

Autarky architecture design principles

Forget about eternity

A building will most probably survive its present owner and/or its original intention.

The point of delivery only marks an end to the architect's involvement, but is just the starting point for an unpredictable series of users and uses.

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- 'Houses are the domain of slowly shifting fantasies and rapidly shifting needs. The widowed parent moves in; finances require letting out a room (new door and outdoor stair); accumulating stuff needs more storage (or public storage frees up some home space). Meanwhile desires accumulate for a new deck, a hot tub, a modernized kitchen, a luxurious bathroom, a walk-in closet, a hobby refuge in the garage, a kid refuge in the basement or attic, a whole new master bedroom.' (Stewart Brand — 'How buildings learn', p.10)

Keep it simple

The more sophisticated integrated systems and techniques are, the more likely they are to break or to be one day out-of-date. A transparent and understandable construction as well as an accessible infrastructure will make life within easier.

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- 'But most modern buildings, especially tall ones, have complex infrastructures for lighting, heating plumbing, and electricity. It's hard to make this infrastructure adapt to new purposes.' (Richard Sennett — 'The Open City')

Enable adaption

An open building program allows later change and adaption.

It will invite people to alter and play around with over time and is designed for growth.

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- 'An adapted state is not an end state. A successful building has to be periodically challenged and refreshed, or it will turn into a beautiful corpse. The scaffolding was never taken completely down around Europe's medieval cathedrals because that would imply that they were finished and perfect, and that would be an insult to God.' (Stewart Brand — 'How buildings learn', p.209)
- 'Once we break the strangle-hold of function on form, once buildings are less tightly fit-for-purpose, they can become living, evolving structures.' (Richard Sennett — 'The Open City')

Imagine reconfiguration

Modularity on all scales and the integration of time into design ensures that building materials and components can be taken apart, altered and changed without being wasted.

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- 'Brian Eno wrote: 'I think that humans have a taste for things that not only show that they have been through a process of evolution, but which also show they are still part of one. They are not dead yet.' ... If Eno is right, those are the best years, the time when the building can engage us at our own level of complexity.' (Stewart Brand — 'How buildings learn', p.11)

Record change

A building won't be finished when it's construction is completed—aging and future adaptations are part of an extended construction process. Recording these changes in a logbook keeps track of a building's learning process and makes it visible and usable for its future inhabitants.

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- "‘Preservation IS maintenance’ John Ruskin himself, the founder of anti-scrape preservation, intoned, ‘Take proper care of your monuments, and you will not need to restore them.’ (Stewart Brand — 'How buildings learn', p.110)

Consider tactility

There are materials that age gracefully and others that don't. Since a building is not a rendering nor an architectural photography, it's real life is actually starting after the picture is taken.

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- 'Things should not be new, but neither should they be rotten with age. Buildings should be just ripe—worn but still fully functional. Genuinely old buildings are constantly refreshed, but not too far, and new buildings are forced to ripen. (Stewart Brand — 'How buildings learn', p.10)
- 'Wood is already the most adaptive of all building materials because amateurs are comfortable messing with it.' (Stewart Brand — 'How buildings learn', p.209)

Allow imperfection

Perfection can be intimidating - or dead, whereas imperfection leaves room for an own interpretation. Even failure can be a necessary step in a larger learning process and reveal unforeseen possibilities.

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- 'Incomplete form is a basic principle in the good conduct of social life in general. In sociology, incomplete form goes by the name of 'dialogics.' In everyday social life, it's what we mean by good listening skills, or by sensing what people mean to say but can't find exactly the right words for, or by putting disconnected bits of ideas together when people talk to one another. (Richard Sennett — 'The Open City')
- 'Christopher Alexander routinely cites the authority of the Japanese artistic virtue of wabi kasabi — 'the recognition that in a beautiful thing there is always some part which is lovingly and carefully done, and some parts which are very roughly done, because the compensation between the two is necessary in a real thing.' (Stewart Brand — 'How buildings learn', p.206)

Respect tradition

By listening and observing at what is there already and why it is there the way it is, the wisdom of the past can be integrated it into a contemporary practise, that makes use of local material, methods and considers site specific knowledge.

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- Vernacular building traditions have the attention span to incorporate generational knowledge about long-term problems such as maintaining and growing a building over time. (Stewart Brand — 'How buildings learn', p.206)

Mix everything .. carefully

If materials, functionalities, ownership, occupants' age etc. are well mixed they create synergies: a system in which all these components complement each other and as a whole create a dynamic balance.

Autarky architecture building patterns

Modular building units

- 'As for the shape: be square. The only configuration of space that grows well and subdivides well and is really efficient to use is the rectangle. (...) If you start boxy and simple, outside and in, then you can let complications develop over time, responsive to use. Prematurely convoluted surfaces are expensive to build, a nuisance to maintain, and hard to change.' (Stewart Brand — 'How buildings learn', p.192)

Long thin structures

- Arrange each building so that it breaks down into wings which correspond, approximately, to the most important natural social groups within the building. Make each building as long and narrow as you can - never more than 25 feet wide. (Christopher Alexander — 'A pattern language', pattern 107)
- 'If we treat the presence of natural light as an essential -not optional- feature of indoor space, then no building could ever be more than 20-25 feet deep, since no point in a building which is more than 12 or 15 feet from a window, can get good natural light.' (Christopher Alexander — 'A pattern language', pattern 107)

Connected buildings

- 'The cluster of land and the homes immediately around one's own home is the source for gradual differentiation of neighborhood land use, and it is the natural focus of neighborly interaction.' (Christopher Alexander — 'A pattern language', pattern 37)
- 'Connected buildings force people to learn how to adapt to the realities outside them, which are greater, and more impenetrable than they are.' (Christopher Alexander — 'A pattern language', pattern 108)
- 'Try to form new buildings as continuations of the older buildings.' (Christopher Alexander — 'A pattern language', pattern 108)

Positive outdoor space

- 'Make all the outdoor spaces which surround and lie between your buildings positive. Give each one some degree of enclosure; surround each space with wings of buildings, trees, hedges, fences, arcades and trellised walks, until it becomes an entity with a positive quality and does not spill out indefinitely around corners.' (Christopher Alexander — 'A pattern language', pattern 106)
- 'The shape of the outdoor space is as important as the shape of the buildings which surround it.' (Christopher Alexander — 'A pattern language', pattern 106)

South facing

- 'Perhaps the most important single fact about a building. If the building is placed right, the building and its gardens will be happy places full of activity and laughter. If it is done wrong, then all the attention in the world, and the most beautiful details, will not prevent it from being a slightly gloomy place.' (Christopher Alexander — 'A pattern language', pattern 105)

Arcades / Balconies

- 'Arcades create an ambiguous territory between the public world and the private world.' (Christopher Alexander — 'A pattern language', pattern 119)
- 'Apart from lending Unity to the streetscape, arcades often take the place of the ancient forums.' (Bernard Rudofsky — Streets for people)
- '(...) every building needs at least one place, and preferably a whole range of places, where people can be still within the building, but in touch with the people and the scene outside.' (Christopher Alexander — 'A pattern language', pattern 166)

Open stairs

- 'Open stairs has in its nature the fact of independence, free comings and goings.' (Christopher Alexander — 'A pattern language', pattern 158)
- 'Open stairs act as extensions of the public world.' (Christopher Alexander — 'A pattern language', pattern 158)

Connection to the earth

- 'A house feels isolated from the nature around it, unless its floors are interleaved directly with the earth that is around the house.' (Christopher Alexander — 'A pattern language', pattern 168)

Thin window frames / Small panes

- 'The smaller the windows are, and the smaller the panes are, the more intensely windows help connect us with what is on the other side.' (Christopher Alexander — 'A pattern language', pattern 239)
- 'When we consider a window as an eye through which to see a view, we must recognize that it is the extent to which the window frames the view, increases its intensity, increases its variety, even increases the number of views we seem to see.' (Christopher Alexander — 'A pattern language', pattern 239)