

MENTOR LLUNJI

REFLECTIONS ON SEISMIC DESIGN

AN ENGINEER'S VIEW BEYOND THE CODE



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An Engineer's view beyond the code

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*In memory of the victims of the Kahramanmaraş earthquakes of 2023,
reminding us of the human stakes behind every design decision.*

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PREFACE

Reflections on Seismic Design is not a textbook, a manual, or a step-by-step guide. It is a personal book, a collection of intimate thoughts on seismic design, its present, and its future.

It brings together the questions and issues I have encountered during more than two decades of designing structures in earthquake-prone regions. It is a professional memoir of seismic design.

I wrote it free from the constraints of academic paradigms, yet with professional honesty, raising many of the unspoken doubts on which, unfortunately, seismic design rests. It reflects my perspective on modern seismic design philosophy, offering a critical view of building codes, the educational system, digital tools, and the profession itself.

The book was inspired by and is dedicated to the victims of the Kahramanmaraş earthquakes of 2023, whose images compelled me to write again about seismic design, a subject I thought I had set aside long ago.

The main message of the book is that seismic design has nothing to do with exactness, but with understanding.

In this time of swift technological development, we must return to fundamentals more than ever before, cultivate independent thinking, and rely on sound principles.

The profession needs seismic design that the majority of engineers can truly comprehend. Ironically, this need is greater now than it was two decades ago, when my focus was on helping architects grasp conceptual seismic principles. Today, the roles have reversed; it is engineers who most need education.

These essays were written between 2023 and 2026. Their purpose is to remind practicing engineers that nothing in our field is set in stone, and that true progress comes only when we dare to question even the most obvious postulates.

The freehand sketches were intentionally included to remind us of the forgotten art of thinking through drawing, and that the solution to even the most complex structural problems often begins with a simple line on paper.

This book addresses specific topics in seismic design that are rarely discussed in the literature and never in such a direct way. It is a guide to critical thinking, a much-needed tool in our digital era, aimed at provoking curiosity, encouraging reflection, and helping engineers develop their own informed approach to earthquake-resistant design.

This is a collection of thoughts, not conclusions or theories.

These are simply the reflections of a practitioner.

Dulcigno, February 2026

Mentor Llundji