Äerdschëff

Building, Learning and Shaping A Habitable World

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First edition, 2026
Published by Äerdschëff Éditions
1, rue du Lycée
L-8508 Redange/Attert
Luxembourg
Editorial direction: Katy Fox
Cover illustration: Katy Fox
Editing and proofreading: Äerdschëff asbl
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ISBN: 978-99987-412-1-8

Printed by Kettler, Germany.

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soutenu par
œuvre nationale

"The times are urgent; let us slow down."

Bayo Akomolafe

"They did not know it was impossible, so they did it."

Quotation wrongly attributed to Mark Twain

For Camille.

To the living beings of our time,

human and more-than-human.

To our intertwined lives,

to what we make possible

for one another.

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Introduction: Building, Learning and Shaping a Habitable World

Katy Fox

Some buildings refuse to be reduced to mere structures. They become questions, propositions and condensed reflections on the society that brought them into being, and on the society that might emerge through them. Äerdschëff belongs to this category. Strictly speaking, it is a low-tech* building open to the public in Redange/Attert*, inspired by Earthship* principles and adapted to the Luxembourg context. Yet that description alone would miss much of what gives the project its significance. Äerdschëff is also an educational tool, a civic experiment, a site of translation and a material record of how ecological ambition takes shape through law, labour, climate, funding, institutions and collective persistence.

This book begins with a simple conviction: projects such as Äerdschëff matter not only for what they are, but also for what they reveal. They raise questions that conventional buildings often allow us to overlook. Where does water come from, and where does it go? What maintenance makes comfort possible? Which materials are treated as waste, and which as resources? Which forms of knowledge remain the preserve of specialists, and which can be shared, learned and sustained collectively? How might a building become not a silent object of admiration, but a means of thinking together?

These questions acquire a different urgency when the conditions of everyday life no longer seem assured. Climate disruption, biodiversity loss, energy and material vulnerabilities, inequalities and the weakening of democratic life are approached here as interconnected problems. From this perspective, ecological bifurcation* means more than the gradual improvement of existing systems. It raises the question of a change of course: which infrastructures, forms of comfort and habits can we sustain, and which must we transform or relinquish? The term predicts neither a single future nor a controlled rupture. It names a collective undertaking whose directions and consequences remain open to debate.

A habitable world is the horizon of this undertaking, but it cannot be reduced to tolerable temperatures or a technically effective shelter. It means being able to obtain food and water, learn, receive care and participate in the decisions that organise shared life. It also means not securing these conditions by undermining them for others, elsewhere or later, or by exhausting the living environments on which they depend. Speaking of habitable worlds in the plural recognises the diversity of places, cultures and ways of life. It does not multiply the planets available to us: these worlds share one Earth and limits that cannot be negotiated at will.

Buildings participate directly in this organisation. They are never simply shelters or aesthetic objects. They bring bodies, energy, heat, water, waste, materials, land, labour and time into relation. They shape what a society considers normal, comfortable and worth attending to. In affluent societies, supply networks often allow much of this metabolism to be forgotten. Heat and water arrive from elsewhere. Waste goes elsewhere. Materials are extracted elsewhere. The costs of comfort can also be displaced, socially, geographically and through time. The building then appears more independent of its surroundings than it actually is.

The Earthship idea challenges this apparent independence. It asks whether dwelling could be organised around more visible relationships with heat, light, water, food and material reuse*. Its force lies as much in this cultural and political proposition as in its technologies: what if a building helped us understand the dependencies that make life possible? Such a proposition deserves to be tested, not taken for granted. Making a flow visible does not make it sustainable, any more than bringing a system closer to its users guarantees that they will be able to understand or maintain it.

Äerdschëff takes up this proposition through translation rather than imitation. The Earthship did not simply travel intact from New Mexico to Luxembourg. It entered a different climate, legal framework, political culture and set of institutional relationships. From a model chiefly associated with private dwelling, it moved into the setting of a public building, a collective project and a place of learning. This shift transformed the design. Accessibility, structural verification, fire safety, sanitation, system reliability and responsibility for maintenance shaped what could be built and how the place could be used. The result is a hybrid whose choices must be understood in context.

One of the book's guiding arguments is that such adaptation should not be confused with failure. Ecological innovation enters public life through negotiation, compromise and partial solutions. Structural reinforcements, controversies over materials, systems commissioned late and the constraints on a small civic organisation all belong to the account. They show what it takes to bring another way of building into being. This does not mean that every compromise was justified or every difficulty inevitable. Documenting the experience also means distinguishing what opened up possibilities from what could have been better designed, organised or shared.

It is in this sense that the book approaches Äerdschëff as a public experiment. Public, because the building hosts visits, workshops, training and civic gatherings rather than providing a refuge apart from society. An experiment, because completing its construction does not settle the questions it raises. Its uses, systems and relationships continue to be tested. Openness to learning does not remove the obligation to make the place reliable. It requires clarity about what is known, what is still being investigated and what needs to be corrected.

No single voice could fully account for this project. For some, it is primarily an architectural proposition; for others, a learning environment, a civic struggle, a technical laboratory,

an experience of cooperation or a demanding undertaking whose difficulties have left their mark. A plurality of voices is necessary to convey the experiences, disagreements and learning that shaped the project. Bringing them together does not mean reconciling them artificially. Some differences between the accounts remain, and they matter: they help us understand how the same undertaking can be experienced differently depending on each person's responsibilities, expectations and resources.

The book's coherence therefore rests less on unanimity than on the questions running through its contributions. What happens when civil society participates in producing public infrastructure? How can material constraints, users' expectations and partners' responsibilities be brought into relation? How are learning and maintenance connected? Under what conditions does cooperation remain sustainable for those who sustain it? And how can knowledge acquired in one place assist other groups without imposing a model on them?

These questions structure the book's three parts.

Part I, 'The making of Äerdschëff', traces the project's emergence from its first intuitions to its material and institutional realisation. It explores its origins, design principles, technical choices and the long process through which inspiration took built form. The building appears as a demanding collective achievement, shaped by labour, engineering, regulatory negotiation and practical ingenuity. The accounts give access to decisions, but also to the hesitations and disagreements that accompanied them. They invite readers to distinguish what was imagined from what could actually be achieved.

Part II, 'Learning through Äerdschëff', shifts attention from the building as an object to the building as an environment. Volunteers, designers and educators show how the project became a place of learning in the broadest sense: people learned techniques, but also cooperation, improvisation, patience and care. The forest garden*, the Tiny Office, the educational programmes and the more playful contributions make tangible forms of learning that a construction history alone could not capture. They also reveal what this learning requires: time, facilitation, opportunities to return and room to speak about frustrations as well as successes.

Part III, 'Contexts, affinities, futures', broadens the frame. A critical reading of Earthship research brings documented performance into conversation with uncertainties and the social dimensions of autonomy*. It offers ways of distinguishing measured results, promises and interpretations. The other contributions situate Äerdschëff within debates about low-carbon construction, the relationships buildings organise, ecological politics, desire, democratic space and the institutional conditions of bifurcation. The project thus becomes an entry point into wider questions without losing its material grounding or the limits specific to a local experiment.

These three parts offer a movement from making to learning and then towards wider perspectives. They need not, however, be read in that order. Readers can also follow the resonances between chapters: adaptation and invention, commoning* and governance, repair and pedagogy, desire and sufficiency. A personal account may illuminate a technical difficulty; an institutional analysis may give a construction-site memory a different meaning. The variety of registers makes such connections possible without requiring a single way through them.

The book's purpose is at once documentary, analytical and political. Documentary, because it gathers the traces of a decade-long process: testimonies, memories, techniques and reflections. Analytical, because it explores the relationships between architecture, learning and public life. Political, because reorganising collective life within planetary limits involves values, institutions, conflicts and relations of power. Its perspective is situated: people who initiated, built and used the project participate in interpreting it. Their accounts do not replace independent evaluation, but they make accessible dimensions of the experience that a technical assessment alone would leave in the shadows.

Shaping habitable worlds therefore does not mean designing a perfect future and then attempting to implement it. It means examining how life is already sustained, what makes it fragile and what could be reorganised. At the scale of a building, these questions become concrete: a water reserve, a wall, a garden, a shared skill, a clarified responsibility. Yet they do not remain confined to the site. They connect resource use with forms of learning and decision-making, and local conditions with the more distant consequences of our choices.

This book is a situated archive of that collective experience, but its invitation is addressed to the present. It speaks to those who build, teach, maintain, make decisions or seek a way to participate. It does not ask readers to subscribe to an exemplary image of Äerdschëff. It proposes examining the project's possibilities and contradictions closely enough to make something of them elsewhere. The question opening these pages is therefore not only what was built here. It concerns the relationships a place can help us understand and transform so that shared life remains habitable.









Part I – The Making of the Äerdschëff