

A
PATTERN
LANGUAGE

TOWNS • BUILDINGS • CONSTRUCTION

Christopher Alexander

Sara Ishikawa Murray Silverstein

with

Max Jacobson Ingrid Fiksdahl-King Shlomo Angel

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USING THIS BOOK

A PATTERN LANGUAGE

Volume 1, *The Timeless Way of Building*, and Volume 2, *A Pattern Language*, are two halves of a single work. This book provides a language, for building and planning; the other book provides the theory and instructions for the use of the language. This book describes the detailed patterns for towns and neighborhoods, houses, gardens, and rooms. The other book explains the discipline which makes it possible to use these patterns to create a building or a town. This book is the sourcebook of the timeless way; the other is its practice and its origin.

The two books have evolved very much in parallel. They have been growing over the last eight years, as we have worked on the one hand to understand the nature of the building process, and on the other hand to construct an actual, possible pattern language. We have been forced by practical considerations, to publish these two books under separate covers; but in fact, they form an indivisible whole. It is possible to read them separately. But to gain the insight which we have tried to communicate in them, it is essential that you read them both.

The Timeless Way of Building describes the fundamental nature of the task of making towns and buildings.

It is shown there, that towns and buildings will not be able to become alive, unless they are made by all the people in society, and unless these people share a common pattern language, within which to make these buildings, and unless this common pattern language is alive itself.

In this book, we present one possible pattern language, of the kind called for in *The Timeless Way*. This language is extremely practical. It is a language that we have distilled from our own building and planning efforts over the last eight years. You can use it to work with your neighbors, to improve your town and neighborhood. You can use it to design a house for yourself, with your family; or to work with other people to design an office or a workshop or a public building like a school. And you can use it to guide you in the actual process of construction.

The elements of this language are entities called patterns. Each pattern describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice.

For convenience and clarity, each pattern has the same format. First, there is a picture, which shows an archetypal example of that pattern. Second, after the picture, each pattern has an introductory paragraph, which sets the context for the pattern, by explaining how it helps to complete certain larger patterns. Then there are three diamonds to mark the beginning of the problem. After the diamonds there is a headline, in bold type. This

headline gives the essence of the problem in one or two sentences. After the headline comes the body of the problem. This is the longest section. It describes the empirical background of the pattern, the evidence for its validity, the range of different ways the pattern can be manifested in a building, and so on. Then, again in bold type, like the headline, is the solution—the heart of the pattern—which describes the field of physical and social relationships which are required to solve the stated problem, in the stated context. This solution is always stated in the form of an instruction—so that you know exactly what you need to do, to build the pattern. Then, after the solution, there is a diagram, which shows the solution in the form of a diagram, with labels to indicate its main components.

After the diagram, another three diamonds, to show that the main body of the pattern is finished. And finally, after the diamonds there is a paragraph which ties the pattern to all those smaller patterns in the language, which are needed to complete this pattern, to embellish it, to fill it out.

There are two essential purposes behind this format. First, to present each pattern connected to other patterns, so that you grasp the collection of all 253 patterns as a whole, as a language, within which you can create an infinite variety of combinations. Second, to present the problem and solution of each pattern in such a way that you can judge it for yourself, and modify it, without losing the essence that is central to it.

Let us next understand the nature of the connection between patterns.

The patterns are ordered, beginning with the very largest, for regions and towns, then working down through neighborhoods, clusters of buildings, buildings, rooms and alcoves, ending finally with details of construction.

This order, which is presented as a straight linear sequence, is essential to the way the language works. It is presented, and explained more fully, in the next section. What is most important about this sequence, is that it is based on the connections between the patterns. Each pattern is connected to certain "larger" patterns which come above it in the language; and to certain "smaller" patterns which come below it in the language. The pattern helps to complete those larger patterns which are "above" it, and is itself completed by those smaller patterns which are "below" it.

Thus, for example, you will find that the pattern ACCESSIBLE GREEN (60), is connected first to certain larger patterns: SUBCULTURE BOUNDARY (13), IDENTIFIABLE NEIGHBORHOOD (14), WORK COMMUNITY (41), and QUIET BACKS (59). These appear on its first page. And it is also connected to certain smaller patterns: POSITIVE OUTDOOR SPACE (107), TREE PLACES (171), and GARDEN WALL (173). These appear on its last page.

What this means, is that IDENTIFIABLE NEIGHBORHOOD, SUBCULTURE BOUNDARY, WORK COMMUNITY, and QUIET BACKS are incomplete, unless they contain an ACCESSIBLE GREEN; and that an ACCESSIBLE GREEN is itself incomplete, unless it contains POSITIVE OUTDOOR SPACE, TREE PLACES, and a GARDEN WALL.

And what it means in practical terms is that, if you

want to lay out a green according to this pattern, you must not only follow the instructions which describe the pattern itself, but must also try to embed the green within an IDENTIFIABLE NEIGHBORHOOD or in some SUB-CULTURE BOUNDARY, and in a way that helps to form QUIET BACKS; and then you must work to complete the green by building in some POSITIVE OUTDOOR SPACE, TREE PLACES, and a GARDEN WALL.

In short, no pattern is an isolated entity. Each pattern can exist in the world, only to the extent that is supported by other patterns: the larger patterns in which it is embedded, the patterns of the same size that surround it, and the smaller patterns which are embedded in it.

This is a fundamental view of the world. It says that when you build a thing you cannot merely build that thing in isolation, but must also repair the world around it, and within it, so that the larger world at that one place becomes more coherent, and more whole; and the thing which you make takes its place in the web of nature, as you make it.

Now we explain the nature of the relation between problems and solutions, within the individual patterns.

Each solution is stated in such a way that it gives the essential field of relationships needed to solve the problem, but in a very general and abstract way—so that you can solve the problem for yourself, in your own way, by adapting it to your preferences, and the local conditions at the place where you are making it.

For this reason, we have tried to write each solution in a way which imposes nothing on you. It contains only those essentials which cannot be avoided if you really

want to solve the problem. In this sense, we have tried, in each solution, to capture the invariant property common to all places which succeed in solving the problem.

But of course, we have not always succeeded. The solutions we have given to these problems vary in significance. Some are more true, more profound, more certain, than others. To show this clearly we have marked every pattern, in the text itself, with two asterisks, or one asterisk, or no asterisks.

In the patterns marked with two asterisks, we believe that we have succeeded in stating a true invariant: in short, that the solution we have stated summarizes a *property* common to *all possible ways* of solving the stated problem. In these two-asterisk cases we believe, in short, that it is not possible to solve the stated problem properly, without shaping the environment in one way or another according to the pattern that we have given—and that, in these cases, the pattern describes a deep and inescapable property of a well-formed environment.

In the patterns marked with one asterisk, we believe that we have made some progress towards identifying such an invariant: but that with careful work it will certainly be possible to improve on the solution. In these cases, we believe it would be wise for you to treat the pattern with a certain amount of disrespect—and that you seek out variants of the solution which we have given, since there are almost certainly possible ranges of solutions which are not covered by what we have written.

Finally, in the patterns without an asterisk, we are certain that we have *not* succeeded in defining a true

invariant—that, on the contrary, there are certainly ways of solving the problem different from the one which we have given. In these cases we have still stated a solution, in order to be concrete—to provide the reader with at least one way of solving the problem—but the task of finding the true invariant, the true property which lies at the heart of all possible solutions to this problem, remains undone.

We hope, of course, that many of the people who read, and use this language, will try to improve these patterns—will put their energy to work, in this task of finding more true, more profound invariants—and we hope that gradually these more true patterns, which are slowly discovered, as time goes on, will enter a common language, which all of us can share.

You see then that the patterns are very much alive and evolving. In fact, if you like, each pattern may be looked upon as a hypothesis like one of the hypotheses of science. In this sense, each pattern represents our current best guess as to what arrangement of the physical environment will work to solve the problem presented. The empirical questions center on the problem—does it occur and is it felt in the way we have described it?—and the solution—does the arrangement we propose in fact resolve the problem? And the asterisks represent our degree of faith in these hypotheses. But of course, no matter what the asterisks say, the patterns are still hypotheses, all 253 of them—and are therefore all tentative, all free to evolve under the impact of new experience and observation.

Let us finally explain the status of this language, why

we have called it "A Pattern Language" with the emphasis on the word "A," and how we imagine this pattern language might be related to the countless thousands of other languages we hope that people will make for themselves, in the future.

The Timeless Way of Building says that every society which is alive and whole, will have its own unique and distinct pattern language; and further, that every individual in such a society will have a unique language, shared in part, but which as a totality is unique to the mind of the person who has it. In this sense, in a healthy society there will be as many pattern languages as there are people—even though these languages are shared and similar.

The question then arises: What exactly is the status of this published language? In what frame of mind, and with what intention, are we publishing this language here? The fact that it is published as a book means that many thousands of people can use it. Is it not true that there is a danger that people might come to rely on this one printed language, instead of developing their own languages, in their own minds?

The fact is, that we have written this book as a first step in the society-wide process by which people will gradually become conscious of their own pattern languages, and work to improve them. We believe, and have explained in *The Timeless Way of Building*, that the languages which people have today are so brutal, and so fragmented, that most people no longer have any language to speak of at all—and what they do have is not based on human, or natural considerations.

We have spent years trying to formulate this language, in the hope that when a person uses it, he will be so impressed by its power, and so joyful in its use, that he will understand again, what it means to have a living language of this kind. If we only succeed in that, it is possible that each person may once again embark on the construction and development of his own language—perhaps taking the language printed in this book, as a point of departure.

And yet, we do believe, of course, that this language which is printed here is something more than a manual, or a teacher, or a version of a possible pattern language. Many of the patterns here are archetypal—so deep, so deeply rooted in the nature of things, that it seems likely that they will be a part of human nature, and human action, as much in five hundred years, as they are today. We doubt very much whether anyone could construct a valid pattern language, in his own mind, which did not include the pattern *ARCADES* (119) for example, or the pattern *ALCOVES* (179).

In this sense, we have also tried to penetrate, as deep as we are able, into the nature of things in the environment: and hope that a great part of this language, which we print here, will be a core of any sensible human pattern language, which any person constructs for himself, in his own mind. In this sense, at least a part of the language we have presented here, is the archetypal core of all possible pattern languages, which can make people feel alive and human.

SUMMARY OF THE LANGUAGE

A pattern language has the structure of a network. This is explained fully in *The Timeless Way of Building*. However, when we use the network of a language, we always use it as a *sequence*, going through the patterns, moving always from the larger patterns to the smaller, always from the ones which create structures, to the ones which then embellish those structures, and then to those which embellish the embellishments. . . .

Since the language is in truth a network, there is no one sequence which perfectly captures it. But the sequence which follows, captures the broad sweep of the full network; in doing so, it follows a line, dips down, dips up again, and follows an irregular course, a little like a needle following a tapestry.

The sequence of patterns is both a summary of the language, and at the same time, an index to the patterns. If you read through the sentences which connect the groups of patterns to one another, you will get an overview of the whole language. And once you get this overview, you will then be able to find the patterns which are relevant to your own project.

And finally, as we shall explain in the next section, this sequence of patterns is also the "base map," from

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which you can make a language for your own project, by choosing the patterns which are most useful to you, and leaving them more or less in the order that you find them printed here.



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

within each region work toward those regional policies which will protect the land and mark the limits of the cities;

2. THE DISTRIBUTION OF TOWNS

3. CITY COUNTRY FINGERS

4. AGRICULTURAL VALLEYS

5. LACE OF COUNTRY STREETS

6. COUNTRY TOWNS

7. THE COUNTRYSIDE

SUMMARY OF THE LANGUAGE

through city policies, encourage the piecemeal formation of those major structures which define the city;

8. MOSAIC OF SUBCULTURES

9. SCATTERED WORK

10. MAGIC OF THE CITY

11. LOCAL TRANSPORT AREAS

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

connect communities to one another by encouraging the growth of the following networks;

16. WEB OF PUBLIC TRANSPORTATION

17. RING ROADS

18. NETWORK OF LEARNING

19. WEB OF SHOPPING

20. MINI-BUSES

establish community and neighborhood policy to control the character of the local environment according to the following fundamental principles;

21. FOUR-STORY LIMIT

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22. NINE PER CENT PARKING

23. PARALLEL ROADS

24. SACRED SITES

25. ACCESS TO WATER

26. LIFE CYCLE

27. MEN AND WOMEN

both in the neighborhoods and the communities, and in between them, in the boundaries, encourage the formation of local centers;

28. ECCENTRIC NUCLEUS

29. DENSITY RINGS

30. ACTIVITY NODES

31. PROMENADE

32. SHOPPING STREET

33. NIGHT LIFE

34. INTERCHANGE

around these centers, provide for the growth of housing in the form of clusters, based on face-to-face human groups;

35. HOUSEHOLD MIX

36. DEGREES OF PUBLICNESS

37. HOUSE CLUSTER

38. ROW HOUSES

39. HOUSING HILL

40. OLD PEOPLE EVERYWHERE

SUMMARY OF THE LANGUAGE

between the house clusters, around the centers, and especially in the boundaries between neighborhoods, encourage the formation of work communities;

41. WORK COMMUNITY
42. INDUSTRIAL RIBBON
43. UNIVERSITY AS A MARKETPLACE
44. LOCAL TOWN HALL
45. NECKLACE OF COMMUNITY PROJECTS
46. MARKET OF MANY SHOPS
47. HEALTH CENTER
48. HOUSING IN BETWEEN

between the house clusters and work communities, allow the local road and path network to grow informally, piecemeal;

49. LOOPED LOCAL ROADS
50. T JUNCTIONS
51. GREEN STREETS
52. NETWORK OF PATHS AND CARS
53. MAIN GATEWAYS
54. ROAD CROSSING
55. RAISED WALK
56. BIKE PATHS AND RACKS
57. CHILDREN IN THE CITY

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in the communities and neighborhoods, provide public open land where people can relax, rub shoulders and renew themselves;

58. CARNIVAL
59. QUIET BACKS
60. ACCESSIBLE GREEN
61. SMALL PUBLIC SQUARES
62. HIGH PLACES
63. DANCING IN THE STREET
64. POOLS AND STREAMS
65. BIRTH PLACES
66. HOLY GROUND

in each house cluster and work community, provide the smaller bits of common land, to provide for local versions of the same needs;

67. COMMON LAND
68. CONNECTED PLAY
69. PUBLIC OUTDOOR ROOM
70. GRAVE SITES
71. STILL WATER
72. LOCAL SPORTS
73. ADVENTURE PLAYGROUND
74. ANIMALS

within the framework of the common land, the clusters, and the work communities encourage transformation of

SUMMARY OF THE LANGUAGE

the smallest independent social institutions: the families, workgroups, and gathering places. The family, in all its forms;

75. THE FAMILY
76. HOUSE FOR A SMALL FAMILY
77. HOUSE FOR A COUPLE
78. HOUSE FOR ONE PERSON
79. YOUR OWN HOME

the workgroups, including all kinds of workshops and offices and even children's learning groups;

80. SELF-GOVERNING WORKSHOPS
AND OFFICES
81. SMALL SERVICES WITHOUT RED TAPE
82. OFFICE CONNECTIONS
83. MASTER AND APPRENTICES
84. TEENAGE SOCIETY
85. SHOPFRONT SCHOOLS
86. CHILDREN'S HOME

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

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93. FOOD STANDS

94. SLEEPING IN PUBLIC

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 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 or small groups of individuals, who are able to build the patterns all at once.

The first group of patterns helps to lay out the overall arrangement of a group of buildings: the height and number of these buildings, the entrances to the site, main parking areas, and lines of movement through the complex;

95. BUILDING COMPLEX

96. NUMBER OF STORIES

97. SHIELDED PARKING

98. CIRCULATION REALMS

99. MAIN BUILDING

100. PEDESTRIAN STREET

101. BUILDING THOROUGHFARE

102. FAMILY OF ENTRANCES

103. SMALL PARKING LOTS

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fix the position of individual buildings on the site, within the complex, one by one, according to the nature of the site, the trees, the sun: this is one of the most important moments in the language;

- 104. SITE REPAIR
- 105. SOUTH FACING OUTDOORS
- 106. POSITIVE OUTDOOR SPACE
- 107. WINGS OF LIGHT
- 108. CONNECTED BUILDINGS
- 109. LONG THIN HOUSE

within the buildings' wings, lay out the entrances, the gardens, courtyards, roofs, and terraces: shape both the volume of the buildings and the volume of the space between the buildings at the same time—remembering that indoor space and outdoor space, yin and yang, must always get their shape together;

- 110. MAIN ENTRANCE
- 111. HALF-HIDDEN GARDEN
- 112. ENTRANCE TRANSITION
- 113. CAR CONNECTION
- 114. HIERARCHY OF OPEN SPACE
- 115. COURTYARDS WHICH LIVE
- 116. CASCADE OF ROOFS
- 117. SHELTERING ROOF
- 118. ROOF GARDEN

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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. PATHS AND GOALS
- 121. PATH SHAPE
- 122. BUILDING FRONTS
- 123. PEDESTRIAN DENSITY
- 124. ACTIVITY POCKETS
- 125. STAIR SEATS
- 126. SOMETHING ROUGHLY IN THE
MIDDLE

now, with the paths fixed, we come back to the buildings: within the various wings of any one building, work out the fundamental gradients of space, and decide how the movement will connect the spaces in the gradients;

- 127. INTIMACY GRADIENT
- 128. INDOOR SUNLIGHT
- 129. COMMON AREAS AT THE HEART
- 130. ENTRANCE ROOM
- 131. THE FLOW THROUGH ROOMS
- 132. SHORT PASSAGES
- 133. STAIRCASE AS A STAGE
- 134. ZEN VIEW
- 135. TAPESTRY OF LIGHT AND DARK

SUMMARY OF THE LANGUAGE

within the framework of the wings and their internal gradients of space and movement, define the most important areas and rooms. First, for a house;

- I36. COUPLE'S REALM
- I37. CHILDREN'S REALM
- I38. SLEEPING TO THE EAST
- I39. FARMHOUSE KITCHEN
- I40. PRIVATE TERRACE ON THE STREET
- I41. A ROOM OF ONE'S OWN
- I42. SEQUENCE OF SITTING SPACES
- I43. BED CLUSTER
- I44. BATHING ROOM
- I45. BULK STORAGE

then the same for offices, workshops, and public buildings;

- I46. FLEXIBLE OFFICE SPACE
- I47. COMMUNAL EATING
- I48. SMALL WORK GROUPS
- I49. RECEPTION WELCOMES YOU
- I50. A PLACE TO WAIT
- I51. SMALL MEETING ROOMS
- I52. HALF-PRIVATE OFFICE

add those small outbuildings which must be slightly independent from the main structure, and put in the access from the upper stories to the street and gardens;

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- 153. ROOMS TO RENT
- 154. TEENAGER'S COTTAGE
- 155. OLD AGE COTTAGE
- 156. SETTLED WORK
- 157. HOME WORKSHOP
- 158. OPEN STAIRS

prepare to knit the inside of the building to the outside, by treating the edge between the two as a place in its own right, and making human details there;

- 159. LIGHT ON TWO SIDES OF EVERY ROOM
- 160. BUILDING EDGE
- 161. SUNNY PLACE
- 162. NORTH FACE
- 163. OUTDOOR ROOM
- 164. STREET WINDOWS
- 165. OPENING TO THE STREET
- 166. GALLERY SURROUND
- 167. SIX-FOOT BALCONY
- 168. CONNECTION TO THE EARTH

decide on the arrangement of the gardens, and the places in the gardens;

- 169. TERRACED SLOPE
- 170. FRUIT TREES
- 171. TREE PLACES

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172. GARDEN GROWING WILD

173. GARDEN WALL

174. TRELLED WALK

175. GREENHOUSE

176. GARDEN SEAT

177. VEGETABLE GARDEN

178. COMPOST

go back to the inside of the building and attach the necessary minor rooms and alcoves to complete the main rooms;

179. ALCOVES

180. WINDOW PLACE

181. THE FIRE

182. EATING ATMOSPHERE

183. WORKSPACE ENCLOSURE

184. COOKING LAYOUT

185. SITTING CIRCLE

186. COMMUNAL SLEEPING

187. MARRIAGE BED

188. BED ALCOVE

189. DRESSING ROOM

fine tune the shape and size of rooms and alcoves to make them precise and buildable;

190. CEILING HEIGHT VARIETY

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- 191. THE SHAPE OF INDOOR SPACE
- 192. WINDOWS OVERLOOKING LIFE
- 193. HALF-OPEN WALL
- 194. INTERIOR WINDOWS
- 195. STAIRCASE VOLUME
- 196. CORNER DOORS

give all the walls some depth, wherever there are to be alcoves, windows, shelves, closets, or seats;

- 197. THICK WALLS
- 198. CLOSETS BETWEEN ROOMS
- 199. SUNNY COUNTER
- 200. OPEN SHELVES
- 201. WAIST-HIGH SHELF
- 202. BUILT-IN SEATS
- 203. CHILD CAVES
- 204. SECRET PLACE

At this stage, you have a complete design for an individual building. If you have followed the patterns given, you have a scheme of spaces, either marked on the ground, with stakes, or on a piece of paper, accurate to the nearest foot or so. You know the height of rooms, the rough size and position of windows and doors, and you know roughly how the roofs of the building, and the gardens are laid out.

The next, and last part of the language, tells how to

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make a buildable building directly from this rough scheme of spaces, and tells you how to build it, in detail.

Before you lay out structural details, establish a philosophy of structure which will let the structure grow directly from your plans and your conception of the buildings;

205. STRUCTURE FOLLOWS SOCIAL SPACES

206. EFFICIENT STRUCTURE

207. GOOD MATERIALS

208. GRADUAL STIFFENING

within this philosophy of structure, on the basis of the plans which you have made, work out the complete structural layout; this is the last thing you do on paper, before you actually start to build;

209. ROOF LAYOUT

210. FLOOR AND CEILING LAYOUT

211. THICKENING THE OUTER WALLS

212. COLUMNS AT THE CORNERS

213. FINAL COLUMN DISTRIBUTION

put stakes in the ground to mark the columns on the site, and start erecting the main frame of the building according to the layout of these stakes;

214. ROOT FOUNDATIONS

215. GROUND FLOOR SLAB

216. BOX COLUMNS

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- 217. PERIMETER BEAMS
- 218. WALL MEMBRANES
- 219. FLOOR-CEILING VAULTS
- 220. ROOF VAULTS

within the main frame of the building, fix the exact positions for openings—the doors and windows—and frame these openings;

- 221. NATURAL DOORS AND WINDOWS
- 222. LOW SILL
- 223. DEEP REVEALS
- 224. LOW DOORWAY
- 225. FRAMES AS THICKENED EDGES

as you build the main frame and its openings, put in the following subsidiary patterns where they are appropriate;

- 226. COLUMN PLACE
- 227. COLUMN CONNECTION
- 228. STAIR VAULT
- 229. DUCT SPACE
- 230. RADIANT HEAT
- 231. DORMER WINDOWS
- 232. ROOF CAPS

put in the surfaces and indoor details;

- 233. FLOOR SURFACE
- 234. LAPPED OUTSIDE WALLS

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- 235. SOFT INSIDE WALLS
- 236. WINDOWS WHICH OPEN WIDE
- 237. SOLID DOORS WITH GLASS
- 238. FILTERED LIGHT
- 239. SMALL PANES
- 240. HALF-INCH TRIM

build outdoor details to finish the outdoors as fully as the indoor spaces;

- 241. SEAT SPOTS
- 242. FRONT DOOR BENCH
- 243. SITTING WALL
- 244. CANVAS ROOFS
- 245. RAISED FLOWERS
- 246. CLIMBING PLANTS
- 247. PAVING WITH CRACKS BETWEEN
THE STONES
- 248. SOFT TILE AND BRICK

complete the building with ornament and light and color and your own things;

- 249. ORNAMENT
- 250. WARM COLORS
- 251. DIFFERENT CHAIRS
- 252. POOLS OF LIGHT
- 253. THINGS FROM YOUR LIFE

CHOOSING A LANGUAGE
FOR YOUR PROJECT

All 253 patterns together form a language. They create a coherent picture of an entire region, with the power to generate such regions in a million forms, with infinite variety in all the details.

It is also true that any small sequence of patterns from this language is itself a language for a smaller part of the environment; and this small list of patterns is then capable of generating a million parks, paths, houses, workshops, or gardens.

For example, consider the following ten patterns:

PRIVATE TERRACE ON THE STREET (140)

SUNNY PLACE (161)

OUTDOOR ROOM (163)

SIX-FOOT BALCONY (167)

PATHS AND GOALS (120)

CEILING HEIGHT VARIETY (190)

COLUMNS AT THE CORNERS (212)

FRONT DOOR BENCH (242)

RAISED FLOWERS (245)

DIFFERENT CHAIRS (251)

This short list of patterns is itself a language: it is one of a thousand possible languages for a porch, at the front of a house. One of us chose this small language, to build

CHOOSING A LANGUAGE FOR YOUR SUBJECT

a porch onto the front of his house. This is the way the language, and its patterns, helped to generate this porch.

I started with **PRIVATE TERRACE ON THE STREET** (140). That pattern calls for a terrace, slightly raised, connected to the house, and on the street side. **SUNNY PLACE** (161) suggests that a special place on the sunny side of the yard should be intensified and made into a place by the use of a patio, balcony, outdoor room, etc. I used these two patterns to locate a raised platform on the south side of the house.

To make this platform into an **OUTDOOR ROOM** (163), I put it half under the existing roof overhang, and kept a mature pyracanthus tree right smack in the middle of the platform. The overhead foliage of the tree added to the roof-like enclosure of the space. I put a wind screen of fixed glass on the west side of the platform too, to give it even more enclosure.

I used **SIX-FOOT BALCONY** (167) to determine the size of the platform. But this pattern had to be used judiciously and not blindly—the reasoning for the pattern has to do with the minimum space required for people to sit comfortably and carry on a discussion around a small side-table. Since I wanted space for at least two of these conversation areas—one under the roof for very hot or rainy days, and one out under the sky for days when you wanted to be full in the sun, the balcony had to be made 12 x 12 feet square.

NEW PATHS AND GOALS (120): Usually, this pattern deals with large paths in a neighborhood, and comes much earlier in a language. But I used it in a special way. It says that the paths which naturally get formed by people's walking, on the land, should be preserved and intensified. Since the path to our front door cut right across the corner of the place where I had planned to put the platform, I cut the corner of the platform off.

The height of the platform above the ground was determined by **CEILING HEIGHT VARIETY** (190). By building the platform approximately one foot above the ground line, the ceiling height of the covered portion came out at between 6 and 7 feet—just right for a space as small as this. Since this height above the ground level is just about right for sitting, the pattern **FRONT DOOR BENCH** (242) was automatically satisfied.

There were three columns standing, supporting the roof over

CHOOSING A LANGUAGE FOR YOUR SUBJECT

the old porch. They had to stay where they are, because they hold the roof up. But, following *COLUMNS AT THE CORNERS* (212), the platform was very carefully tailored to their positions—so that the columns help define the social spaces on either side of them.

Finally, we put a couple of flower boxes next to the “front door bench”—it’s nice to smell them when you sit there—according to *RAISED FLOWERS* (245). And the old chairs you can see in the porch are *DIFFERENT CHAIRS* (251).

You can see, from this short example, how powerful and simple a pattern language is. And you are now, perhaps ready to appreciate how careful you must be, when you construct a language for yourself and your own project.



The finished porch

The character of the porch is given by the ten patterns in this short language. In just this way, each part of the environment is given its character by the collection of patterns which we choose to build into it. The character of what you build, will be given to it by the language of patterns you use, to generate it.

CHOOSING A LANGUAGE FOR YOUR SUBJECT

For this reason, of course, the task of choosing a language for your project is fundamental. The pattern language we have given here contains 253 patterns. You can therefore use it to generate an almost unimaginably large number of possible different smaller languages, for all the different projects you may choose to do, simply by picking patterns from it.

We shall now describe a rough procedure by which you can choose a language for your own project, first by taking patterns from this language we have printed here, and then by adding patterns of your own.

1. First of all, make a copy of the master sequence (pages xix–xxxiv) on which you can tick off the patterns which will form the language for your project. If you don't have access to a copying machine, you can tick off patterns in the list printed in the book, use paper clips to mark pages, write your own list, use paper markers—whatever you like. But just for now, to explain it clearly, we shall assume that you have a copy of the list in front of you.

2. Scan down the list, and find the pattern which best describes the overall scope of the project you have in mind. This is the starting pattern for your project. Tick it. (If there are two or three possible candidates, don't worry: just pick the one which seems best: the others will fall in place as you move forward.)

3. Turn to the starting pattern itself, in the book, and read it through. Notice that the other patterns mentioned by name at the beginning and at the end, of the pattern you are reading, are also possible candidates for your language. The ones at the beginning will tend to be "larger" than your project. Don't include them, unless

CHOOSING A LANGUAGE FOR YOUR SUBJECT

you have the power to help create these patterns, at least in a small way, in the world around your project. The ones at the end are "smaller." Almost all of them will be important. Tick all of them, on your list, unless you have some special reason for not wanting to include them.

4. Now your list has some more ticks on it. Turn to the next highest pattern on the list which is ticked, and open the book to that pattern. Once again, it will lead you to other patterns. Once again, tick those which are relevant—especially the ones which are "smaller" that come at the end. As a general rule, do not tick the ones which are "larger" unless you can do something about them, concretely, in your own project.

5. When in doubt about a pattern, don't include it. Your list can easily get too long: and if it does, it will become confusing. The list will be quite long enough, even if you only include the patterns you especially like.

6. Keep going like this, until you have ticked all the patterns you want for your project.

7. Now, adjust the sequence by adding your own material. If there are things you want to include in your project, but you have not been able to find patterns which correspond to them, then write them in, at an appropriate point in the sequence, near other patterns which are of about the same size and importance. For example, there is no pattern for a sauna. If you want to include one, write it in somewhere near BATHING ROOM (144) in your sequence.

8. And of course, if you want to change any patterns, change them. There are often cases where you may have a personal version of a pattern, which is more true, or

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more relevant for you. In this case, you will get the most “power” over the language, and make it your own most effectively, if you write the changes in, at the appropriate places in the book. And, it will be most concrete of all, if you change the name of the pattern too—so that it captures your own changes clearly.



Suppose now that you have a language for your project. The way to use the language depends very much on its scale. Patterns dealing with towns can only be implemented gradually, by grass roots action; patterns for a building can be built up in your mind, and marked out on the ground; patterns for construction must be built physically, on the site. For this reason we have given three separate instructions, for these three different scales. For towns, see page 3; for buildings, see page 463; for construction, see page 935.

The procedures for each of these three scales are described in much more detail with extensive examples, in the appropriate chapters of *The Timeless Way of Building*. For the town—see chapters 24 and 25; for an individual building—see chapters 20, 21, and 22; and for the process of construction which describes the way a building is actually built see chapter 23.

THE POETRY OF THE LANGUAGE

Finally, a note of caution. This language, like English, can be a medium for prose, or a medium for poetry. The difference between prose and poetry is not that different languages are used, but that the same language is used, differently. In an ordinary English sentence, each word has one meaning, and the sentence too, has one simple meaning. In a poem, the meaning is far more dense. Each word carries several meanings; and the sentence as a whole carries an enormous density of interlocking meanings, which together illuminate the whole.

The same is true for pattern languages. It is possible to make buildings by stringing together patterns, in a rather loose way. A building made like this, is an assembly of patterns. It is not dense. It is not profound. But it is also possible to put patterns together in such a way that many many patterns overlap in the same physical space: the building is very dense; it has many meanings captured in a small space; and through this density, it becomes profound.

In a poem, this kind of density, creates illumination, by making identities between words, and meanings, whose identity we have not understood before. In "O Rose thou art sick," the rose is identified with many

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greater, and more personal things than any rose—and the poem illuminates the person, and the rose, because of this connection. The connection not only illuminates the words, but also illuminates our actual lives.

O Rose thou art sick.
The invisible worm,
That flies in the night
In the howling storm:

Has found out thy bed
Of crimson joy:
And his dark secret love
Does thy life destroy.

WILLIAM BLAKE

The same exactly, happens in a building. Consider, for example, the two patterns BATHING ROOM (144) and STILL WATER (71). One defines a part of a house where you can bathe yourself slowly, with pleasure, perhaps in company; a place to rest your limbs, and to relax. The other is a place in a neighborhood, where this is water to gaze into, perhaps to swim in, where children can sail boats, and splash about, which nourishes those parts of ourselves which rely on water as one of the great elements of the unconscious.

Suppose now, that we make a complex of buildings where individual bathing rooms are somehow connected to a common pond, or lake, or pool—where the bathing room merges with this common place; where there is no sharp distinction between the individual and family processes of the bathing room, and the common pleasure of the common pool. In this place, these two patterns

exist in the same space; they are identified; there is a compression of the two, which requires less space, and which is more profound than in a place where they are merely side by side. The compression illuminates each of the patterns, sheds light on its meaning; and also illuminates our lives, as we understand a little more about the connections of our inner needs.

But this kind of compression is not only poetic and profound. It is not only the stuff of poems and exotic statements, but to some degree, the stuff of every English sentence. To some degree, there is compression in every single word we utter, just because each word carries the whisper of the meanings of the words it is connected to. Even "Please pass the butter, Fred" has some compression in it, because it carries overtones that lie in the connections of these words to all the words which came before it.

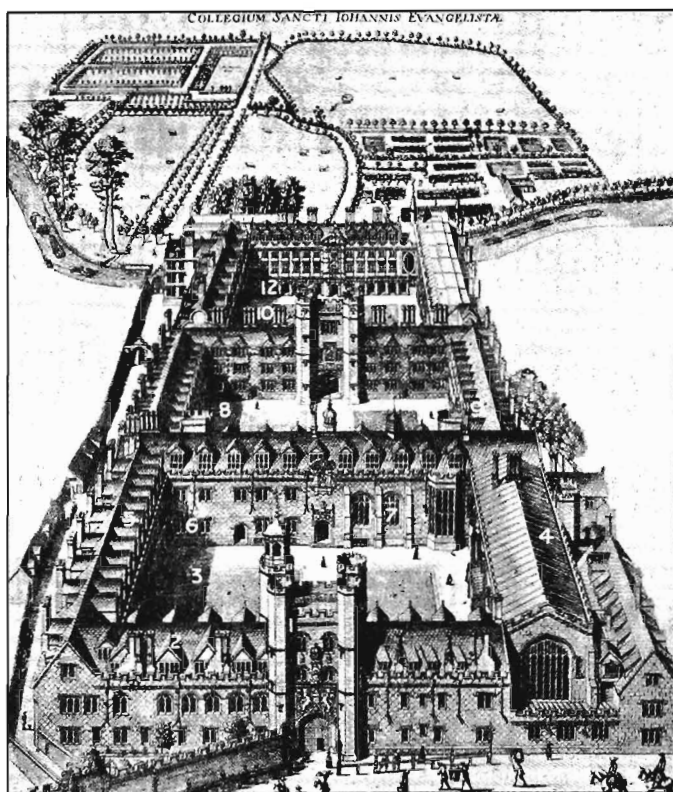
Each of us, talking to our friends, or to our families, makes use of these compressions, which are drawn out from the connections between words which are given by the language. The more we can feel all the connections in the language, the more rich and subtle are the things we say at the most ordinary times.

And once again, the same is true in building. The compression of patterns into a single space, is not a poetic and exotic thing, kept for special buildings which are works of art. It is the most ordinary economy of space. It is quite possible that all the patterns for a house might, in some form be present, and overlapping, in a simple one-room cabin. The patterns do not need to be strung out, and kept separate. Every building, every room,

every garden is better, when all the patterns which it needs are compressed as far as it is possible for them to be. The building will be cheaper; and the meanings in it will be denser.

It is essential then, once you have learned to use the language, that you pay attention to the possibility of compressing the many patterns which you put together, in the smallest possible space. You may think of this process of compressing patterns, as a way to make the cheapest possible building which has the necessary patterns in it. It is, also, the only way of using a pattern language to make buildings which are poems.

98 CIRCULATION REALMS**



. . . once you have some rough idea how many buildings you are going to build—BUILDING COMPLEX (95), and how high they are to be—NUMBER OF STORIES (96), you can work out roughly what kind of layout they should have to make the access to them clear and comfortable. This pattern defines the overall philosophy of layout.



In many modern building complexes the problem of disorientation is acute. People have no idea where they are, and they experience considerable mental stress as a result.

. . . the terror of being lost comes from the necessity that a mobile organism be oriented in its surroundings. Jaccard quotes an incident of native Africans who became disoriented. They were stricken with panic and plunged wildly into the bush. Witkin tells of an experienced pilot who lost his orientation to the vertical, and who described it as the most terrifying experience in his life. Many other writers in describing the phenomenon of temporary disorientation in the modern city, speak of the accompanying emotions of distress. (Kevin Lynch, *The Image of the City*, Cambridge, Mass.: MIT Press, 1960, p. 125.)

It is easiest to state the circulation problem for the case of a complete stranger who has to find his way around the complex of buildings. Imagine yourself as the stranger, looking for a particular address, within the building. From your point of view, the building is easy to grasp if someone can explain the position of this address to you, in a way you can remember easily, and carry in your head while you are looking for it. To put this in its most pungent form: *a person must be able to explain any given address within the building, to any other person, who does not know his way around, in one sentence.* For instance, "Come straight through the main gate, down the main path and turn into the second little gate, the small one with the blue grillwork—you can't miss my door."

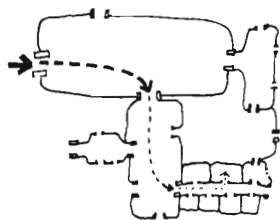
At first sight, it might seem that the problem is only important for strangers—since a person who is familiar with a building can find his way around no matter how badly it is organized.

BUILDINGS

However, psychological theory suggests that the effect of badly laid out circulation has almost as bad an effect on a person who knows a building, as it does on a stranger. We may assume that every time a person goes toward some destination, he must carry some form of map or instruction in his mind. The question arises: How much of the time does he have to be consciously thinking about this map and his destination? If he spends a great deal of time looking out for landmarks, thinking about where to go next, then his time is entirely occupied, and leaves him little time for the process of reflection, tranquil contemplation, and thought.

We conclude that any environment which requires that a person pay attention to it constantly is as bad for a person who knows it, as for a stranger. A good environment is one which is easy to understand, without conscious attention.

What makes an environment easy to understand? What makes an environment confusing? Let us imagine that a person is going to a particular address within a building. Call this address A. The person who is looking for A does not go directly toward A—unless it happens to be visible from the point where he starts. Instead, he sets his journey up to form a series of steps, in which each step is a kind of temporary intermediate goal, and a taking off point for the next step. For example: First go through the gate, then to the second courtyard on the left, then to the right-hand arcade of the courtyard, and then through the third door. This sequence is a kind of map which the person has in his head. If it is always easy to construct such a map, it is easy to find your way around the building. If it is not easy, it is hard to find your way around.



The way the map in your mind works.

A map works because it identifies a nested system of realms (in the case of our example the realms are first, the building itself, then the courtyard, then the arcade, then the room itself, the destination). The map guides you to the entrance of the largest realm, and from there to the entrance of the next largest realm, and so on. You make one decision at a time, and each decision you make narrows down the extent of the building which remains to be explored, until you finally narrow it down to the particular address you are looking for.

It seems reasonable to say that any useful map through a building complex must have this structure, and that any building complex in which you cannot create maps of this kind is confusing to be in. This is borne out by intuition. Consider these two examples; each has a system of realms which allows you to make such maps very easily.

An Oxford college. Here the college is made up of courts, each court has a collection of rooms called a "staircase" opening off it, and the individual suites of rooms open off these staircases. The realms are: College, Courts, Staircases, Rooms.

Manhattan. Here the city is made up of major areas, each major area has certain central streets and arteries. The realms are: Manhattan, Districts, Realms defined by the avenues, and Realms defined by cross streets and individual buildings. Manhattan is clear because the districts are so well defined, and the realms defined by the streets are subordinate to the realms defined by the avenues.

We conclude that in order to be clear, a building complex must follow three rules:

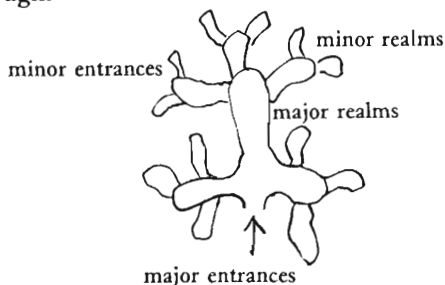
1. It is possible to identify a nested system of realms in the complex, the first and largest of these realms being the entire complex.
2. Each realm has a main circulation space, which opens directly from the entrances to that realm.
3. The entrances to any realm open directly off the circulation space of the next larger realm above it.

We emphasize finally, that these realms at every level must have *names*; and this requires, in turn, that they be well enough defined physically, so that they can in fact be named, and so that one knows where the realm of that name starts, and where it

stops. The realms do not have to be as precise as in the two examples we have given. But they must have enough psychological substance and existence so that they can honestly work as realms in somebody's mind.

Therefore:

Lay out very large buildings and collections of small buildings so that one reaches a given point inside by passing through a sequence of realms, each marked by a gateway and becoming smaller and smaller, as one passes from each one, through a gateway, to the next. Choose the realms so that each one can be easily named, so that you can tell a person where to go, simply by telling him which realms to go through.



Treat the first entrances to the whole system of circulation realms, the very largest ones, as gateways—MAIN GATEWAYS (53); make the major realms, which open off the gateways, pedestrian streets or common land—COMMON LAND (67), PEDESTRIAN STREET (100); then, make minor realms with individual buildings, and courtyards, and major indoor streets—MAIN BUILDING (99), BUILDING THOROUGHFARE (101), HIERARCHY OF OPEN SPACE (114), COURTYARDS WHICH LIVE (115); and mark the entrance to these minor realms with minor entrances that still stand out quite clearly—FAMILY OF ENTRANCES (102), MAIN ENTRANCE (110). Make the layout of paths consonant with PATHS AND GOALS (120). . . .