



TARTINE BREAD

BY CHAD ROBERTSON
PHOTOGRAPHS BY ERIC WOLFINGER





TARTINE BREAD

by Chad Robertson
photographs by Eric Wolfinger


CHRONICLE BOOKS
SAN FRANCISCO



Text copyright © 2010 by Chad Robertson.

Photographs copyright © 2010 by Eric Wolfinger and Chad Robertson.

All rights reserved. No part of this book may be reproduced in any form without written permission from the publisher.

ISBN 978-1-4521-0028-9

The Library of Congress has previously cataloged this title under ISBN 978-0-8118-7041-2

Designed by VANESSA DINA.

Food and prop styling by ERIC WOLFINGER and CHAD ROBERTSON.

Typesetting by JANIS REED.

Photograph on [page 29](#) by Catherine Karnow.

Front cover image and photographs on [pages 19, 34, 35, 78, 115, 136, 138, 150, 178, 210, 216, 222, 224, 236, 239, and 252](#) by Chad Robertson.

Photographs on [pages 18](#) and [42](#) by Suzanne Yacovetti.

Illustrations by David Wilson.

[Page 9](#): *Les Canotiers de la Meurthe*, Émile Friant, 1888. Courtesy of Le Musée de l'École de Nancy.

Chronicle Books LLC

680 Second Street

San Francisco, California 94107

WWW.CHRONICLEBOOKS.COM

TABLE OF CONTENTS

Bread in Time

CHAPTER 1

Basic Country Bread

CHAPTER 2

Semolina and Whole-Wheat Breads

CHAPTER 3

Baguettes and Enriched Breads

CHAPTER 4

Days-Old Bread

Acknowledgments

Index

Table of Equivalents

About the Authors

Bread in Time

My strongest inspiration came not from real bread but from images—images of a time and place where bread was the foundation of a meal and at the center of daily life. There is a painting of boaters gathered at a riverside table. At the head, a large crusty loaf held close to the heart is cut into wedges to commence the meal. This scene was painted a little more than a century ago in France, when a worker's portion of bread was two pounds per day, and bread was on every table at mealtime. This was elemental bread that sustained generations. To find this bread, I would have to learn to make it. Thus began my search for a certain loaf with an old soul.

I opened my first bakery nearly fifteen years ago after three years of formal apprenticeship and with the vision of my ideal loaf taking shape. Each loaf would tell the hands of the baker who made it and each would also have its own expression—like a clay vessel pulled from the kiln after firing. The loaf would be baked dark, and the substantial, blistered crust would hold some give while containing a voluptuous, wildly open crumb with the sweet character of natural fermentation and a subtle balance of acidity. The bread would be a joy to eat fresh and would keep well for a week.

Although I had apprenticed with some of the finest artisan bakers in the United States and France, none had taught me how to make the loaf I was envisioning. Instead, they gave me the tools to get there.

From my first mentor, I learned to approach bread making as both a craft and a philosophy of ingredients and how they interact. With that understanding came the promise that I could find my way to any bread I imagined. “Dough is dough,” he liked to say, implying that all breads are closely related—even the ones that seemed quite different.

After years of learning, I realized I would never get there working under the tutelage of someone else. I was twenty-three when Elisabeth, now my wife, and I built our first small bakeshop with the help of friends north of San Francisco, along the coast of Tomales Bay. Bakeshop was an apt name for the room where I would spend the next six years working. We cut a hole in the wall and built a wood-fired oven outside facing into the shop. The shop was one step from the home where we lived. Technically, I was a home baker with a big oven. I would have to make hundreds of loaves a day for years in a sort of solitary baking trance to achieve what I had in my mind's eye.

I started with the wood-fired oven and no mixer. The rigor of mixing three hundred pounds of dough by hand required a softer dough, so I added more water.





During my first apprenticeship, I had worked with wet doughs, so this was familiar territory. The oven was fired all day as the dough was mixed, shaped, and set to rise on cloths. The loaves were ready to bake a few hours after shaping, and I baked through the night. But after months with little sleep, I changed my course. Opening the windows in the evening cooled the dough down and slowed the final rising significantly. The bake could wait until the next morning.

I held close to my ideal, but after such a long rise, the resulting bread was sometimes more sour than I wanted. To counter this, I began using my wild yeast starter at a younger, more mild stage until I achieved the complex flavors I was after with the right balance of acidity. Now, I could get a decent night's rest, freed from the "life of bats." The only problem with this new schedule was that I would have to bake later in the day and sell bread in the afternoon. So that's what I did: gaining the pleasures of warm bread for dinner and toast for breakfast. After a decade of working alone, I took on my first apprentices. I had spent almost half my life obsessing over bread; it was now something I did, not something I talked about. Making bread had become a mostly silent meditation for me, and I liked it that way. It would take a fortuitous trade agreement to draw me out.

In 2005, Eric Wolfinger came to work at Tartine with no baking experience. He was on track to becoming a chef before he decided to try his hand at baking. Eric grew up surfing in Southern California and noticed that I had an ideal surfing schedule: starting my day around noon and finishing in the early evening. He suggested a trade. He offered to teach me to surf, and I would teach him to make bread. Eric's persistence wore me down, and I agreed to try surfing.

By the time my sore ribs had healed from my first surfing session, I had a new obsession, and he was the one to talk to. He followed my every surfing question with another question about bread. During those long drives up and down the coast, we often had two conversations going on at once. Months and years passed as we learned together, surfing in the morning and baking in the afternoon.

Lucky for me, Eric stuck around long enough to learn to make great bread, gaining the keen understanding of my approach that would make our collaboration on this book possible.

Over the course of time, I articulated what had been only in my head and redefined for myself the craft of bread making. The idea was to distill the content of our daily discussions into techniques that would work well for the home baker—to make a baker's guidebook.

Traditional, intuitive bread making does not lend itself naturally to a written recipe. Before the study of microbiology, bakers understood the subtleties of the process. The nature of fermentation was second nature to their own. That is, they understood fermentation in relation to the rhythms of their own lives. It is necessarily the same with modern artisan bakers. All points lead back to the starter and the leaven as origin of the process, and the way that they are used to manage fermentation determines the outcome. Then, as now, the most important aspect of making bread was managing the stages of fermentation by knowing what to look for. The visual element would be an integral part of this book project. There was no question in my mind that Eric had to document our work. He was uniquely qualified by his experience, his daily baking shift, and his passion for photography. *Tartine Bread* would have to be photographed throughout the process of building the book. This would require another year's commitment from Eric.



When I started describing how to make the basic loaf, I knew it would take some work to ~~translate my method into a process for making something comparable at home~~. Eric had been baking on his days off at home for years, using a cast-iron combo cooker as a baking vessel with excellent results. He suggested we set up a private blog for a handful of bread testers, send them all combo cookers, and engage in a virtual dialogue—sharing photos of home-baked bread, answering questions, and adding to our instructions where they needed more clarity.

Mostly, I expected it would be a helpful progress check, as we initially intended to post every recipe for testing as we completed it. But within the first week, we discovered two things: there were not enough hours in the day for us to maintain an interactive blog, and many of our test bakers achieved, in their first attempt, bread at home that looked as if it had come out of our own ovens on a good day. We had expected neither of these things, but the latter was a revelation. Indeed, the exemplary bread we show in the first chapter is a home-baked tester loaf.

We stayed in contact with a few of the bread testers, who continued to bake regularly. We answered questions as the testers came up with their own schedules, modifying times and temperatures so that making bread fit into their lives. Some made breads that were close to the original mold, while others made different, equally delicious breads to suit their needs and their vision.

This was exactly what we had hoped for, and I decided to profile some of our testers in this book. Relating our testers' real-life experiences, I discuss how they altered our approach to get distinctly different breads.

The “Tartine Bread” approach follows a loose set of concepts that we introduce in a single “basic recipe” and then build on throughout the book. As you gain an understanding of how bread “works,” you will be able to make adjustments in timing and technique to achieve a broad range of results. The goal of making bread with a satisfying depth of flavor, a good crust, and a moist, supple crumb is a constant.

We begin by showing you how to make a leaven and then how to make our Tartine Basic Country Bread at home. Since bread making has always been a visual learning experience for me, I wanted a heavily photographic depiction of the process to start. Jacques Pepin's books *La Technique* and *La Méthode* were strong inspirations. Learning a craft is as much about copying as it is about understanding, as much visual as it is intellectual. As an apprentice, I watched bakers making bread and then cleaned up after them. Eventually I got my hands in the dough. Here you'll do both.



We explored the notion of starting the book with a yeasted bread recipe to encourage those who might be intimidated by beginning with a wild yeast starter. We reasoned that if the rise was long and slow, we would get something respectable to start with, and then dive into making a natural leaven for a more challenging but rewarding loaf. We found that the difference in the time it takes to make a well-fermented yeasted bread and a natural leavened one was negligible. But the difference in quality was considerable. The straight yeasted bread lacked everything we love about the original. It simply did not have the savor or the staying power.

Tartine Bread is devoted to the use of natural leaven, often called sourdough. I promote using a “younger” leaven with very little acidity. It’s a sweet-smelling, yeastier relative of the more sour and vinegary-smelling sourdough. When making bread with nothing more than flour, water, and salt, aspiring bakers should apply their attention to learning how to control the process of fermentation. The concept is not without precedent.

Up until the 1930s, French bakers used natural leaven in bread, croissants, and brioche. After commercial yeast became available, the skilled practice of caring for and using natural leaven declined. Convenience gained the upper hand, and flavor was sacrificed. With this shift, the keystone in the tradition of baking was largely lost. Taste a brioche bread skillfully made with natural leaven and compare it to the straight-yeasted version. The substantial gains in savor, keeping qualities, and versatile uses with the natural leaven justify the time it takes to build and care for one. Once the natural leaven is thriving, you can use it any way that suits your taste and your schedule.

Beginning with the basic recipe, subsequent breads progress from the original, building on what you have learned in the previous recipes. All the bread recipes are based on one kilogram of flour, so you will be able to compare and contrast differences in ratios and effects in practice. By moving parts around slightly, shifting ratios, and adjusting handling, we show you how to move from the Tartine loaf to pizza and then to baguette, brioche, croissant, and English muffins. This is where you see the gears of the basic recipe in motion. Whether your ideal bread is a thin, crisp flatbread or a classic baguette, the basic recipe will remain “north.” All variations are traced out from the basic country recipe, and the origins are traced back to it. This is a baking guidebook to get you where you want to go.









Tartine bread began in 1992, when I visited a bakery in the Berkshire Mountains of western Massachusetts a few months before graduating from the Culinary Institute of America in New York. On the way, I confided to Elisabeth Prueitt, my classmate at the time, the notion that I might want to become a bread baker.

Liz and I arrived late one morning while the bakers were deep into their shift. A modern interpretation of Satie echoed through the vast brick barn as the final loaves were pulled from the oven and packed into an overflowing delivery truck. The last baker on shift would make deliveries to surrounding towns.

This place seemed a better fit than the frenetic kitchens I had worked in before. The honest handcraft and generous ambience struck a chord with my West Texas upbringing among generations of western boot and saddle makers.

While my culinary school classmates sought positions with well-known chefs in Manhattan, I settled on an apprenticeship with Richard Bourdon, a classically trained concert musician turned baker. Richard had quit the French horn to make bread in the late 1970s and packed his family for a tour (mostly on foot) of bakeries in the French Alps. When I met him in 1992, he was renowned as one of the first bakers in the United States to revive the use of a preindustrial French bread-making technique using extremely wet dough slowly risen with a wild yeast leaven. Richard's bread was notoriously difficult to prepare and had gained a cult following among the growing ranks of artisan bakers on the East Coast.

The affable baker accepted my request to apprentice on the spot, and offered Liz and me room and board in the farmhouse where he lived with his wife and five children. Liz began working as a pastry chef in a nearby restaurant, and I soon found myself working twelve-hour shifts for weeks. What I left in the evening, I would return to in the morning before sunrise. It was a long, hot summer working alone with Bourdon. We mixed, shaped, and pulled three thousand loaves a day from the oven followed with a delivery route. I had found what would become my life's profession.

Richard's goal was to make "good food." He wanted to produce healthful bread, and for him that meant mixing the flour with enough water to hydrate and fully cook the starch to make it more digestible. "Try to cook a cup of rice in half a cup of water," he said to illustrate the point. He insisted on fermenting his dough with a wild yeast natural leaven over a long time because he believed the process unlocked the nutrition in whole grains that were otherwise indigestible. The resulting high hydration in combination with a long, natural fermentation created a distinctively delicious loaf of bread. Richard's bread was exceptionally moist and tender, and had a depth of flavor achieved only after a long, slow rise using natural leaven. His bread was indeed good food, but he could tell I was still searching. After two years, he encouraged me to move on and keep learning.



Following a short stop in Northern California, Liz and I set off for the French Alps to find the baker about whom Richard had so often spoken. I was on the trail of my mentor's mentor. From stories Richard had told, my head was filled with visions of giant wood-fired ovens and a dough so wet it had to be shaped in midair before landing on the workbench. The Sorcerer's Apprentice came to mind. In reality, the broom would soon be in my hands, and I'd be sweeping the bakeshop every hour.

Though we did not camp in the forest on the outskirts of town as Richard had, we immersed ourselves in French provincial life—working first in Provence with Daniel Colin and then on to the Bauges Alpes range in the Savoie with Patrick LePort.

After meeting us at the train station when we arrived in Provence, Daniel found us a place to stay with a friend who owned an old wine château. The château had fallen into partial ruin surrounded by hectares of gnarled grapevines. He told us that there were a few people living on the property, and that it was now a “*naturaliste*” retreat. The château was called the “*marie fée*,” a new-age amalgam of Woodstock-era Americana, Sai Baba mysticism, and Provençal hillbilly.

We rode our bicycles through ancient vineyards and past shepherds on our way to the bakery each morning. Liz made pastry, working alongside the pâtissier, while I worked with the boulangers. Daniel took it upon himself to teach me the history of American jazz. His vinyl collection of Miles, Monk, Mingus, Coltrane, and Bill Evans was exhaustive. We lived on *pain intégrale*, jars of pâté, and local rosé wine, which was cheaper than water. It was a special time.

For the first few weeks, *l'américain* swept the shop and made rounds of instant coffee with hot tap water. Soon, though, my skills at the shaping table earned my acceptance. I realized how well prepared I was after working that hard season with Richard. The Frenchmen were surprised that I could properly handle their slack dough, which was common perhaps in the home-baking tradition but difficult to make on the larger production scale of a wholesale bakery. Available to cover shifts, I became an unexpected windfall in the ever-present logistical puzzle of scheduling vacation time in a French bakery while remaining open for business, and I fast found myself in the company of friends. We spent half a year at Daniel's Boulangerie Artisanale.

As we were readying to leave for the Alps, Daniel offered us a ride. He wanted to detour through Bordeaux to visit his aging father, and we had the time. The day we left, he made a small batch of bread specially for his father. It was a wetter dough than usual, with a long bulk rise, which he baked hot and dark. The crumb had huge pearlescent holes, and the crust cracked as it cooled. The bread seemed alive even as it cooled and settled. While he packed the bread for the journey, Daniel commented that “this is the way I'd always make bread for myself—but my customers would not buy it.” It was radical bread—a study in extremes—and I was much closer to finding the loaf with an old soul.

The loaves that Daniel had baked for his father held strong in my mind. I had not seen bread like that anywhere before. Speeding west across France in his Peugeot turbo wagon filled with bread, he told me about a lone baker in a small village near the coast who made the same bread he had just made for his father.

The bakery was a one-room shop in the Mèdoc with a wood-fired oven and plank shelving on the wall for bread. A bell hung outside the door, and in the afternoon it was rung to signal that hot bread was being pulled from the oven—just in time for dinner. This turned the baking schedule I had known upside down. Fresh bread for dinner was perfectly ideal and why work all night to have fresh bread in the morning, when toast is a treat unto itself? Never getting his name, I always spoke of him as “the

awesome baker.” Years later, recalling him in desperation would help me find a livable schedule I had forgot existed.

On the way to the Savoie, Daniel also took me to meet Monsieur Voisin, the man who had designed and built Daniel and Patrick’s stacked-deck wood-fired ovens, as well as rebuilding the centuries old oven of “the awesome baker.” Though his name means “neighbor,” *voisin* is the last word one might use to describe a man who had never traveled outside France and passionately despised foreigners. He enjoyed his own house-cured foie gras with a glass of Sauternes for breakfast and, inexplicably, invited us to join him. We ate *en plein air* next to a wooden rowboat planted thick with *fraises des bois*, while discussing French oven-building history.

Daniel dropped us off at Patrick LePort’s bakery, Boulangerie Savoyarde, where we were received like family returning from travels. Alpine muesli and *petit épeautre*, locally grown spelt bread, sustained us, with the occasional raclette binge on off nights. The kindness and generosity of our hosts were humbling.

We loved the work, the food, and the afternoon hikes to visit nearby *alpages* where some of the bakers tended cows and goats at high elevation for making traditional regional, seasonal cheeses. Our fellow bakers had accepted us, and we began to settle in. We talked about staying, yet my French *copain* advised against it. They recognized my dedication as a young baker and told me to return to the States and build an oven to make my own bread. My time spent learning in France was essential and instructive, allowing me to place what Bourdon had taught me into a historical context of tradition.

In France at the time, apprentice bakers would work twenty years more before having the opportunity to open their own places. It was against generations of tradition for a young baker to strike out on his own. French bakers were constrained by traditions that bound them to make the type of bread people expected of them. A big loaf, baked dark with huge holes, did not amount to “good bread” in this modern age; though that too would change over the next decade.



sample content of Tartine Bread

- [click Vanishing Acts pdf, azw \(kindle\), epub, doc, mobi](#)
- [read online A History of England, Volume 1: Prehistory to 1714 \(6th Edition\) pdf, azw \(kindle\), epub, doc, mobi](#)
- [read online Therapeutic and Functional Stretching for Manual Therapists: Long-Term Adaptation pdf, azw \(kindle\), epub](#)
- [Fire in the Hole: Stories online](#)

- <http://transtrade.cz/?ebooks/A-Social-History-of-England.pdf>
- <http://conexdx.com/library/A-History-of-England--Volume-1--Prehistory-to-1714--6th-Edition-.pdf>
- <http://korplast.gr/lib/Tarr--Oxford-World-s-Classics-.pdf>
- <http://cavalldecartro.highlandagency.es/library/Fire-in-the-Hole--Stories.pdf>