



Jan A. Eckert

STEWARDSHIP IN DESIGN EDUCATION

Future-Proofing the Eco-Social
Curriculum

Human-Centered
Design Studies

Collection Editor
D. S. NICHOLAS

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Abstract

Since Tomás Maldonado's *La Speranza Progettuale* (1970) and Victor Papanek's *Design for the Real World* (1971), design's social and environmental responsibility has been much discussed—yet slowly implemented in education. This book presents a framework for eco-social design education centered on stewardship: a mindset that transcends traditional disciplinary boundaries to address our global polycrisis. Integrating social and planetary boundaries, degrowth theories, and inner development, it redefines design's scope and ambition. The first part examines systemic challenges and disciplinary limitations; the second introduces the Stewardship Framework—a practical guide for students, educators, and practitioners committed to transformative design practice.

Key words

Stewardship; Eco-Social Design; Transformation Design; Transition Design; Regenerative Design; Design Education; Systems Thinking; Post-disciplinary Approaches; Degrowth Theories; Inner Development

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1

Introduction

1.1 Learning objectives

Written for design learners and educators alike, this book focuses on the appropriate educational scaffolding needed for the next generation of designers and provides a framework for eco-social design based on the notion of stewardship for people, communities, and our planet. It sets out to identify and examine the knowledge, concepts, and skills that need to be recognized and integrated into design education today as it increasingly struggles to remain relevant and sustainable in the face of our global and systemic polycrisis.

In the context of this book, the term “polycrisis” refers to the interconnected nature of multiple simultaneous and systemic challenges that reinforce and compound each other. Today, humanity faces an unprecedented convergence of such crises: climate change, biodiversity loss, resource depletion, pollution, growing inequality, economic instability, social fragmentation, and many more. This systemic nature of interconnected issues makes traditional siloed approaches to problem-solving and design education increasingly ineffective.

Design education (like many other disciplines) must evolve to equip future practitioners with the ability to understand

these complex systemic relationships and to develop holistic approaches that can address multiple dimensions of our polycrisis simultaneously. With seven of the Earth's nine planetary boundaries crossed by the time this book is being written, growing social inequality reaching levels not seen since the 1920s, and escalating geopolitical conflicts over scarce resources fragmenting global cooperation, this transformation cannot wait—design education must act now to prepare practitioners who can navigate and address our interconnected polycrisis before these mutually reinforcing crises spiral beyond our collective capacity to respond. Stewardship in design provides a framework for holistic thinking and action. It begins at the core—with us—by encouraging inner transformation, shifting our worldview and underlying mindset, which often prove destructive to our ecosystem.

1.2 Rationale and outline

The vision of a comprehensive approach to design has been discussed since the historic Bauhaus Manifesto, published by Walter Gropius in Weimar in April 1919. The extension of this holistic approach to social and environmental responsibility probably reached its peak in the early 1970s, with seminal works such as former Ulm school director Maldonado's *La Speranza Progettuale* (1970, 1972) and Austrian-US designer and design critic Papanek's *Design for the Real World* (1971).

However, the implementation of these ideas in design practice and education has been slow and often inadequate, resulting in the addition of design “disciplines” branded as “eco-social” or “transformational” design rather than a rethinking of the

design discipline as a whole. This book aims to contribute to this ongoing and necessary transition by providing a comprehensive framework for design education that is aligned with the learning goal of cultivating designers as stewards of eco-social transformation.

At its core, this book is about building capacities, knowledge, and competencies to transform our relationships with our ecosystem (Figure 1). It encompasses inner development, regenerative economic models, and the design of transformative stepping stones that build transitions into more harmonic coexistence with our natural world. Part I takes a “learning from history” perspective, examining how eco-social thinking in design has evolved and what we can learn from past critiques and visions. Part II shifts to a “learning from preferable futures” perspective, functioning as a workbook that delivers concrete tools and approaches for implementing stewardship principles in contemporary design practice.

To achieve this purpose, this book explores several frameworks and models that have emerged, both from my own teaching practice and from recent developments in eco-social thinking:

1. **Systems Thinking Approach:** By viewing design through the lens of systems thinking, I provide a holistic understanding of the role of design in complex social and environmental contexts. This includes introducing learners to Donella Meadows’s (2004, 2008) concept of leverage points for systems change, enabling them to identify and act on opportunities for meaningful change.
2. **The Y-Shaped Designer Model (Eckert, 2017, 2018):** Building on the familiar T-shaped model, this approach adds a critical

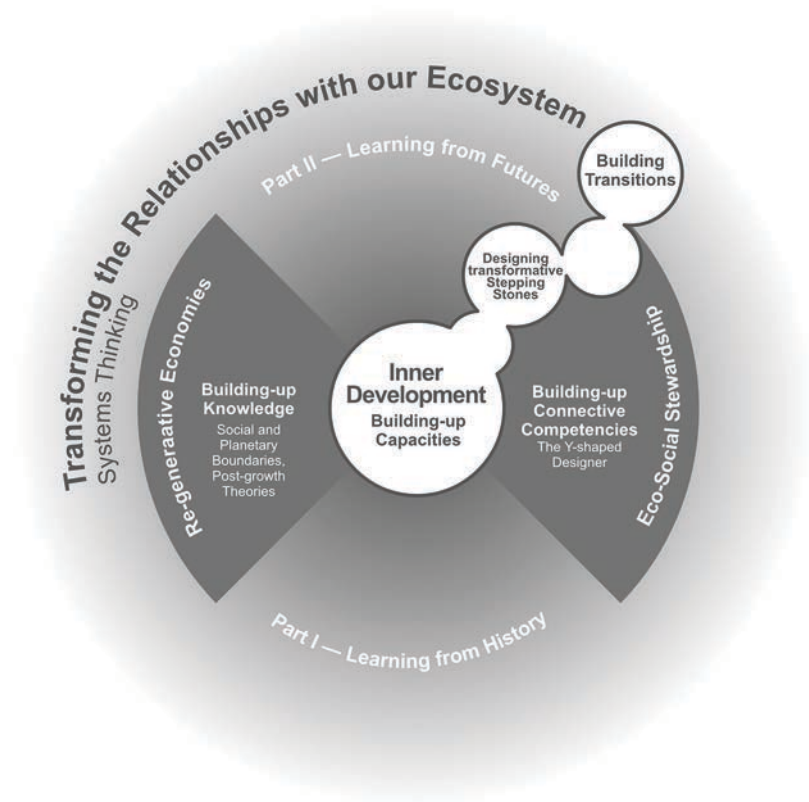


Figure 1: Objectives of this book: Building capacities for transforming our relationships with our ecosystem through inner development, regenerative economic models, and transformative design approaches. Part I examines the historical evolution of eco-social design thinking, while Part II provides practical tools for building transitions into preferable futures (Author's illustration).

link that focuses on connective competencies needed to lead cross-disciplinary collaborations from a stewardship perspective that is explored in Chapter 3.

3. Degrowth Concepts: Building on the work of degrowth pioneers such as Thomas Piketty (2014), Jason Hickel (2020),

and Kōhei Saitō (2022, 2024), this book explores degrowth theories and their implications for eco-social design. This perspective challenges the conventional growth-oriented economic model and proposes alternative approaches that prioritize social well-being and ecological regeneration.

4. The Inner Development Goals (IDGs): Complementing degrowth, the framework adds the notion of “degrowth through inner growth” to this book by emphasizing the need for a profound shift in our collective mindset and behavior. It also bridges the gap between the Sustainable Development Goals (SDGs) and the Kunming-Montreal Biodiversity Framework by outlining the capacities required to tackle the complexity of global sustainability challenges.
5. Social and Planetary Boundaries: Incorporating Kate Raworth’s (2022) “doughnut economics” model, which visualizes the balance between social foundations and ecological ceilings, providing a framework for understanding sustainable development within our planet’s regenerative capacity.

Together, these considerations form the principle of the model for Stewardship in Design, which serves as the core of the pedagogical framework presented. Stewardship in Design seeks to overcome the challenges that have hindered the widespread adoption of eco-social design principles in education and practice. Its goal is to equip the next generation of designers with the knowledge, skills, and mindset necessary to address the complex challenges facing our world, to reimagine the role of design in a post-growth society, and to foster a regenerative relationship between human activity and the ecosystem we share with other living beings.

1.3 Learning pathways in traditional design education

Before delving into the subject matter of this book, I would like to share some reflections on my own learning journey as an interior architecture and design student in the early 2000s, and my subsequent experiences as an educator in both fields. These personal insights are intended to provide context for the transformative approach to design education that this book advocates, and I hope they will resonate with both aspiring designers and fellow educators.

Today's field of design education has evolved drastically from when I started studying myself. Many programs emerged at the intersection of traditional design disciplines, the social sciences, technology, and ecology, opening up unprecedented opportunities for students to engage with complex social and environmental challenges through their design practice. As an undergraduate, design was initially only a subdiscipline within the context of my interior design studies, a subject often associated with the design of furniture or furnishings from the perspective of creating spaces. This rather narrow view was common among many of my peers, and I've observed that some students still enter design programs with similar preconceptions. In the early 2000s, this perception was reinforced by the presence of star or author designers from the 1980s and the 1990s who were highly prominent in interior design stores and catalogs. Some of these designers competed to bring the most artistic and expensive pieces of furniture to market, often prioritizing esthetics over functionality or sustainability.

I vividly remember this time when a “streamline design” aluminum lounge chair fetched record prices at auction. Its functionality, ergonomics, and sustainability were rarely questioned, except by a few critical design theorists or practitioners who clung to a more use-oriented approach to design. This tension between artistic expression and practical functionality is one that many designers, both students and professionals, continue to struggle with today. At the same time, the concept of design and designer became increasingly diffused across different fields and professions, expanding the potential impact of design practice and thinking beyond traditional boundaries.

It was during these years of conflicting design paradigms that I read a book called *Interface: An Approach to Design* by German design theorist Gui Bonsiepe (1999). His publication argued that the focus of design is primarily on the interaction between users and artifacts. This assertion gave me a new and surprising perspective because, without questioning its value, it somehow downplayed the importance of the design object, the artifact, which I had previously seen as central to the discipline.

To illustrate his thesis, Bonsiepe uses the image of a pair of scissors, which unfolds a space of interaction between the user’s intended action and the required artifact. This concept, which can be extended to a wide range of actions and artifacts and their various components, was completely new to me at the time. This paradigm shift fundamentally changed my approach to design and continues to influence my research and teaching methodology today.

Later, as a design educator and architect of several postgraduate design programs, I encountered these contradictions anew. For

many colleagues, design remained primarily an artistic discipline, while others saw it as closely related to business or engineering. While all of these perspectives have their place in the history of design, a crucial point that led me to distinguish design from the arts can be summed up in one word: *accountability*.

Too often, as designers and design students, we overlook our responsibility for what we create and its potential impact on others—something I see as central to the future of eco-social design or any evolution of the design domain.

Beyond this discourse on designer responsibility, another aspect of my role as an educator became paramount: maintaining sensitivity to the needs of the nonacademic world while preparing students for their transition into it. And by “transition,” I also mean challenging and potentially transforming that world. As a result, bridging education and the “real world” became a critical focus of my approach to design education with a specific notion of emerging environmental and social issues.

A concept that has greatly aided my understanding and organization of this connection is that of “situational competencies” (also known as “concrete competencies”), developed by Swiss teaching and learning researcher Hansruedi Kaiser (2005, 2011). Kaiser’s “situational competences” represent a synthesis of knowledge and skills that enable graduates to cope with concrete practical or professional situations after graduation (e.g., facilitation skills when working with numerous stakeholders). Kaiser’s approach was instrumental in aligning the search for connective competencies (as discussed later when we dive into the Y-shape model) with the real-world situations that learners may encounter in their future professional lives.

As both learners and educators engage with the content of this book and as the “real world” is constantly changing, I encourage you to remain open to such transformative ideas. The field of design is constantly evolving, and what we understand about the scope and impact of design today may be significantly expanded tomorrow. This expansion is already happening rapidly across global social, economic, political, and ecological dimensions, reshaping how design interfaces with complex real-world challenges. Critical thinking and the ability to challenge established norms are critical skills for designers at all stages of their careers.

Moreover, I believe it’s our responsibility as educators to create opportunities for these “aha” moments in our students’ learning journeys. By challenging preconceptions and broadening perspectives on the role of design in society, we can prepare the next generation of designers to approach complex, multifaceted challenges with humility, creativity, and responsibility.

As we move through the chapters that follow, let us approach the concepts and frameworks with an open yet critical mind, always striving to understand the broader context and implications of our work in design. It is my hope that this book will serve as a catalyst for new insights and perspectives, much as Bonsiepe’s scissors did for me, leading both learners and educators to a more holistic and impactful understanding of design.

1.4 Summary

Drawing on personal experience as both a student and an educator, I set out to trace the evolution of design education from a narrow focus on esthetics to a broader understanding of design’s societal impact and designer accountability. This journey

underscores the importance of bridging academia with real-world challenges, incorporating concepts such as situational or transformative competencies to prepare students for the complexities of professional practice in a world whose systems are continually reaching their tipping points.

This book is intended to educate a new generation of designers as stewards of people, communities, and the planet. Drawing on seminal work from the 1970s to the present, it bridges the long-standing gap between theory and practice in social and environmental responsibility, offering a framework that inspires individualized learning pathways toward eco-socially responsible design practice and education.

The framework integrates several innovative models, including the Y-shaped designer concept, IDGs, Systems Thinking, and Degrowth Theories. At the core of the framework is the principle of stewardship in design addressing the challenges of adopting eco-social design principles.

Part I

2

At the tipping points of our systems: Design and eco-social responsibility

2.1 Learning objectives

This chapter provides a focused exploration of key moments in design's evolving relationship with social and environmental issues. While not exhaustive, this selective historical review highlights three crucial episodes that have shaped eco-social design practice. These episodes include the emergence of human-centered design approaches that prioritize people's needs and experiences, and also reveal how such human-centered practice has gradually expanded beyond individual users to encompass broader social communities and ecological systems:

- The Ontological Dimension of Design
- Designing in the Social Sphere
- Designing in Systems

By examining these key inflection points, my aim is to provide essential context for understanding how design can meaningfully address environmental and social concerns, while setting the stage for the transformative stewardship framework presented in Part II. Unlike traditional design approaches that treat symptoms in isolation, this framework acknowledges the interconnected nature of our constantly evolving polycrisis and requires both critical systemic thinking to grasp emerging design challenges and honest recognition that we as designers are not neutral observers but active participants embedded within these crisis systems. This positioning demands a fundamental shift from seeing ourselves as external problem-solvers to understanding our role as stewards responsible for designing our way toward regenerative futures.

2.2 The ontological dimension of design

“Design is basic to all human activities” is one of the key statements that Papanek emphasizes throughout his book *Design for the Real World* (Papanek, 1971). His text is not the first, but it is probably the most discussed in the history of design to address the unfortunate relationship between design and mass consumption. According to Austrian-born American designer Papanek, rapid advances in science and technology make the potential outcomes and effects of design less predictable, thus making designers feel less responsible for the eco-social impact of their work. However, Papanek also recognizes that design has always served as an extension of human capabilities and is also involved in the dimension of predicting and planning the future