

Lifeless architecture

Description

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Architecture has more in common with geology than biology. At least this is one of the conclusions I take from a series of interesting articles from a special issue of *Arq* (*Architecture Research Quarterly*) on architecture and biotechnology.

More accurately, itâ??s the skeletons, hardened excreta, dead tissue, and shells that provide the structural support for organic life, and that outlive the living organisms that produce them. Such rigid materials also associate more readily with the life span of a building than soft, motile tissue.

Some organic material eventually breaks down and turns back into non-living carbon deposits, limestone, flint, marble and other substances that end up in buildings.

In any case, the buildings that have survived from antiquity tend to be made of geological material â?? i.e. hard stone.

Amidst an enthusiasm for an architecture that mimics the biological, professor of experimental anatomy Jamie Davies outlines several points at which architecture and biology depart company.

Whereas buildings are constructed following plans in a top down manner, organisms develop piecemeal, responding to local conditions, from the bottom up. Organisms also rely on feedback from their environment via small interactions that then propagate to the formation of the whole organism. That much is obvious.



Building maintenance

But the lifelessness of buildings turns out to be architectureâ??s major asset. After all, because they are non-living, the functioning of a building can be halted momentarily for maintenance and improvement. Unlike zygotes and embryos buildings do not have to start functioning until they are built: â??Human-designed buildings and other machines have to [â?¦] function only once they are completed: furthermore, function can be suspended when maintenance and alteration have to take place. Developing bodies, on the other hand, have to be viable throughoutâ?• (48).

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There is some appeal in the idea of buildings that live and breathe, adapt to their surroundings, and either incorporate living material, or integrate synthetic structures and materials built on organic principles. Some architects even propose *nanobuildings* â??that will be â??grownâ?? from the subatomic levelâ?• and start their life in a vat (John Johansen).

But living things die, can be killed off, and are extremely sensitive to environmental conditions: â??while the idea of â??growing your own buildingâ?? may be attractive, a truly living building would have the disadvantage that individual living things are easily killedâ?• (49). Davies invokes P.B. Shelleyâ??s poem *Ozymandias*, where all that remained of the mighty Pharaoh was a stone statue in ruins on the desert floor. Davies remarks, â??as fossilised shells silently state with a different kind of eloquence, stone artefacts long outlast their organic buildersâ?• (49).

References

- Davies, Jamie A. 2016. Machines for living in: Connections and contrasts between designed architecture and the development of living forms. *Arq (Architectural Research Quarterley)*, (20) 1, 45-50.
- Johansen, John M. 2011. *Nanoarchitecture: A Discourse Part I*. johnmjohansen.com

Note

- Image is of Siwa Oasis, Egypt, 2005.

Category

1. Nature

Tags

1. architecture
2. biology
3. buildings
4. geology

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Author
rcoyne99

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