

[Space and Place: Sommer Semester 2007 ]

## Christopher Alexander Pattern Language



Christopher Alexander, 1975

# Christopher Alexander Pattern Language

*A pattern language: towns, buildings, construction.*

Christopher Alexander, Sara Ishikawa, Murray Silverstein, with Max Jacobson, Ingrid Fiksdahl-King, Schlomo Angel.  
New York, Oxford University Press, 1977.

<http://www.uni-weimar.de/architektur/InfAR/lehre/Entwurf/Patterns/patterns.html>

## About Patterns

Patterns are an independent arrangement of physical parts in a way around a conceptual problem (the conceptual problem or - goal can be attained of a technically, aesthetically or social nature) to be solved or a design goal (physically: not only materially, also geometrically). Although patterns can also be relations [between geometrical or material "parts"] or as a part of is self to be understood.

However patterns are principle based on the concept of „relations“: Buildings consist of physical parts (cities > houses, churches, roads / house > walls, stairs, and roof).



**Towns - Defining Town or Community**

**Buildings - Shaping Buildings in the Land in three Dimensions**

**Construction - Creating an Individual Building**

## Defining Town or Community

- *We begin with that part of the language which defines a town or community.*

*This patterns can never be "designed" or "built" in one fell swoop - but patient piecemeal growth, designed in such a way that every individual act is always helping to create or generate these larger global patterns, will, slowly and surely, over the years, make a community that has these global patterns in it.*

1. INDEPENDENT REGIONS / 94. SLEEPING IN PUBLIC

## Defining Town or Community

- Build up these larger city patterns from the grass roots, through action essentially controlled by two levels of self-governing communities, which exist as physically identifiable places.

12. COMMUNITY OF 7000

13. SUBCULTURE BOUNDARY

14. IDENTIFIABLE NEIGHBORHOOD

15. NEIGHBORHOOD BOUNDARY

**Pattern name**

**Subculture Boundary**

**Pattern number**

**13**

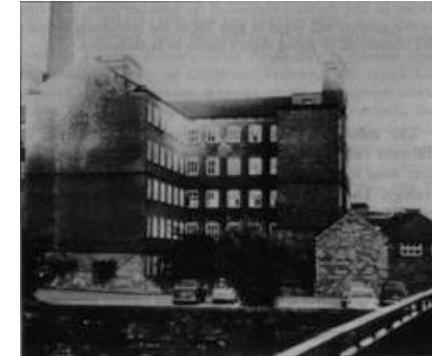
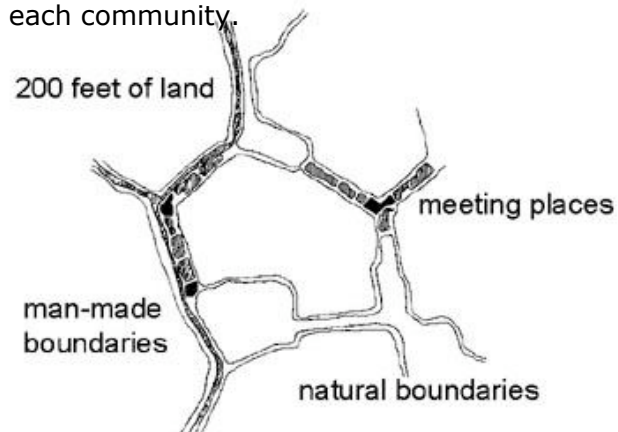
### Design problem

The mosaic of subcultures requires that hundreds of different cultures live, in their own way, at full intensity, next door to one another. But subcultures have their own ecology. They can only live at full intensity, unhampered by their neighbors, if they are physically separated by physical boundaries.

### Design solution

Separate neighboring subcultures with a swath of land at least 200 feet wide. Let this boundary be natural - wilderness, farmland, water - or man-made - railroads, major roads, parks, schools, some housing . Along the seam between two subcultures, build meeting places, shared functions, touching each community.

### Explanation of design solution



## Defining Town or Community

- Build up these larger city patterns from the grass roots, through action essentially controlled by two levels of self-governing communities, which exist as physically identifiable places.

12. COMMUNITY OF 7000

13. SUBCULTURE BOUNDARY

14. IDENTIFIABLE NEIGHBORHOOD

**15. NEIGHBORHOOD BOUNDARY**

**Pattern name**                      **Neighbourhood Boundary**

**Pattern number**                    **15**

### Design problem

The effect of the border is substantial for the neighbourhood. If the border is too weak, the neighbourhood cannot maintain their identifiable character.

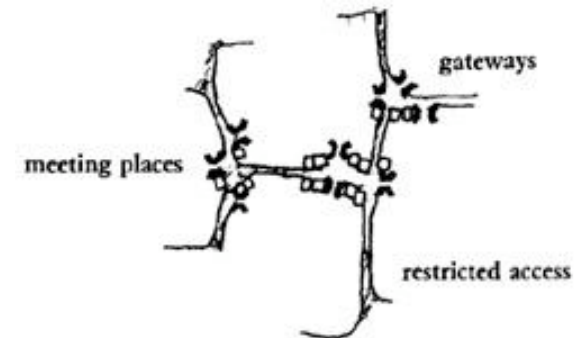
### Explanation of design problem

By the observation of neighbourhoods, which achieved the goal of the self-sufficiency and physically, as also from the view of the inhabitants, it's to notice that the most important single characteristic of a neighbourhood border is the reduced admission into the neighbourhood: Neighbourhoods, whose self-sufficiency succeeded, have clear and relative few ways and roads, which in-lead.

### Design solution

Promote the formation of a border approximately around every neighbourhood, in order to separate it from the neighbourhoods beside it. Create this border through close half of roads and by limiting the admission to the neighbourhood. Place gates against the points, where the limited access roads meet the border; make the front of the border broadly enough for the admission of meeting places for the common functions of several neighbourhoods.

Space and Place – Pattern Language



Bauhaus-  
Universität  
Weimar

Daniel Macedo 52349

## Defining Town or Community

- Both in the neighbourhoods and the communities, and in between the, in the boundaries, encourage the formation of local centers.

28. ECCENTRIC NUCLEUS

29. DENSITY RING

**30. ACTIVITY NODES**

31. PROMENADE

32. SHOPPING STREET

33. NIGHT LIFE 2

34. INTERCHANGE

**Pattern name**

**Activity Nodes**

**Pattern number**

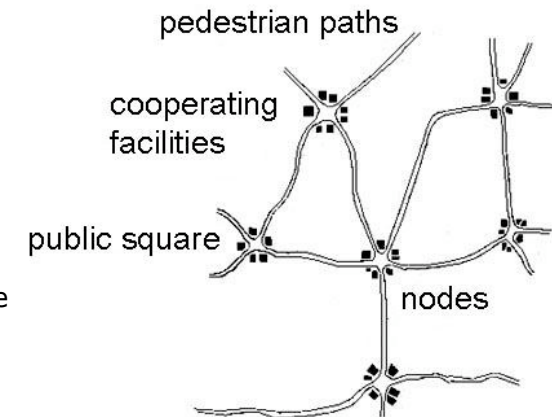
**30**

**Design problem**

Community facilities scattered individually through the city do nothing for the life of the city .

**Design solution**

Create nodes of activity throughout the community, spread about 300 yards apart. First identify those existing spots in the community where action seems to concentrate itself. Then modify the layout of the paths in the community to bring as many of them through these spots as possible. This makes each spot function as a "node" in the path network. Then, at the center of each node, make a small public square, and surround it with a combination of community facilities and shops which are mutually supportive .



**Bauhaus-  
Universität  
Weimar**

## Defining Town or Community

- The local shops and gathering places.

87. INDIVIDUALLY OWNED SHOPS

**88. STREET CAFE**

89. CORNER GROCERY

90. BEER HALL

91. TRAVELER S INN

92. BUS STOP

93. FOOD STANDS

94. SLEEPING IN PUBLIC

**Pattern name**                      **Street Cafe**

**Pattern number**                      **88**

### Design problem

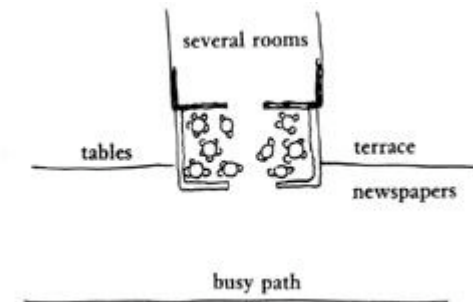
The Café Streets offer a singular, typical urban situation. It's a place that offers the possibility of observing the others and being seen.

### Explanation of Design problem

People like to go to public spaces like parks, promenades and boulevards - and also in Streets Café - and mixed themselves among the society. Likewise there are some similar rituals, to be found here: e.g. Reading the Newspaper, hanging around, having a drink, etc. People feel safe, comfortable and relaxed. When a coffee shop as a porch you can sit there for hours - in public.

### Design solution

Promote a development of local Coffee Shops in each neighbourhood. They should be intimate places, with several areas, on a living street, where people can sit and have a drink and observe the city life. Between the Coffee Shop and the street there should be enough space to have tables and chairs outside.



**Bauhaus-  
Universität  
Weimar**

## Shaping Buildings in the Land in three Dimensions

- *This completes the global patterns which define a town or a community.*

*We now start that part of the language which gives shape to groups of buildings, and the individual buildings, on the land, in three dimensions. These are the patterns which can be "designed" or "built" - the patterns which define the individual buildings and the space between buildings; where we are dealing for the first time with patterns that are under the control of individuals, who are able to build the patterns all at once.*

95. BUILDING COMPLEX / 204. SECRET PLACE

## Shaping Buildings in the Land in three Dimensions

- When the major parts of buildings and the outdoor areas have been given their rough shape, it is the right time to give more detailed attention to the paths and squares between the buildings.

119. ARCADES

120. PATH AND GOALS 2

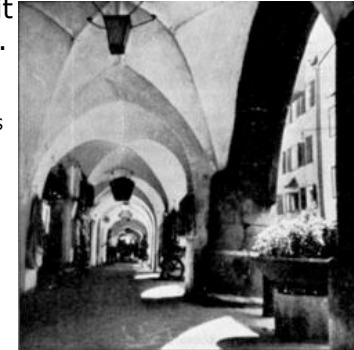
121. PATH SHAPE

122. BUILDING FRONTS

123. PEDESTRIAN DENSITY

124. ACTIVITY POCKETS

125. STAIR SEATS



**Pattern name**

**Arcades**

**Pattern number**

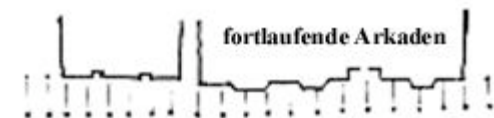
**119**

**Design problem**

Arcades - considered and partly inside, partly outside running sidewalks along houses  
- play an important role with the relationship, which humans develop to buildings.

**Explanation of Design problem**

Buildings work often many unfriendly than necessarily, they do not make a connection to the external world, no invitation for entering. Between the inside of the building and the external world there are no strong connections, no spaces, which overlap. The classical solution of this problem is the arcade, creates it nevertheless an overlapping territory between the public and the private world.



**Design solution**

Where always corridors run along in building edges, they build arcades and use it above all to interconnect buildings so that the people under protection from Arcades can go from a place on to others places.

Bauhaus-  
Universität  
Weimar

## Shaping Buildings in the Land in three Dimensions

- When the major parts of buildings and the outdoor areas have been given their rough shape, it is the right time to give more detailed attention to the paths and squares between the buildings.

119. ARCADES

120. PATH AND GOALS 2

121. PATH SHAPE

122. BUILDING FRONTS

**123. PEDESTRIAN DENSITY**

124. ACTIVITY POCKETS

125. STAIR SEATS



**Pattern name** Pedestrian Density

**Pattern number** 123

### Design problem

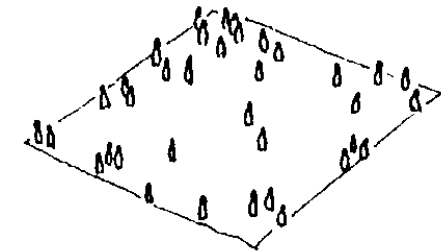
Many of our public places nowadays were meant to be places with live, multicoloured. They are however actually abandoned and dead.

### Explanation of Design problem

The pedestrian density at a place plays an important role whether this place works dead or alive. Other things are likewise important: which borders are on the place, what do people do, if they stay in groups and listen musicians on the street, or having sun bathes, etc.

The number of square meters per person supplies however a good reference point for the function of the place.

As rule it can be said that between 15 and 30 square meters are used per person. Above 50 square meters will the space not be used. When the number of pedestrians that walk through a space are known, using this rule, the adequate area for usage will be found.



### Design solution

Measure the size of places, streets for pedestrians and all places, where people meet, so that each person comes to square meter at each time a surface of 15-30.

Space and Place – Pattern Language



Daniel Macedo 52349

## Shaping Buildings in the Land in three Dimensions

- When the major parts of buildings and the outdoor areas have been given their rough shape, it is the right time to give more detailed attention to the paths and squares between the buildings.

119. ARCADES

120. PATH AND GOALS 2

121. PATH SHAPE

122. BUILDING FRONTS

123. PEDESTRIAN DENSITY

124. ACTIVITY POCKETS

**125. STAIR SEATS**



**Pattern name**

**Stair Seats**

**Pattern number**

**125**

**Design problem**

Wherever there is action in a place, the spots which are the most inviting, are those high enough to give people a vantage point, and low enough to put them in action.

### **Explanation of Design problem**

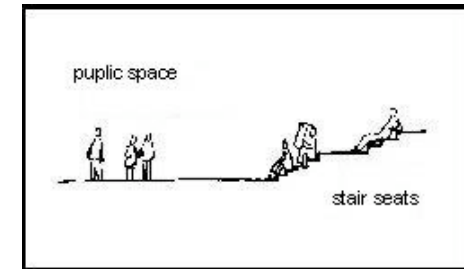
If a public space doesn't provide these both tendencies, the majority of people will simply not stay there.

The problem is that this (higher) position will usually have the effect of removing a person from the action. This means that any places which are slightly elevated must also be within easy reach on circulation paths.

People sit on the edges of lower steps, if they are wide enough and inviting. When there are areas in public places which are both slightly raised and very accessible, people naturally gravitate toward them. As examples of this situation are Stepped cafe terraces, stepped surrounding public plazas, stepped porches, stepped statues and seats.

### **Design solution**

In any public place where people meet - pass by, add a few steps at the edges where stairs come down or where there is a change of level. Make these raised areas immediately accessible from below, so that people may congregate and sit to watch the others.



Space and Place – Pattern Language

**Bauhaus-  
Universität  
Weimar**

Daniel Macedo 52349