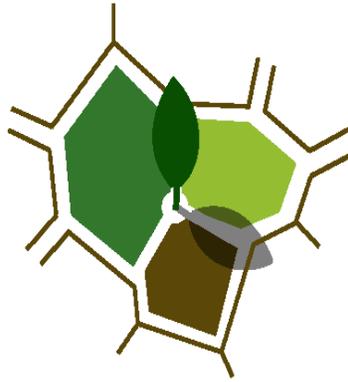


What Exactly is “A Pattern Language?”



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PATTERN: 1) A fully realized form, original, or model accepted or proposed for imitation:
Something regarded as a normative example to be copied: ARCHETYPE

5) An artistic or mechanical design or form.

15) The manner in which smaller units of a language are grouped or groupable
into larger units. – *Webster's*

LANGUAGE: Any method of communicating ideas, as by a system of signs, symbols, or
gestures, or the like. – *American Heritage*

A pattern language is obviously a language of patterns; but why does that seem so abstract, so intangible? An ordinary language of words, sentences, grammar, syntax, etc., seems much more straightforward, much easier to grasp; but that's only because that kind of language is so primordially ingrained in our behavior and modes of cognition that its usage proceeds subconsciously, usually effortlessly. A closer examination, however, will reveal that such a language is, in fact, composed of patterns, and that all languages – that is *communication systems* – are indeed essentially 'pattern' languages.

In order to support this claim, I am going to scan *The Timeless Way of Building* (Volume 1 in the Center for Environmental Structure series) looking for specific quotes that provide elucidation. The author says of this book: “[I]t lays the foundation of the series. It presents a new theory of architecture, building, and planning which has, at its core, that age-old process by which people of a society have always pulled the order of their world from their own being.”

This book provides the philosophy of procedure used in Volume 2 of the series, *A Pattern Language*, and should be read first. The author says of Volume 2: “[I]t is a working document for such an [organic] architecture. It is an archetypal language which allows any lay person or group of persons to design any part of the environment for themselves. It applies equally to the design of houses, public buildings, neighborhoods, streets, gardens, individual window seats.”

Volume 3 in the series, *The Oregon Experiment*, “is the first of the series to describe in full detail how this theory may be implemented.”

Keeping in mind that these quotes are coming from an architect-designer with the intended purpose of introducing and formulating a methodology specifically for the construction of “towns” and “buildings,” nevertheless, he does a good job of clarifying the use of a “pattern language” for any purpose, and drawing the comparisons between a language of patterns and a language of words.

The quotes:

- 🌈 [The Timeless Way] is a process which brings order out of nothing but ourselves; it cannot be attained, but it will happen of its own accord, if we will only let it. (p. 3)
- 🌈 There is a central quality which is the root criterion of life and spirit in a [person]. A town, a building, or a wilderness. This quality is objective and precise, but it cannot be named. (p. 19)
- 🌈 The search which we make for this quality, in our own lives, is the central search of any person, and the crux of any individual person's story. It is the search for those moments and situation when we are most alive. (p. 41)
- 🌈 In order to define this quality in buildings and in towns, we must begin by understanding that every place is given its character by certain patterns of events that keep on happening there. (p. 55)
- 🌈 We can come alive only to the extent the buildings and towns we live in are alive. (p. 62)
- 🌈 We know, then, that what matters in a building or a town is not its outward shape, its physical geometry alone, but the events that happen there. (p. 65)
- 🌈 And indeed, the world does have a structure, just because these patterns of events which repeat themselves are always anchored in the space. (p. 69)
- 🌈 This close connection between patterns of events and space is commonplace in nature. (p. 73)
- 🌈 These patterns of events are always interlocked with certain geometric patterns in the space. Indeed...each building and each town is ultimately made out of these patterns in the space, and out of nothing else. (p. 75)
- 🌈 On the geometric level, we see certain physical elements repeating endlessly, combined in an almost endless variety of combinations. (p. 82)
- 🌈 Beyond its elements, each building is defined by certain patterns of relationships among the elements. (p. 85)
- 🌈 Evidently, then, a large part of the "structure" of a building or town consists of patterns of relationships. (p. 87)
- 🌈 When we look closer, we realize that these relationships are not extra, but necessary to the elements, indeed a part of them...the fact is that the elements *themselves* are patterns of relationships. (p. 88)
- 🌈 Each one of these patterns is a morphological law, which establishes a set of relationships in space...And each law or pattern is itself a pattern of relationships among still other laws, which are themselves just patterns of relationships again. (p. 90)
- 🌈 Further, each pattern in the space has a pattern of events associated with it. (p. 91)

- [T]here is a fundamental inner connection between each pattern of events, and the pattern of space in which it happens. (p. 92)
- We realize then that it is just the patterns of events in space which are repeating in the building or the town: and *nothing else*. (p. 94)
- Each building [or town or artifact] gets its character from just the patterns which keep on repeating there. (p. 95)
- Of course the patterns vary from place to place, from culture to culture, from age to age...But still, in every age and every place the structure of our world is given to it, essentially, by some collection of patterns which keeps on repeating over and over and over again. (p. 100)
- The specific patterns out of which a building or a town is made may be alive or dead. To the extent that they are alive, they let our inner forces loose, and set us free; but when they are dead they keep us locked in inner conflict. (p. 101)
- Yet it is obvious, intuitively, that some towns and buildings are more full of life; and others less. If they all get their character from the patterns they are made of, then somehow the greater sense of life which fills one place, and which is missing from another, must be created by these patterns too. (p. 105)
- It is therefore clear that patterns play a concrete and objective role in determining the extent to which we come to life in any given place. (p. 115)
- Good patterns are good because to some extent each one of them reaches the quality without a name itself. (p. 116)
- The more living patterns there are in a thing – a room, a building, or a town – the more it comes to life as an entirety, the more it glows, the more it has this self-maintaining fire, which is the quality without a name. (p. 123)
- Each pattern helps to sustain other patterns. (p. 131)
- And finally the quality without a name appears, not when an isolated pattern lives, but when an entire system of patterns, interdependent at many levels, is all stable and alive. (p. 135)
- And when a building has this fire, then it becomes a part of nature...(p. 137)
- On the other hand, of course, we shall find the physical parts in which the patterns manifest themselves unique and slightly different each time they occur...The repetition of patterns is quite a different thing from the repetition of parts. (p. 150)
- Indeed, the different parts will be unique *because* the patterns are the same. (p. 151)
- To reach the quality without a name we must then build a living pattern language as a gate. (p. 155)
- So I began to wonder if there was a code, like the genetic code, for human acts of building?...It turns out there is. It takes the form of a language. (p. 166)

- The people can shape buildings for themselves, and have done it for centuries, by using languages which I call pattern languages. A pattern language gives each person who uses it, the power to create an infinite variety of new and unique buildings, just as his ordinary language gives him the power to create an infinite variety of sentences. (p. 167)
- Each pattern is a rule which describes what you have to do to generate the entity which it defines. (p. 182)
- It is in this sense that the system of patterns forms a language. (p. 183)
- From a mathematical point of view, the simplest kind of language is a system which contains two sets: 1) a set of elements or symbols, and 2) a set of rules for combining these symbols. (p. 183)
- A natural language like English is a more complex system. (p. 184)
- A pattern language is a still more complex system of this kind. (p. 185)
- An ordinary language like English is a system which allows us to create an infinite variety of one-dimensional combinations of words, called sentences. (p. 185)
- A pattern language is a system which allows its users to create an infinite variety of those three-dimensional combinations of patterns which we call buildings, gardens, towns. (p. 186)
- In summary: both ordinary and pattern languages are finite combinatory systems which allow us to create an infinite variety of unique combinations, appropriate to different circumstances, at will. (p. 187)
- The rules of English make you creative because they save you from having to bother with meaningless combinations of words. (p. 206)
- A pattern language does the same. (p. 207)
- At all times, in every human culture, the entities of which the world is made are always governed by pattern languages which people use. (p. 210)
- And, beyond that, it is not just the shape of towns and buildings which comes to them from pattern languages, it is their quality as well. (p. 211)
- It may be hard to believe that one might make a work of art by simply combining patterns...But once again, the difficulty of believing it may have to do with the fact that we tend to think of patterns as "things," and keep forgetting that they are complex, and potent fields. (p. 223)
- To work our way toward a shared and living language once again, we must first learn how to discover patterns which are deep, and capable of generating life. (p. 243)
- Each pattern is a three-part rule, which expresses a relation between a certain context, a problem, and a solution. (p. 247)
- Patterns can exist at all scales. (p. 247)

- 🌈 To make a pattern explicit, we merely have to make the inner structure of the pattern clear. (p. 249)
- 🌈 [N]o matter what method is used, the pattern is an attempt to discover some invariant feature, which distinguishes good places from bad places with respect to some particular system of forces. (p. 260)
- 🌈 We may then gradually improve these patterns which we share, by testing them against experience: we can determine, very simply, whether these patterns make our surroundings live, or not, by recognizing how they make us feel. (p. 277)
- 🌈 Once we have understood how to discover individual patterns which are alive, we may then make a language for ourselves, for any building task we face. The structure of the language is created by the network of connections among individual patterns: and the language lives, or not, as a totality, to the degree these patterns form a whole. (p. 305)
- 🌈 Each pattern, then, depends both on the smaller patterns it contains, and on the larger patterns within which it is contained. (p. 312)
- 🌈 Each pattern sits at the center of a network of connections which connect it to certain other patterns that help to complete it...And it is the network of these connections between patterns which creates the language. (p. 313)
- 🌈 In this network, the links between the patterns are almost as much part of the language as the patterns themselves. (p. 314)
- 🌈 It is, indeed, the structure of the network which makes sense of individual patterns, because it anchors them, and helps make them complete. (p. 315)
- 🌈 The language is a good one, capable of making something whole, when it is morphologically and functionally complete. (p. 316)
- 🌈 We must therefore invent new patterns, whenever necessary, to fill out each pattern which is not complete. (p. 319)
- 🌈 When every pattern has its principal components given by the smaller patterns which lie immediately below it in the language, then the language is complete. (p. 322)
- 🌈 The individual buildings [or artifacts] which you make will live, or not, according to the depth and wholeness of the language which you use to make them with...once you have it, this language is general. If it has the power to make a single building live, it can be used a thousand times, to make a thousand buildings live. (p. 324)
- 🌈 Then finally, from separate languages for different building tasks, we can create a larger structure still, a structure of structures, evolving constantly, which is the common language for a town. This is the gate, (p. 325)

That's a pretty comprehensive list; it's sure to provide some comprehension regarding the use of pattern languages. The book goes on for some two-hundred more pages yet I think I have distilled enough of the fundamentals to make this collection of quotes useful.

If there is anything I would add or emphasize, it is this: *patterns are not things!* Ongoing use of the English language has compelled us to perceive the world as a collection of isolated, discrete, separate entities (thus we have a reductionist science). Patterns are more the connections, the relationships between things (elements); or between things (elements) and events; or between events (process). Realizing these distinctions will require shifting to a 'right-brain,' or more accurately 'whole-brain,' mode of perception.

Good luck with your patterns...