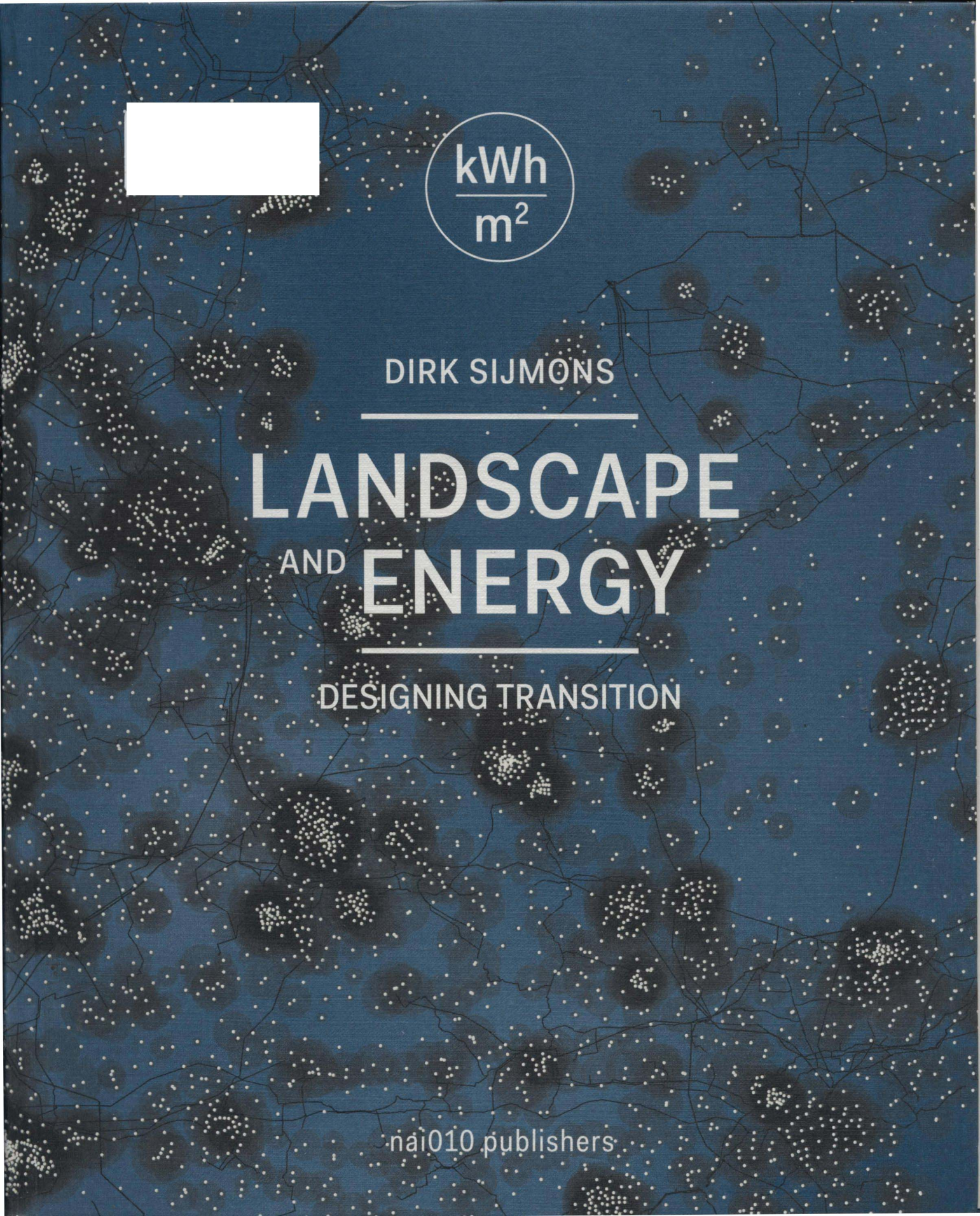

DIRK SIJMONS

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Edited by Dirk Sijmons
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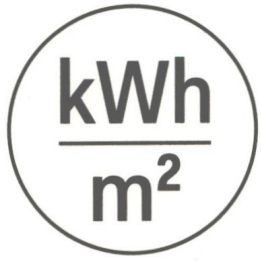
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01

INTRODUCTION

INTRODUCTION

THE RECIPROCITY OF ENERGY AND SPACE

Just as energy and mass are linked in Albert Einstein's famous formula $E=mc^2$, energy and space can also be seen in relation to each other. Throughout human history, there has been a notable interaction between the use of energy and the use of space, between the production of energy and spatial design. To work the earth – to mine, to organize, operate and redesign it – major energy investments have been made, via human and animal muscle power, and also with the help of machines that are powered by fuels. Conversely, for every form of energy generation, spatial interventions are required, and every form of energy has a spatial footprint. Ever since the taming of fire, trees have been felled, and even entire regions have been deforested to get fuel. Fossil fuels such as coal, oil and gas are 'solidified sunshine', and they need to be released, dug up, drilled and pumped out of the earth, and then transported and processed. The ditches and peat-bogs in the Dutch landscape are the silent witnesses to the peat extraction of the past. Open-pit mines for lignite and coal are among the largest human artefacts.

In the reciprocal relationship between space and energy, it cannot unambiguously be said which is leading, and which is following; it might be both. When we want to work the earth in a certain way, we look for the appropriate type and amount of energy. And once we have access to a large source of energy, we think of new applications that we previously could not have imagined. Energy and space change each other, and they change together over the course of history. It is not far-fetched to divide human history into periods based on the dominant form of energy, and each energy period also has its own characteristic spatial manifestations. We can characterize the period beginning in about 1800 as the era of 'fossil expressionism'.[1]

1 Term borrowed from German philosopher Peter Sloterdijk.