



9



PREFACE

What you are holding in your hands is a manual dedicated to cyclopean masonry. That is all. We can't have you getting lost in temporal translation—you play a central role in disseminating this ancient knowledge. So before we begin, we want to clarify a few things, and share some prerequisite thoughts. First, some notes on cannibalism. Then, our thoughts on manuals and dissemination of knowledge. We conclude with an introduction to the structure of this book. Take your time, don't rush. There's a lot to digest.

ON CANNIBALISM

We've chosen the polemical term "cannibalism" to frame our project as both verb and noun. By cannibalism, we do not refer to the common use of cannibal as human consuming human. Instead, we refer to inanimate matter consuming itself, or its own likeness. We refer to an aggressive, *in situ*

upcycling. Not a blasé recycling, nor simply a material adaptation. Our intent is not to romanticize barbarity, but distill its materiality. What does cannibalism mean as an act of architecture? Is it an architectural predator versus prey binary? Is it intrinsically violent, destructive? Can it be a sustainable, careful reconfiguration of the hostile?

We propose to cannibalize rubble to produce a future architecture. This manual does not reference the practice of human cannibalism, but rather, appropriates the term cannibalism as a proposed, architectural mindset. The content of this manual modifies the semantics of cannibalism. It overlays the term cannibalism to refer to a more cognizant,



Cyclopean: *adj.* “(1) often capitalized: of, relating to, or characteristic of a Cyclops; (2) huge, massive; (3) of or relating to a style of stone construction marked typically by the use of large irregular blocks without mortar”

Cannibalism: *n.* “(1) the usually ritualistic eating of human flesh by a human being; (2) the eating of the other flesh of an animal by another animal of the same kind; (3) an act of cannibalizing something”

Cyclopean Cannibalism: construction technique consisting of the re-appropriation of pre-existing building stock for the assembly of “new” buildings // harnesses robotics to site, scan, and minimally carve stock to reconstruct architecture at a full scale

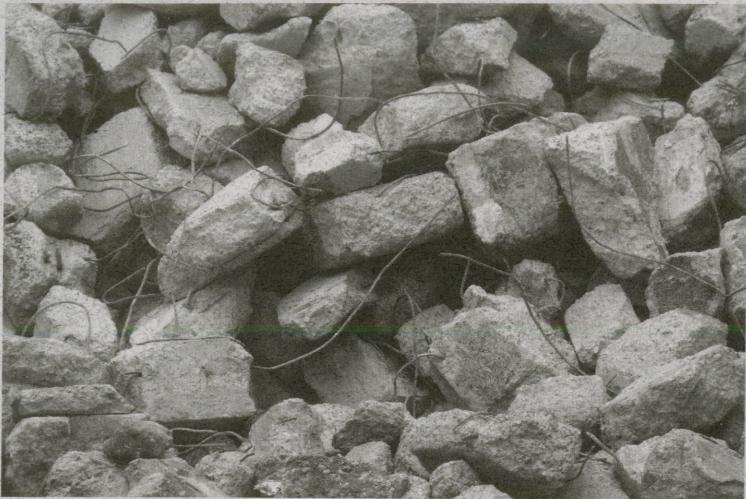


FIG 1.1 Concrete Rubble (Peter Kaminski)

in-situ mode of recycling. This manual deploys architectural cannibalism as a reconfigured materiality.

Our initial work on the subject began with a peripheral interest in Oswald de Andrade's *Manifesto Antropófago*¹ (Cannibalist Manifesto) of 1928. Andrade's seminal text argued for a cultural liberation of Brazilian artistic production, premised on its long history of "cannibalizing" European works. It was a visceral,



FIG 1.2 Figure from *Manifesto Antropófago*

post-colonial counter to European cultural dominance. Purported tribal "rites" are a combative tool against cultural destruction.

In this sense, we deploy de Andrade's *antropófagia*, or cultural cannibalization, as a method for architectural thinking and making. Our cannibalism combats exploitative and wasteful architecture. It challenges the current construction framework in the North American, urban context. It eats old architecture, unwanted and unusable building waste. From material likeness consuming likeness, we hope to devour the paradigm of wasteful dominance.

ON COOKBOOKS

With the topic of construction waste established, we needed a final deliverable. A means of disseminating our accumulated knowledge. Certain cookbook-manuals came to mind. In 1971, William Powell published the *Anarchist Cookbook*². That same year, Ant Farm released their *Inflatocookbook*³. Both texts offered empowerment through accumulated, documented, and shared knowledge. They insisted on freedom through instruction. Of course, the texts deviate in message. But their intent is clear. The contents of both texts—their

1. Oswald de Andrade, *Manifesto Antropófago* (Cannibalist Manifesto), 1928.

2. William Powell, *The Anarchist Cookbook*. New York: Stuart, 1971.

3. Ant Farm, *Inflatocookbook*. Cambridge, MA: Ant Corps, 1971.

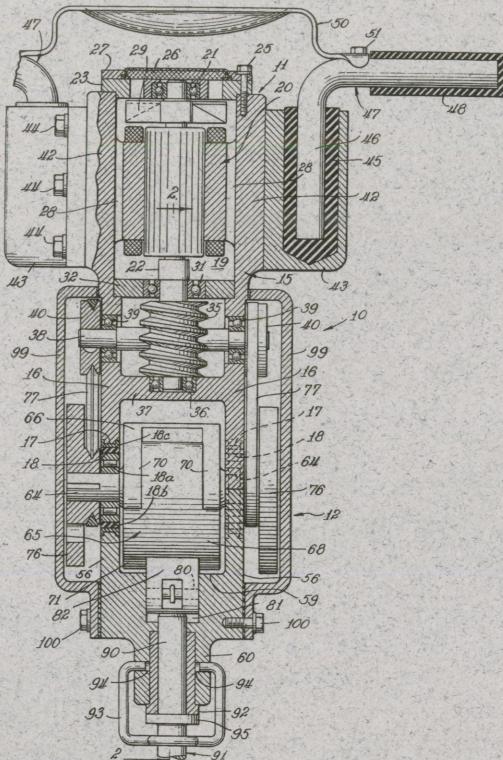


FIG.1.3 Demolition Hammer, US Patent:
2,778,335, Russel G. Bourbon, (1957)

accumulated, curated sets of knowledge—exist for the reader, to be deployed by the reader.

We choose to follow in these footsteps. This is our manual, for you and to be deployed by you. It is a revival of megalithic stone works, to confront our construction waste. The manual is also our manifesto. The way in which we construct buildings today is more anachronistic than the ancient techniques we propose. Materials are sourced from all over the globe and shipped to construction sites. Even recycled materials are shipped away to be processed. Almost nothing is sourced in situ, from previous buildings. So this manual is not just documentation and how-to, but also a means of convincing you, reader, to re-assess how we conceive of design and how we build.

The current mode of designing and subsequent construction is not working. So we turn back the clock, for a multi-temporal revival. We unearth the original mascot of grand stone cannibalism—Cyclops. We invite the Cyclops family members to help us share this knowledge. We blend fiction with fact, merging myths of the past with techniques of the future. We merge our own fictions with oral histories. In this way, we re-convey information that the careful archeologists have discovered, but intuit our own (coupled with computational tools, in some cases). This is a handbook based on a lost poem that no one remembers the precise stanzas to. We

remember the rhythm, the drama it conveys, but the exact words have vanished over time. So we've reimagined them here, in the form of a manual.

With our mythical, cyclopean guests, we journey through time to reassemble this knowledge. The collage of myth and fact begins at our first stop, 1971. This time visit is premised on the aforementioned manual precedents. They articulate our desire to share and democratize our knowledge. It is our hope that this can become a participatory movement, much like the texts of this era spurred. Our second time stop reaches back into the farther depths of history. It is the source of our research. We revisit the stone works of past civilizations. We draw from the first societies of the world—from Egypt to Japan and Rome to Rapa Nui. But, our emphasis focuses on Inka (Inga, Inca) stone works as a stand-in for cyclopean construction. Yet all of these complex, geometric languages await a contemporary translation...

ON CONTENT

This manual picks up where the Inka left off. It begins at the end of Inka civilization and, in a way, our own. It offers regeneration within the context of demolition and rampant urban development. It seeks to learn from both crises and construction techniques of the past. This manual unearths Inka masonry techniques to postulate a new, material paradigm. We seek to reclaim the remains of



FIG 1.4 Inka Rubble Terracing, Chinchero

demolished buildings within the urban fabric. We harness the craft of stone cutting to assemble a structural system out of ruin.

This method is not motivated by a romantic viewpoint, but rather by a recognition that cyclopean cannibals understood this crisis better than we do.

The premise of our manual is to offer you, reader, this translation. Above all, this is a cookbook dedicated to converting debris into adaptable building systems.

A traditional cookbook offers the history behind a dish, or an anecdote, as well as preparation and sourcing of materials. We follow this same logic. Our cookbook synthesizes this mode of instruction, and takes on a visual language. The option exists as reading this manual textually with complementary images, or purely as a visual guide. We've translated historical techniques to today's language, in two mediums.

The manual is divided into three parts—context, past, future. We open up this instructional work with our own manifesto, an imagined dialogue between ourselves (the contemporary builders) and Cyclops (the original masonry builder). We then unpack the techniques used by civilizations that utilized

large-scale masonry construction. Our focus centers on the Inka. We then catalog debris materials, offer constructional frameworks for varied contexts, and include the tools—both digitized and analog—utilized to achieve these structures. The rest of the translation work we leave for you and your new body of knowledge.



WARNING!

THE TEXT YOU ARE ABOUT TO READ
MAY OR MAY NOT BE TRUE.



This manual is, in some parts, entirely a work of fiction. While it draws from established techniques and myth, it intentionally blends the two. We do not distinguish between these two divergent elements. Some of the material in this book is true, and corroborated with citations, etc. Some is rooted in oral history and our own musings of the past. Do not take us at our word. This manual is meant for your own deciphering. We intend for this academically "disrespectful" merging of fact and fiction to cultivate a new architectural approach to recycled materials and design.