

The book does not claim to express a new language in interactive design between Iranian architecture and special philosophical approach and west architecture, rather, it is a software-aided design practice trying to reach a better perception and recognition of Iranian architecture and modern achievements of western architects.



Arched entrance decorated with paintings, Sheikh Lotfollah Mosque, Isfahan

I specially appreciate Mr. Sadjad Sabour, the creative artist and our colleague in Inter-discipline Design World, and Mr. Torabi (Eng.) for his support and presenting of his works in the book which made it more enriched.

Ali Khiabani