Natural models

JOHN RIDPATH

Peder Anker

FROM BAUHAUS TO ECOHOUSE
A history of ecological design
216pp. Baton Rouge: Louisiana State University Press. $34.95.
978 0 8071 3551 8

According to its blurb, Peder Anker's *From Bauhaus to Ecohouse* is concerned with a long-standing – but critically neglected – debate about "environmentally sensitive architecture". It isn't – though Anker's own introduction seems to promise something similar: "Global warming has brought ecological design to the forefront of recent architectural journalism and academic debate. Despite claims to novelty, much of this discussion reflects back on earlier ideas". There is an important distinction to make here: environmentalism and ecology are not synonymous. And as it turns out, the difference between the two is at the heart of this study of ecological science and design.

"Ecology", Anker reminds us, has its etymological origins in the human house, *oikos*, "the most anthropocentric object on earth". While an environmentalist might like to think of ecology as a world-view which does not put mankind at its centre, movements like the Bauhaus first came to the science with this human focus in mind. Indeed, Walter Gropius had marked out the school's artistic commitment to the built environment in his *Manifesto of the Bauhaus* (1919): "The ultimate aim of all creative activity is a building! . . . Architects, painters, and sculptors must once again come to know and comprehend the composite character of a building, both as an entity and in terms of its various parts".

Yet the Bauhaus did not truly embrace ecology until after their facilities in Germany were closed in 1933. Several figures in the school moved to London in the mid-1930s. Gropius, Marcel Breuer, László Moholy-Nagy and Herbert Bayer lived together in the Lawn Row Flats in Hampstead, a communal living space also known as the Isokon Building. It was during his stay here that Moholy-Nagy began to think about "nature as a construction model", argued that artists should look for "prototypes in nature" and described architecture as "an organic component of living". London Zoo's penguin pool (1934), a triumph of Bauhaus-style modernist architecture, perhaps seems as unnatural and inorganic as buildings get, but the principal designer Berthold Lubetkin took the inspiration for its double helix ramps and angular concrete from ecology. Mechanistic and mathematical approaches were beginning to dominate biological science at the time, and architects like Lubetkin saw geometric forms as the building blocks of nature. And as Anker shows, there was a political importance to displaying animals flourishing in such environments: it suggested that humans could also thrive in the new ecological settings offered by the Bauhaus and their followers. London Zoo became a laboratory for experiments at the intersection of ecology and architecture, staking out modernist visions for urban design and town planning. The English evolutionary biologist Julian Huxley even envisaged a future in which there would "no longer be the lamentable contrast between the accommodation provided for the gorillas at the London Zoo and the human population of our towns".

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Other members of the Bauhaus put these words into action. One of Bayer's greatest ecological achievements was not a building, but a book. *The World Geo-Graphic Atlas*, published in 1953, was designed to promote a harmonious relationship between the social and natural worlds. The artist/craftsman was not to imitate nature, but to "create a spiritual world of itself side-by-side with nature". In recognizing the boundary between natural and man-made environments, co-existence and mutual improvement would follow.

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In his magisterial new book, *Elizabethan Architecture: Its rise and fall, 1540–1640*, Mark Girouard quotes Daniel's poem as an example of the Elizabethan awareness that both earthly fortunes and costly buildings, their physical expression, were ephemeral. Surrounded by the religious houses that had been destroyed, pillaged or converted to secular use by men of their grandfathers' generation, Daniel and contemporaries such as Shakespeare and Spenser were preoccupied by the image of the ruin. Paradoxically, one result of this awareness was the construction of buildings that flaunted their own fragility: delicate confections of brick, stone, glass and air that William Harrison described in 1577 as "rather curious to the eye like paperwork than substantial for continuance". Indeed, one such house, Thornton College in Lincolnshire, designed by John Thorpe for Sir Vincent Skynner, appears to have collapsed shortly after it was finished around 1602; according to the antiquary Abraham de la Pryme, writing in 1697, "when it was finished, [it] fell quite down to the bare ground without any visible cause, and broke in pieces all the rich furniture that was therein". Other buildings, such as Tresham's Lyveden New Bield, were left stranded after the deaths or bankruptcy of the men or (more rarely) women who commissioned them, and were never finished. The very wealth of illustration in *Elizabethan Architecture* – the range of houses, lodges, standings and banqueting houses paraded before the reader's eye – serves as a reminder of how much has now perished. Some buildings, such as the ill-fated Thornton College, were short-lived, and are represented by plans, drawings and engravings. Others survive only in part: two archways and a section of the kitchen wing from Holdenby House in Northamptonshire, built by Elizabeth's favourite Sir Christopher Hatton; the lodge at Sherborne Castle in Devon, home of another favourite, Sir Walter Raleigh; Sir Walter Aston's gatehouse at Tixall in Staffordshire, which has survived two Halls; porter's lodges, two banqueting houses and some service buildings at Sir Baptist Hick's Campden Manor House in Gloucestershire. Some, notably Northumberland House, the last of the great Jacobean "palaces" on the Strand, and Holland House, which was "unforgivably" largely demolished after suffering damage during the Second World War, lasted long enough to be photographed, and their loss seems especially poignant.

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Aside from a few innovations – such as the open-well, cantilevered wooden staircase, which probably dates from the early years of the reign of James I – the strength of Elizabethan and Jacobean architecture lies in the way in which it fuses different styles, bringing together the talents of both native and foreign-born workers, and adapting European styles to English tastes and the English climate. Although buildings such as Hardwick Hall were influenced by Italian classicism, they differ from their southern European counterparts in their incorporation of the massive windows that were ubiquitous in English great houses between the 1570s and 1620s. This fashion was not without its problems; advising his reader to site a house "that you may have rooms both for summer and winter, shady for summer, and warm for winter", Francis Bacon comments, "You shall have sometimes

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