

# Design with Non-Urban Planners

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**Keywords:** TU Berlin, Urban Design, UN-Studio.

**Abstract:** Urban design is a contradictory discipline. Its contradiction lies in that the city itself is both an aggregation of complex and contradictory. Even the single (special) research of urban morphology is complicated, therefore, it is unscientific to establish a so-called “urban design” discipline to unify. Consequently, scholars who study urban design can't avoid saying that “Urban Design is multidisciplinary”. When the problem of urban design exists, the discipline is not established, therefore, the question is how to establish the research foundation. This article aims at the postgraduate degree of the Berlin University of Technology: Urban Design discusses UN-Studio(teaching) methods of the urban transformation, mainly concentrate on: 1. The definition and liberation of Multidisciplinary. Establish four discipline system frameworks, and mix background students 2. The mutual support of the curriculum, based on the theoretical curriculum assistance under the core studio practice. 3. Simulating reality: sociological charette and Fast-Works 4. Future Scenarios and Urban Territories 5. Actor-Network and the PlanSpiel Game 6. Contradictions and failures in the process

This paper is subsidized by NSFC project which is named as <Research on Technical System of “Downtown Factory” Community-oriented Regeneration in Yangtze River Delta Region> (Grant No.51678412).

## 1. Introduction

There is no other discipline like urban design has a firm foothold in college teaching before it is recognized in academics and before its achievements. People are even questioning and criticizing the definition of urban design. It first recognizes its teaching status and the facts that can be taught. This is inconsistent with the teaching reform of the Texas Mounted Police in 1950 in the face of “building can teach or not”. Compared with traditional architecture and urban planning, the urban design currently involved in teaching is more from the perspective of the city to judge the mutual constraints and influences of a design in a region and the environment of the region, not limited to single Before the implementation of individual research, the relationship between the body and the overall situation is often preceded by regional planning, to the later stage of design, or even to housing design. The rest of the structural devices, event planning, planning strategies, etc. can occupy important. The proportion is to explain the relationship,

and the urban design pays more attention to the relationship between planning and construction elements, rather than one of them.

In October 2018, the author participated in the joint double degree training of the School of Architecture of the Technical University of Berlin and Tongji University of Shanghai, namely the urban design degree. The urban design of the Berlin University of Technology is a relatively new project. It is based on the superposition of four disciplines: architecture, urban planning, landscape architecture and sociology. Each school draws out its own teaching group to form a city. Designed teaching group. Therefore, the professional courses and the basic courses have been specially designed, which has considerable reference value for the teaching of urban design. The basic course part mainly supplements and adds research-based design methods and theories, especially the newly added social sciences contributes a large number of design support methods for the project. Students need to supplement the relevant literature and homework training to master the basic social survey methods, combined with the academic background of its own architecture, but there is no clear goal or even a unified direction. In the professional curriculum, the project has gathered more than half of the students with multidisciplinary background, such as space geography, Future Science, law, etc. The research group has formed a multi-communication environment, which virtualizes a real social research environment. Secondly, based on the theme of urban regional change, the sociological reasons for the change of urban spatial form are analyzed from all aspects of society, and the narrative is carried out by means of space. Furthermore, among the important nodes of the curriculum, social decision-making will be restored through realistic simulation and rapid decision-making to jointly discuss the spatial problems of the city. All in all, in the urban design teaching experience, urban design is no longer a single spatial decision-making problem, the background of environmental change, the principle of spatial design, and the way of verification all need to interact through multidisciplinary and social decision-making mechanisms. The author's goal in writing this article is not to get an exact answer to urban design, but to explore a new possibility for urban design by discussing the research methods of urban design, broadening horizons, summarizing the interrelationships with other disciplines.

## 2. Methodology Analysis

The urban design project of the Berlin University of Technology is the product of interdisciplinary interactions. In addition to the architecture, urban planning and landscape architecture involved in urban infrastructure construction, sociology is also included as the overall context of construction. Compared with the basic material space teaching, TUB pays more attention to the content and curriculum structure of sociology. The design course is taught in parallel with the basic course for 4 months. The subject of the author's participation is "The Great Transformation", and the discussion range is from three stages, from large to small, followed by one. Pick a specific topic that describes the world's developments in the field for decades before and after the node. B. After the investigation of the original theme, describe the vision of Berlin's future development in this field, and imagine the future urban landscape of 2050. Before that, the teams will conduct a special analysis of Berlin's historical time and events, and sort out the elements of urban spatial change over the past 50 years. After understanding the basic methods and background, the research team will conduct theoretical and practical operation experiments for specific design bases to study its rationality. Each group will be based on a specific community competition transformation, according to their respective subjects, design the

system logic of their own operations and transform the space nodes, and combine the changes in the future development of the city and the world in the previous two stages, and propose relevant Future design. The discussion form of the course node is set according to the course content, including report, meeting, seminar and so on. The course results present and organize campus and social exhibitions in drawings, models.

Among the specific curriculum arrangements, the following five aspects are the most representative features, and the authors respectively comment on the course records and participation experience:

### *2.1. The definition and liberation of Multidisciplinary*

The project consists of four defined disciplines, each of which consists of a professor's chair, a doctoral student, and a teaching assistant to form a unified research group. The number of students is 36, and the knowledge background is complex. Half of them are architectural and urban related engineering. The rest are free to accept any subject background, such as: future science, geography, sociology, literature, law, biology and so on. The professional courses are group work, and each group of 9 people constitutes a discussion mechanism with professional balance. The advantages of interdisciplinary analysis are mainly reflected in the expansion of ideas in the previous research and discussion. At the research stage, students of all professional backgrounds greatly enriched the content of the materials. In the research on the same topic, you can quickly penetrate and design multiple aspects. For example, in considering the transformation of science and technology into the future, in addition to space, social organization structure, ethics, law and other aspects have been relatively complete complement, and a more in-depth academic background support. In the process of communication for the same content, the professional advantages bring about a variety of perspectives and critical views, the discussion of the problem is more in-depth, the considerations are relatively complete, and it is easy to form simple systemic logic.

However, during the specific group discussion, many obstacles were encountered due to individual differences. The time cost of the group is huge, and it is difficult to achieve uniformity. It is not applicable to the discussion of too many topics. Before the discussion, under the premise of sufficient preparation of personal materials, each member of the group needs to obtain the original knowledge of 9 times and give suggestions, and then make corrections according to the recommendations. In the case of insufficient material preparation, the original issue needs to be reinterpreted. Therefore, it is recommended to reduce the number of groups in each group to a maximum of 6 people and increase the category 1-2 of the parallel group to improve efficiency.

### *2.2. The mutual support of the curriculum*

There are two main types of tutoring in the basic course. The first is to supplement the design method based on Method and Tool. The course is designed in parallel with the design course and is divided into five sections: Block1. M&T for Spatial Urban Analyses, Block2-M&T for Design & Research, Block3-M&T for Systemic (Integrative) Design and Research, Block4-Sociology & Social Research, Block5- Critical Reflection on Methods and Tools. These parts are associated with the design curriculum as an auxiliary system, and the operational requirements are also interrelated and the objectives are clear. However, in the detailed design, there are often repeated work, and the course rhythm is mixed. Learning for a specific design method is only at the

level of introduction, not enough to guide the work, the methodology is not fully established, the professionalism is insufficient, and then returning to the course design process, usually only stay at the level of understanding, failing to substantially promote the design process.

The second is a theoretical supplement based on Interdisciplinary and Introduction of Urban Design. This aspect provides a lot of ideas for constructing the theoretical framework of urban design. The main part of urban design lies in the systematic establishment, followed by the technical problems of system implementation. Most of these theoretical courses are questioned based on specific issues that arise in urban renewal, and attempts to answer, such as the changing relationship of urban networks. Therefore, in the face of related design, not only can provide large framework guidance, but also can be used to inspire the whole idea with small dots, and provide support and suggestions for the details. The downside is that these theories tend to have strong special characteristics, and they also face the problem of mutual integration in application. At the same time, they still need to be considered in terms of time dimension. The preachers often choose a single aspect to expand and are easy to form. One-sided thinking is not verified, it requires the listener to have a higher understanding and judgment.

### *2.3. Simulating reality: sociological charette and fast-work*

In urban design, the importance of social science in the practical teaching part is reflected in the sociological charette and fast-work part. In the process of curriculum design, due to the different disciplines and students' backgrounds, the discussion is often similar to the parliament's debate on a certain topic. This situation is actually a sociological simulation of reality. However, the charity varies from a design of a charrette varies, depending on the design problem and the individuals in the group, charrettes often take place in multiple sessions in which the group divides into sub-groups. Such sub-group then presents its work to the full group as material for further dialogue. Such charrettes serve as a way of quickly generating a design solution while integrating the aptitudes and interests of a diverse group of people, the general idea of a charrette is to create an innovative atmosphere in which a diverse group of stakeholders can collaborate to "generate visions for the future". Compare this term with workshop.

On the day of the urban design course, the students went through a total of 3 rounds of charette and quickly designed them based on expert feedback. In this process, the design team quickly scrutinized from the three levels of theme, framework, and space to form a more complete main line and corresponding program. In addition, the participation of charette also includes non-professional personnel, such as Owners, surrounding passers-by, and other people interested in this project, they can make subjective suggestions, these ideas for collage editing, some will be deleted, leaving the most relevant ideas and finishing the law.

### *2.4. Future Scenarios and Urban Territories*

The environment in which the city is designed is always to understand the past and future changes of the city from a spatial perspective. The course theme "The Great Transformation" examines the dramatic changes in the city caused by time accumulation and individual incidents, as well as prejudging changes that may occur in the future. From the current point of view, although the future image of Berlin in 2050 is not long-term, the current rate of change in the urban environment is very fast, and the efficiency of qualitative change is extremely high, which requires the most need for the theme of urban spatial change. Special attention. Therefore, the research team has structured four future themes: Scenario 1. TECHNO/CRAZY or "May the



Figure 1. *The charette and fast design.*

Valley safe us all?”, Scenarios2. DE-GROWTH or “Less is more (for whom?)”, Scenario3. POST-STATE or “The other global union” and Scenario4. E-COUNTERCULTURE or “Going back to where we came from/ Brandenburg?”. Each subject group then details the incentives that guide these changes. Next, under these themes, what is the most important change, what kind of results will be produced, and they will be described one by one on the spatial scale.

## 2.5. Actor Network and the “PlanSpiel” Game

The most special design of the entire course is to organize a conference discussion and role-playing game based on the design theme of the course group. The aim builds on three aspects: 1 – Understand how urban development is a negotiation between a broad range of actors and actor-alliances, varying in agency and interests. 2 – Build on the 4 sets of urban development actors in Berlin researched [urban discourse, housing delivery mechanisms, legislation and regulations, urban planning system. 3 – Further develop the Scenarios and transition deeper into the design aspect of the studio

The “PlanSpiel” game based on the “The Great Council” which is called into being at a moment of great crisis in Berlin, when it becomes unarguably accepted that everything has to change, because everything has become a little bit too much. A new forum for meeting to discuss and make decisions is announced. The core of the game is that Prepares 16 Actor Cards for the 16 council members who will respond to the model urban quarter proposal, setting out the intentions, goals, characteristics the particular interests of each actor and perhaps some guidance on playing them. Urban development involves negotiation: the 16 identified actors should have conflicting interests. It also encourages each group to introduce about three unfamiliar/uncommon maybe even non-human actors to the game in order to make other perspectives visible. In the process of carrying out this game, the students have been greatly trained on the system organization in the society. Understand the decision-making process in the city setting, and clarify the complex situations that need to be faced by playing the role expression. Most

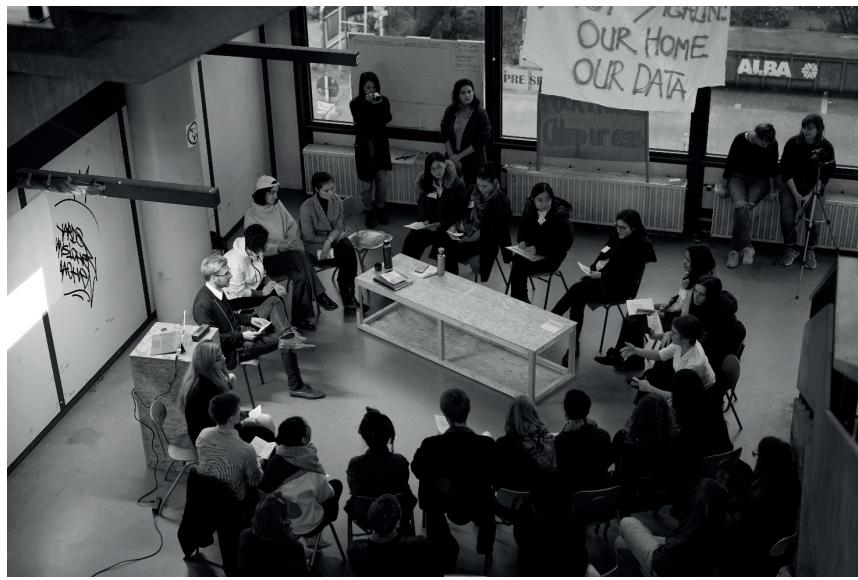


Figure 2. *The PlanSpiel.*

urban designs, while the results point to spatial design, are actually more of a balanced relationship between the parties as a means of presentation.

### 3. Conclusion

Urban design itself is complex and not suitable for premature use in teaching. The urban design teaching of Berlin University of Technology is very rich, and it also has certain system city. The most prominent is the introduction of sociological participation in teaching programs. However, through specific practices, there are still two main problems:

1. The level of assistance for the basic course is not high. Course aids should be carried out in parallel from the other aspects of technology and theory. They should not stay at the level of cognitive understanding and need to focus on analytical research.
2. The design course structure is too complicated. The relevant research at the beginning of the course is not related to the results. The mid-term report organization is complicated. The performance of the result space in the late stage of the course is too weak, and the theoretical system is weak.

The ultimate result is nothing more than abstract extraction and virtual reproduction of the structural relationships in real society. This can only be regarded as a social cognition course for young students who have not yet entered the society. It has not yet made urban design as a discipline to find its own position, nor has it established its own context. These teaching practices can only provide a reference for the theoretical establishment of urban design itself.

### References

UN STUDIO is cooperation of Habitat-Unit. Prof. Philipp Misselwitz, WM Aine Ryan Chair for Urban Design and Urbanisation. Prof. Jörg Stollmann, WM David Bauer.-Technische Universität Berlin.