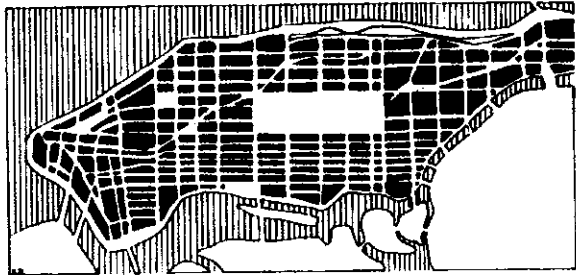
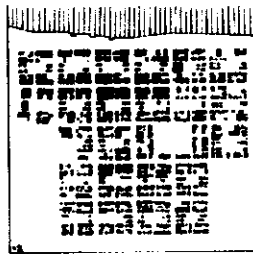


# CONFORMITY and INDIVIDUALITY in the BUILT FIELD



Manhattan



Savannah



Amsterdam

A Report on Graduate Workshop in Thematic Design  
Fall 2001

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# **Contents**

## **Introduction**

The report begins with an introduction to the idea of the study and the organization of the exercises. These notes include discussion of theory, methods and pedagogical aims.

## **Seven studies**

Brian Berry	Muncie, Indiana
Dorothee Dettbarn	Berlin
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Zheng Ji	Beijing
Jovica Mracevic	Herceg Novi
Sae Kyung von Stuckrad	Bankok
Chamnarn Tirapas	Berlin

## **SAR73**

SAR 73 is “The methodological formulation of agreements concerning the direct dwelling environment”. This chapter gives the complete text and drawings of the original report written in 1973 at the SAR (Stichting Architecten Research) in the Netherlands, on the permission of its principle author. This method was used in the first two phases of the workshop.

## **Introduction**

In urbanized built fields around the world, in the interweaving of open space and built form and the distribution of human activities, even in buildings or building complexes set in the larger urban fabric, the tensions between conformity and individuality are more intense than at any time in history. It matters not if we speak of small towns, of urban areas or of any megalopolis, the ability of civil societies of free individuals to agree on the structure and form of their cities and individual buildings is being tested. In multi-tenant buildings - offices, shopping centers, apartment buildings - the same tensions are ever-present.

Always - in shaping the material world we make and occupy - among the many questions are these:

"When I act as an individual, what is my freedom?"

"What are the conventions - the shared principles - that I choose to follow?"

"Who controls what parts of the whole?"

The intensity of the contemporary struggle between conformity and individuality originates from two sources:

1. The possibility of social and technical change and the actual speed of change
2. The increase in choice and the resources needed to act on choices made.

Both conformity - correspondence in form or character (agreement) - and individuality - character peculiar to and distinguishing an individual from others - are under stress. The distinction itself may in fact be blurring. Perhaps our familiar classifications need to be renewed under new conditions.

## **Thematic Design**

Ever since I was a graduate assistant for the Thematic Design course during my studies at MIT for a PhD in Design Theory and Methods, the opportunity to work with talented student designers in exploring the thematic aspects of the built environment has interested me. Much of my teaching and research is grounded in this experience and interest, and has ranged from a focus on the architectural and technical issues of the 'fit-out' of open ended buildings to the problems of urban design under conditions of change and distributed control. In all, my concern is that education for architects be grounded in theory – theory being descriptions of how things work rather than how we want things to work.

One of John Habraken's essays (TOOLS OF THE TRADE, 1996) sets out ten ways in which the thematic is "manifest in the built field and connects to our designing". The ten ways are certainly not exhaustive, but they do represent a valuable starting point for others interested in explorations of professional tools needed to improve the built fabric.

The focus on the thematic (and naturally the non-thematic as well) also has to do with a current research project I'm working on called an electronic teaching library of parametric architectural elements. In this project we have developed, so far, a way of building libraries of architectural elements of any kind, whose attributes can be easily managed. This enables rapid exploration of complex configurations of three-dimensional elements while alternatively fixing and 'releasing' constraints. (THE ELECTRONIC LIBRARY PROJECT)

## **A REPORT ON MAKING AND USING TISSUE MODELS**

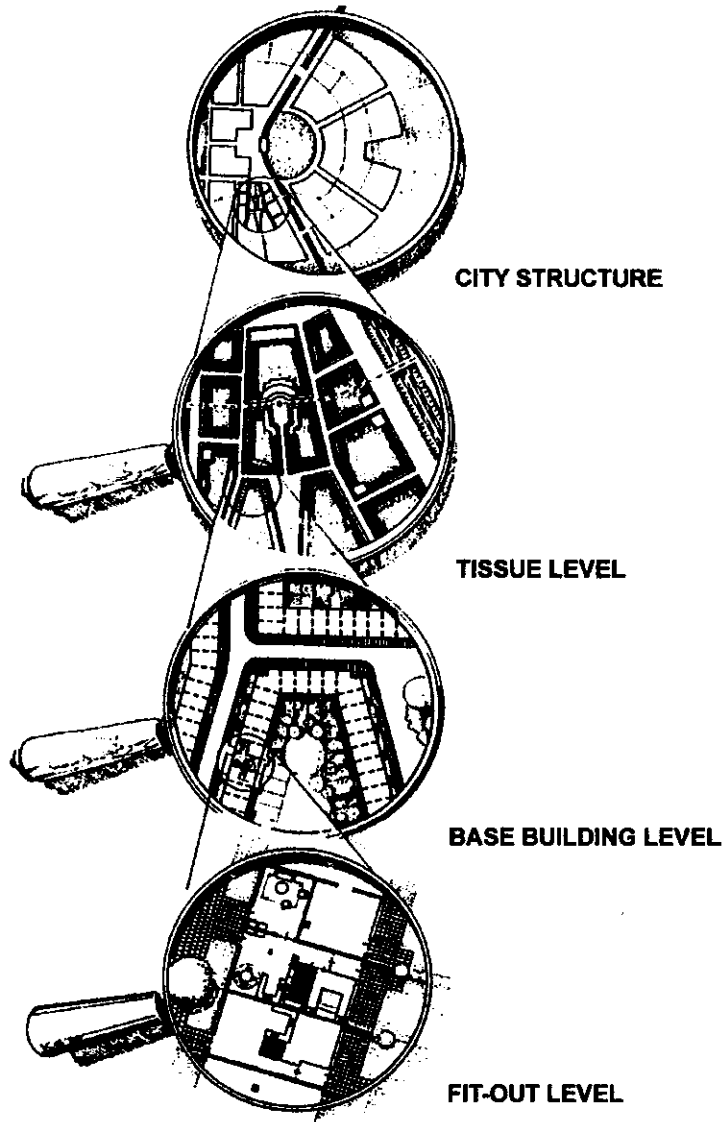
Another way this interest in the thematic is bearing fruit is in this present report on a MArch II Graduate Workshop conducted in the fall semester 2001 with seven graduate students who took part in a study of thematic design at several levels.

### Levels

The idea of levels is not really new. Conventional levels - and the professions normally associated with them - are the urban structure (the concern of urban planners); the urban tissue (the concern of urban designers); base architecture (the concern of architects); and fit-out (the concern of interior designers). Certainly these domains of intervention and professional practice are not rigidly separated but we have come to recognize them as a way to distribute responsibility over particular parts of the whole built field.

In this workshop, we focused on two levels: the urban tissue and base architecture. In the work on urban tissue, we employed an existing method of recording agreements concerning the the interweaving of built form, space and functions that forms the common, coherent ground in which individual building interventions occur. In the case of the urban tissue, we generally assume that everyone having a decisive and controlling interest in the coherence, convenience, beauty and capacity of the urban tissue - interests that are both political and economic - will see this as their domain.

A representation of environmental levels drawn by Frans van der Werf:



In the study reported on here, we examined the two levels in the middle. This focus helped us explore the tensions between conformity and the individual.

While working on a given level, we by necessity look both upward to the higher level and downward to the lower one. Looking upward, we recognize the constraints we operate within. Looking to the lower level, we set constraints whose value and capacity we need to assess because they have to do with the freedom of those acting on that level. A designer always operates in an environmental hierarchy and is responsible for looking both ways!

## **Phases of work**

The workshop was organized in three phases:

### Phase One

The first step was MAKING TISSUE MODELS. We studied thematic aspects of the urban fabric of the cities from which our graduate students came, focusing on the physical, territorial and functional orders of such places under conditions of change and distributed control. Using a variety of graphic notation techniques (see appendix SAR73), we sought to show in graphic images and notes the principle characteristics of neighborhoods in each city. Each student (with a few exceptions) analyzed and described a part of the city they knew most intimately.

This method is concerned with the direct dwelling environment. Using the method enables us to formulate the characteristics that are valid for the relationship, position and dimensions of the spatial and built elements that make up the "neighborhood". The term "tissue" is adopted as the focal point of interest - a level of intervention in its own right. You can choose another name if you want. Having such a focus assumes that we experience the physical ordering of a city area as an entity when the recognizable patterns show how buildings and spaces are arranged. We see that certain kinds of buildings as well as certain sorts of spaces keep re-occurring. These we call "thematic" buildings and spaces. Buildings and spaces that are unique or special we call "non-thematic". We also recognize that human activities are both "thematic" and "non-thematic". When we observe closely, we see that buildings and spaces are always interwoven in a certain way. When this is clearly the case we say that such a part of the city has a clearly recognizable "tissue".

In principle, it is possible to describe the rules (conventions) according to which an area of buildings, spaces and functions are interwoven with each other. Such rules can be captured in TISSUE MODEL DOCUMENTS. These documents combine graphic and text information.

### Step Two

Having produced TISSUE MODEL DOCUMENTS, their use can be studied. For that purpose, sites were found in which to explore the use of TISSUE MODELS. The site could be an edge city site or a site in the middle of the city where we imagine regeneration will take place. The MODELS were then fitted in to the sites, sometimes needing to be transformed to fit specific characteristics such as major roads, a river, a certain topography or other prominent feature. The result

was TISSUE PLANS or urban designs for each site. These show the mutations of the general principles to accommodate the specific conditions of the urban site.

In this second phase we concentrated on FITTING - IN the urban tissue models each student developed into specific sites in the same cities from which the models were derived. Students exchanged tissue model documents so that each would work with a document developed by another classmate. Each student had not only a tissue model document made by a classmate, but also a site in which to explore the use of the tissue model. The goals of this phase are several.

The first goal is to produce, in a short time, an urban design plan as a morphological and functional setting for subsequent architectural intervention (in Phase Three)

The second goal is more focused on methods. Evaluation of the tissue model came first. On the basis of sketch studies, it is possible to judge to what extent the tissue model can be applied in a certain situation. The sketch study gave information on how the tissue model could be improved to fit the site in a better way. A tissue sketch study enables the planning of the infrastructure of roads and waterways (e.g.) according to the characteristics of the tissue model. A tissue sketch offers the possibility to study the ways in which non-tissue elements can be related to the tissue elements. A tissue sketch enables more detailed judgements regarding the consequences for the tissue of the characteristics of the borders and the existing elements of the site. Finally, a tissue sketch can (potentially) be calculated on its density, parking standard, land use and cost. (We are not prepared to do this although it is not far from a possibility give the work done so far with the tissue models).

Four phases or steps can be taken in making tissue sketch studies. They are:

**First Phase:** The grid of the tissue model is fitted into the situation. General requirements for doing this come from questions of orientation, characteristics of existing site elements, and the site borders. Also to be considered are those points where major roads may enter the area. The production of these sketches is very simple and variants can be easily developed. At this first stage variants that appear to be feasible can already be selected.

**Second Phase:** Design of the main road system on the basis of the grid can be done. This is the phase in which the solutions for linking up the tissue with the borders and with the existing elements of the site should be considered in more detail. Usually it will not be possible - or desirable - to occupy the site with the tissue entirely. In those cases also the junctions between the different areas where the tissue is applied should be carefully considered.

**Third Phase:** In this phase, all elements of a higher order that are not tissue elements are added to the plan. These can be public buildings such as schools, medical centers, neighborhood facilities, churches, etc. Also in this phase some areas must be reserved for public parks, playgrounds, urban squares, etc insofar as they are part of the program of requirements of the plan. For the location of these elements some tissue elements must be changed or removed. Phase three already contains all the essential plan elements.

**Fourth Phase:** In this last phase, no more elements are added to the plan. In this phase, the plan should be transformed according to the specific requirements put forward by the parties involved in the decision-making process (architects, planners, user groups, etc). These requirements can be of an aesthetic nature or they can concern the demand for variation in the overall plan layout. The fourth phase tissue sketch must show that there is sufficient space available for this kind of transformation.

The idea is that the urban designer looks at the plan - through the eyes of an urban designer - and deforms or transforms the tissue where she thinks it appropriate. This is also the phase in which more elaborate solutions can be added for special plots in the plan. New elements in the fourth phase will only be added if it turns out that the transformations or specific solutions desired by the planners require more space than is available. (Of course here we are only working hypothetically)

In working out the tissue sketch plans, students were asked to consider the following constraints:

- Parking
- Public Transportation
- Green Space
- Anticipation of intensification of the tissue over time

### Step Three

The third step in the semester was making OPEN ARCHITECTURE. Once an urban design had been proposed, showing basic building morphology, the shape of public space, and the general distribution of functions, each student "returned home" as it were to make a building design in the urban design plan proposed by another student in the city in which the initial Urban Tissue Document originated.

Each student designed an open ended "base building" in the context of the TISSUE PLAN or urban design developed by one of the other students. In doing this shift of responsibilities, objectivity was required and a key principle in environmental design was encountered.



My intention in this phase was to teach how to make "agile" or "open architecture". Such an architecture enables a living balance to be made between convention and sharing on the one hand, and individuality on the other. In an "open" building, individual dwelling unit floor plans are not determined at the outset. Rather, a building with carefully studied "accommodation capacity" is designed that can subsequently be subdivided into individual dwelling units which, further, can be laid out independently. This work on building design required additional communication between students because the TISSUE PLANS, while as explicit as possible as design guidelines, were nevertheless incomplete, needing further elaboration and explanation as thematic starting points for architectural designing.

## **Summary**

All environmental interventions are partial. Each time we propose a design, we fill in empty spaces in the environment built by others. Or, we transform what is already there, leaving opportunities for others to follow us. No one party controls every intervention. Control is distributed. By organizing the work this way, my goal was to help students gain confidence in working in situations of distributed responsibility and to understand how to move from abstraction to specification working with the starting points developed by someone else.

That is, the pedagogical goals were:

1. Learning to convey constraints to be followed by others (setting out conventions and thus defining some limits to individual choice by others)
2. Learning to work within constraints given by others (learning how to develop variations on themes defined by others)

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