
THE VILLAGE BAKER

BY CHARLES CAPALDI

At 3am, I pulled down the single lane main street and parked on the sidewalk in front of the bakery. Sarlat, a small town in the south of France, was still dark,

shutters closed, the odd street lamp flickering in the pre-dawn grey. I couldn't help but imagine the town fathers slumbering in their beds. All, that is, but the village baker. The storefront at la Boulangerie-Pâtisserie may have been dark, but behind the shuttered façade of the building, something was definitely happening. A thin wisp of smoke curled out of the chimney. The distinctive odour of burning pine hung heavy in the air. Maître-boulangier Amédée Humeau was already hard at work. A knock at the back door went unanswered. I walked in to find him in his mitron (the traditional white baker's hat). As he greeted me, he took a quick peek at his rising loaves before turning on the coffee pot. The arrival of a young American intent on learning the mysteries of French bread was quite out-of-the-ordinary, and in Sarlat, out-of-the-ordinary is an excuse to sit down and celebrate. At 3am, a warm pain-au-chocolat and a bowl of freshly brewed coffee was just the ticket.

The wood-fired oven, still hot from the previous day's baking, needed a quick burst of heat to come up to temperature. The gueûlard (a cast-iron cone) fed hot flames directly into the baking chamber and Adée, as he invited me to

call him while we sipped our coffee, skilfully directed the heat from the firebox, first to one side of the oven, and then to the other, so it was evenly dispersed. By the time we reached the

coffee grounds at the bottom of our bowls, I was wrapped in a white apron, well-caffeinated (which doubles for hydrated in France), and ready for the day to come. Or, so I thought.

The next four hours were filled with a flurry of activity. Adée set me first to one task and then to another in quick succession with hardly a chance to catch my breath. The sourdough loaves had been rising for 12 hours and were ready to be baked from the residual heat of this firing. Each successive oven-load required another faggot of wood (an armload of inch thick branches) and a half hour for the heat to evenly distribute itself into

the masonry. This wasn't commercial baking so much as it was artisan baking at its best. It is in the very nature of things artisan that they take time to be done right. There were no dials, no steam injectors, no fancy equipment or machinery. Adée tested the temperature with a practiced, closed fist which he insisted was far more accurate than any fancy thermometer. I tried and came away with the impression that, yes, in fact, it was hot in there. He

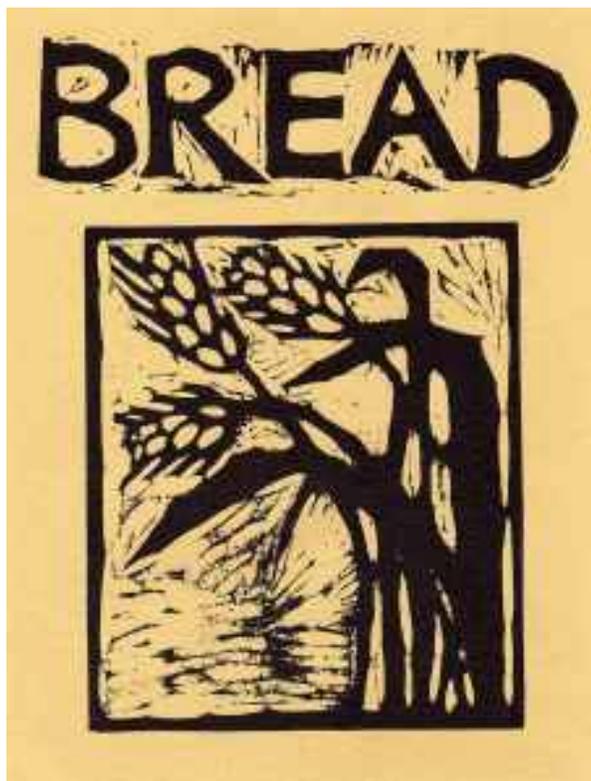


Illustration Courtesy of Bread & Puppet Theater
Glover, Vermont

laughed at me and told me the temperature was perfect if I could barely keep my closed fist in the oven to the count of five. I noted this down carefully for later use and then tried it again. Maybe *he* could keep his hand in there for that long, but I sure couldn't.



Batches of bread were held overnight in the cool temperatures that prevailed by the back door; not in proofing boxes as my research had led me to suspect. This helped ensure a slow, steady rise and gave the sourdough a chance to fully develop the flavour of the flour. Adée wheeled more loaves into the baking room for the final rise, giving them a chance to proof in the warm, basking glow of the wood fired oven.

The bread was baked to golden brown perfection one batch after another. As the loaves came out of the oven on a wooden peel, they were deftly turned into wicker baskets placed helter skelter around the bakery – from the floor, to the shelves over work tables. The

sourdough crackled and popped as it cooled and its subtle odour permeated the warm air.

Man's transition from a hunter-gatherer to a civilized being that relies on the produce from the shelves of his local grocery store has been gradual. From the beginning of time, humans have filled their bellies with grain in one form or another. The nomads that populated pre-history probably just ate it raw, harvesting whatever edible seeds and grains they managed to gather during their long migrations. Following the discovery of fire, however, their eating habits were transformed and the human talent for ingenuity came into its own. At some point, someone threw the entire seed head onto the fire, just long enough to burn the outside covering, rendering it easier to thresh and ultimately, more digestible and enjoyable to eat.

It was a small step from that to threshing the grain and cracking it into smaller, more manageable pieces with the help of two stones, the precursor to the mortar and pestle. The grain would be put through a rustic mortar several times to grind it, or more accurately, to crack it. It would inevitably mingle with dust, shards of stone, and whole grains that escaped the mortar's action. Clearly, man hardly possessed the technical skills necessary to obtain a refined result which we could refer to as flour – at least, not in any modern sense of the term. But cracked grains permitted man to make a thick porridge, the primary foodstuff of 8,000 years ago, and it is in this porridge that we find the embryo of bread, the first step in the transmutation of whole grains to a finished loaf of bread.



Porridge became the mother of all food, and the core foodstuff that nourished western civilization for thousands of years to come. In fact, porridge remained the primary foodstuff of many northern Europeans until the dawn of the 19th century. The act of chewing this primordial stew became far more important than the act of tasting, as witnessed by the archaeological record, replete with the jaw bones of people with teeth worn down to the gums.

Somewhere in the Middle East, people learned to bake their porridge into a flat, unleavened bread. Perhaps the porridge from the day before tipped into the fire by accident. The resulting cracker, for it must have been hard, dense and difficult to chew, was also

pleasantly portable and less prone to spoilage, the obvious precursor to “modern” flatbreads like pita, matzo, nan, and tortillas. Improvements in process and technique were not far behind.

From somewhere under the counter, Adée pulled out a large plastic pail with a tight fitting cover. “I’d like to introduce you to Popine,” he said. Like a farmer who names his cows, Adée had named his sourdough starter, passed down from generation to generation. Popine was worthy of her name. She was an old girl with attitude, a bubbling mass of sour-smelling, naturally-occurring wild yeast, which needed to be built (fed) each day in preparation for making up the next day’s bread. He mixed in a carefully measured amount of water, transforming her into a runny mess, reminiscent of cream-colored Elmer’s glue.



Then he added flour, first mixing it, and then kneading it, as if it were already bread dough. When he was done, he gave her a slap and Popine, now a large, flaccid loaf-shaped pile of dough, jiggled like a baby’s bottom. She had grown by twice her original size and would be given a chance to digest her latest feeding before it was repeated.

By 7 am, the bakery was open for business. Baskets of loaves were stacked on shelves behind the counter, around the shop and anywhere else there was room. A table in the centre of the shop was piled high with golden croissants. Multiple tiers of pains au chocolat topped the pile like the crenulations of a French château. *Madame* Humeau ran the counter. We had not shared that cup of coffee and it seemed we were forever relegated to calling each other “monsieur” and

“madame.” Adée and I loaded bread into his small, blue Citroën to be delivered to local inns, restaurants and cafés.

A break for lunch and time for a short nap broke up the day and by 3pm, we were back in the bakery where Popine had expanded to fill her pail. Carefully divided, she provided enough raw material for several batches of bread in a large pétrin, a commercial mixer large enough to bathe several children in it at once.

The starter was combined with flour, salt, and water to form the dough which was made in batches. Each batch was carefully measured and as the afternoon progressed, I couldn’t help but notice that Adée used less and less starter with each. He explained, “She [Popine – whom he insisted on referring to by name] gets more and more sour as the day goes by, so I use less of her in each batch and the bread all has the same flavour.” The batches were timed to a two hour interval, to allow the oven to be reheated and the loaves to finish rising in rapid succession the next morning. The process seemed simple, albeit long, arduous and somewhat tedious. But the resulting bread was worth the effort – a crisp crust, a hint of sour (French sourdough is much less sour than its American counterpart), and an irregular crumb. As for me, I thought I had the process down pretty well. In less than 12 hours, I reasoned, I had learned what students of French bakery schools spend months studying. Any vestige of self-doubt evaporated when Adée handed me a small jar containing a piece of Popine – a parting gift and my personal connection to the history of bread (French bread, anyway).

The Egyptians are often credited with the discovery of what we would call “bread” today – in other words, a well-risen dough with a bubble filled interior and a discernable crust. A fortuitous circumstance, it is likely that a piece of the previous day’s flatbread dough was left by the fire unbaked. The next day, there it was, slightly sour smelling. Not wanting to waste this precious foodstuff, perhaps its owner cooked it along with the flat bread dough. The resulting bread must have been much lighter than the typical fare, the taste would have been pleasantly sour without being overwhelming and a new era in bread-making was begun. Dough making techniques were refined; including a kneading method that used the feet of slaves as a mixer. In a relatively short period of time, mankind went from baking bread directly in hot wood ash, to enclosing it in a mould to retain heat. For the Egyptians, bread was not only their primary foodstuff, but along with beer, served as a form of currency.

The ancient Greeks contributed the precursor to the modern oven – a domed chamber with a door. Today, the per capita bread consumption in Greece is higher than anywhere else in the world. In fact, Greeks eat twice as much bread as the French and more than four times the amount consumed by the average American. The Greeks, and after them the Romans, took the basic craft of bread-making and turned it into an art form. This rather mundane daily household task evolved into a highly-respected profession on whose shoulders great civilizations would eventually rise and fall.

Travelling across France in my battered black Renault 5, I was struck by the continuity of history. Just a few miles off the auto route, I’d find myself in a medieval town like Sarlat, largely untouched by centuries of technological advancement. Little by little, small hamlets had grown into villages, villages into towns, and towns into cities. The rhythm and activity of urban life was very different from that of the countryside. And bread-making transitioned from an activity that was done in the home and baked in communal ovens to a highly codified metier assured by village bakers.

Hot on the trail of the history of bread, I had hoped to capture the mystique of the ubiquitous French baguette in terms used by the average Frenchman. To no avail. The people of one town ate the bread baked by their village baker and were as faithful to his loaves as Americans are to their preference for Coke or Pepsi. My questions seemed to confuse them, rather than elicit the answers for which I was searching. Ironically, I found the answer in a classic French film.

Marcel Pagnol’s screenplay, *The Baker’s Wife*, tells the story of a village baker whose wife runs off with another man. He is so distraught by this loss that he is unable to bake the daily bread of the villagers he serves. This presents a major dilemma for this turn of the century French village. Either they must find the baker’s wife or learn to live without their daily bread. A dilemma that seems oddly quaint, and somewhat foreign to most of us, but that was palpably real to the villagers in Pagnol’s story and to the audience for his films who, to a soul, still relied on their local village baker for their crusty baguette at dinner. In a moment of anguish, the baker addresses the village:

“If you return my Aurelia to me and rid me of this loss, then I will once again be a true baker. I will knead each batch half an hour longer than usual, and I will mix sprigs of rosemary into the branches I use to heat the bread oven. And, while the bread bakes, I will not sleep, as bakers are accustomed to doing. Instead, I will open the oven door every five minutes so that the loaves never leave my sight. I will make bread that is so delicious, it will never again be used as an accompaniment to other food; it will be nourishment in itself, a food fit for kings.”

While bread made the Roman Empire great, it was also its demise. It took the Romans what seemed forever to transition from eating porridge and gruel, to a marked preference for shaped and risen loaves. Once they learned this lesson, there was no stopping them. Ancient Roman society classed the baker not where he is today, (at best a blue collar worker, and at worst a factory worker) but rather as a skilled artisan plying a trade comparable to that of a tailor. Bakers in Rome were deemed “important to the welfare of the state” and as a result, received preferential treatment. Under the Flavians, they became civil servants and the 258 bakeries dotting the landscape in the ancient city of Rome became “places of state”.

Hordes of jobless people flocked to the Roman capital and were provided with a free ration of grain. The concept of a national dole was thus first borne out of the granaries and later, out of the bakeries of Rome. By 72 B.C. the number of urban unemployed had surged to 40,000 and by the time of Julius Caesar, more than 200,000 recipients of free grain were on the books. Augustus attempted to reduce this number to include only those worthy of a helping hand. But, he soon gave up. In order to maintain his hold on the reigns of power, he had to provide grain to the unemployed, he had to be able to feed his own body guard, and he had to be able to dump grain on the market in order to prevent speculators from driving up the price.

At first, the distribution of daily bread was made with a bronze grain control stamp called the *tessera frumentaria*. The bearer of this stamp was entitled to a monthly distribution of grain. Later, the stamp was replaced by a lead coin, entitling its bearer to a weekly distribution. Under the rule of Aurelian, the distribution was made in bread, rather than grain. Each member of the proletariat was authorized to receive two loaves per day, leading to the rise of a cult who worshipped Annona. Ironically, Annona wasn't a goddess at all, but rather a term used to refer to a measure of grain – specifically, the measure of a year's grain crop – at least until she became personified on Roman coins, a fact which earned her a place somewhere between Demeter and Ceres in their pantheon.

While Romans were busily worshipping Annona and happily stuffing their faces with free loaves of bread, grain producing countries on the fringes of the Roman Empire were quietly starving. The bulk of their grain was shipped back to Rome. As the Empire began to dissolve, so did the source of the grain. 300 years after the death of Christ, the Roman provinces became independent and no

longer had any incentive to send their grain to Rome. In fact, by keeping it for themselves, they had a better chance of warding off starvation. The Roman Empire(s) imploded from the weight of a loaf of bread.

By the late Middle Ages, dough was made in the home and loaves were shaped and identified so they could be baked in a communal oven, owned by the Lord and operated by the village baker on his behalf. Since it was illegal to bake bread anywhere but in the communal oven, the baker's importance and power in the local community grew. Harkening back to the ancient Egyptians, bread became a form of currency and bakers became “loaners of loaves”.

Clearly, the French hold the title for the world's most visible consumers of bread. King Louis IV once

said, “*He who controls a nation's bread is a greater ruler than he who controls their souls.*” Control over bread production in 18th century France still rested firmly in the hands of the King. Unfortunately, 800 years after Louis IV, this lesson was lost on Louis XVI and his lovely Austrian queen, Marie Antoinette. Known as the *Bread King*, Louis XVI lost his head on the guillotine for choosing to



support the American colonies in their struggle for independence, rather than ensuring that his subjects had enough bread to eat. The winter of 1787 in France was the harshest in memory and famine followed quickly on its heels. Bread, or the lack of it, was one of the single greatest factors in the rise of the bloody French Revolution.

Suitably inspired by the breads of France, I returned to the States with my French sourdough starter carefully stuffed into the toe of a pair of sneakers. By the time I got home and had recovered from jet lag, I was itching to bake bread. Bread, like the loaves I'd helped to make, from a sourdough starter with which I was on a first name basis. My family watched from a distance and seemed suitably impressed with my newfound ease in the bread-making world. There had been short-lived experiments with brook trout in the basement, composting worms under the sink, and exploding bottles of Belgian Cherry Lambic Ale in the cupboard. They were probably consoling themselves with the thought that the bread "ordeal" was likely to be less dangerous, less messy and certainly, less smelly, than what had preceded it.

I carefully weighed the flour and water. I took exacting measurements of room temperature and performed elaborate calculations on a chalkboard for the benefit of my audience. I kneaded the dough as I had been taught, finishing off with an impressive slap. The slap, of course, was the cue to explain to my rapt audience that it should jiggle "just like a baby's bottom." Sure enough, it jiggled, my heart leapt, and we were assured of awesome French loaves. Or, so I thought.

I was up at dawn the next morning, anxious to reproduce Adée's timing and methods faithfully. I preheated my gas oven, newly refurbished with a clay insert to reproduce the environment of a bread oven, and brought my loaves up from the cool cellar where they had fermented overnight. Two hours later, they had risen impressively, the oven was up to temperature,



and I loaded my peel. By the time the rest of the family arrived, I had funnelled a half a dozen loaves through the oven, two by two, like the animals exiting Noah's ark. The first loaves were cooling on the counter when the buzzards started to circle. Coffee, hot chocolate, freshly churned butter and homemade jams were at the ready. We sat down and hungrily broke off pieces of that first loaf. My mouth watered in anticipation. The aroma permeated the room and only added to the mystique of my flour covered apron and the bead of sweat on my brow. And then I took the first bite.

It was a reasonable loaf of bread ... and it looked reasonably like the loaves from Sarlat. But something was wrong. The flavour was off, the crumb was dense and regular, not airy and open-holed as I had expected. It just wasn't right – not that my family noticed. It was a vast improvement over the breads to which they had been subjected previously – not the least of which were the doorstep loaves, heavy as lead but filled with the goodness of whole grains, if you could only get someone to eat them. But, they hadn't savoured the bread in Sarlat, they hadn't spent the day with Adée, and they had no concept of the standard I was trying to reach. Needless to say, returning to France was out of the question. I was on my own with my notes, my memories and a vision of the ideal loaf of bread.

Over the next week I baked obsessively, altering first one variable and then another. Using more water to hydrate the dough, changing from table salt to sea salt, increasing the humidity in the oven, then decreasing it, making the dough with bottled French

mineral water, in short, doing everything I could think of. Every experiment changed the bread somewhat, but nothing got me the loaf I sought and I was left with the very real possibility that the problem lay in the flour I was using.

Flour is so common that most of us take it for granted and certainly, in Ancient Rome, no one was asking what kind of flour a baker used. The temptation is to assume that flour is simply grain that has been ground and bagged. While that may have been true 2,000 years ago, today, the reality couldn't be further from the truth.

The advent of the roller mill in the 1890's radically altered the production of grain, and ultimately the quality of the nutrition it delivered to the people. The flour from roller mills rapidly replaced stone-ground flour in both Europe and the Americas. This technological improvement allowed the grain to pass between two grooved steel rollers, one of which rotates at twice the rate of the other. Rather than simply grinding the grain, the roller mill literally tore apart the kernels. A seemingly minor detail, this was a major revolution in how flour was made and allowed the miller to separate the three main parts of the grain from each other: the outer layer, or bran (which contains most of the B vitamins and minerals), the germ (which contains essential fatty acids and vitamin E), and the endosperm or the starch.

By eliminating the bran and the germ, white bread was increasingly devoid of the nutritional content of whole grain loaves. Less nutrition or not, there were clear economic advantages to baking with white flour. It made a more flexible dough guaranteeing a fluffier crumb and a softer texture. If only there were a way to make the quality of white flour consistent across the board. Enter the magic of modern science and the advent of bleached white flour.

Bleaching the flour with chlorine, an otherwise potent environmental toxin, eradicated the carotene (yellowish orange pigments that the body metabolizes into Vitamin A). But, it also levelled out inconsistencies in the characteristics of milled flour – made from an organic product that varied from year to year, crop to crop and farm to farm. By the 1940's, bakers and millers had a whole list of adjuncts to improve the consistency of commercial flours. While many of these are toxins in their own right, few, if any, have proven immediately life-threatening. Little to no nutritional research has been conducted to determine the effect of their by-products, consumed by a nation of bread eaters on a daily basis.

During World War II, the U.S. and British governments independently decided to improve the nutrition of their populace. Flour was the most likely vehicle for accomplishing this since 11 vitamins, 6 minerals and essential fatty acids are lost or removed from wheat during processing, as is the bran. The bleaching process destroys any naturally occurring vitamin E. The British opted to produce a less refined flour. In the U.S., the wartime government decided that it was unreasonable to convince Americans to switch from fluffy white bread to whole wheat loaves. Instead, they opted to enrich white flour with three of the missing vitamins and one mineral: Niacin, Thiamine, Riboflavin and Iron. At the cellular level, enriched white flour lacks the nutritional scope of whole-wheat. In fact, the editor of the 1943 journal *Nutrition Reviews* stated that, "It is a curious fact that enrichment of white flour and white bread was promulgated with little direct experimental evidence to demonstrate the value of such a proposal to the human being." Ironically, the enriched white flour, based on the 1940's standard, remained a staple of American diets until 1995 – when the addition of folic acid (a B vitamin) was authorized.

Grains form the base of the USDA food pyramid. Ironically, the American populace relies extensively on two primary grains to satisfy that requirement – enriched white flour and enriched white rice. Like white flour, white rice is a refined food that has lost its full spectrum of vitamins and minerals.

If enriched white flour comprised just a fraction of the nation's diet, it could be argued that the missing vitamins and minerals would derive from other foods. But white flour is the most common ingredient of commercial foodstuffs from breads to pasta to

breakfast cereal. And breakfast cereal with 8 essential vitamins and minerals, consumed by just about every child from coast-to-coast, is almost unilaterally the sole source of energy most kids will use to fuel their learning for the first four hours of the school day.

It took weeks to find a source of flour besides my local grocery. Who knew that there were numerous artisan flour mills in the Northeast? In fact, I found that I could buy French bread flour milled to the same hardness and mineral content of that used by Lionel Poilâne, a famous Parisian baker. In the end, I settled on a small employee-owned mill in Vermont, appropriately called King Arthur Flour. They had an impressive array of bread-making supplies. More importantly, they would sell me as little as a pound of flour, or as much as a truckload, and guarantee its freshness.

The flour arrived the next day – with the shipping costs, I was cognizant of the fact that this could possibly be the most expensive French sourdough known to man. But, I reasoned, if I could just figure it out and refine the technique for my kitchen, I could regularly keep my family in bread that would vie with the best baguettes I'd ever eaten. That *was* worth a super-human effort.

In the morning, I pulled the loaves out to proof in the warm kitchen and I was struck by the difference. They had risen a full inch higher than any of the loaves made with store-bought flour. When you poked a finger into the loaf, the dough sprung back steadily. But the true test was in the eating. I hesitantly put a piece of fresh-baked bread into my mouth and realized that finally, it was RIGHT! Popine had landed on North American shores with a bang.

The flour was prohibitively expensive. So, under the guise of 'research', I organized a road trip to the King Arthur Flour Mill

in order to stockpile a larger quantity. And, I reasoned, why not continue on to Montréal to see if the French love for bread extended to North America's largest francophone city. I never made it.

Less than a mile across the Vermont-Quebec border lays the small village of Stanstead-Rock Island, home to Le Feuilletton de Stanstead, an artisan bakery run along traditional lines. It is easy to miss as you drive down the main street heading toward the trans-Quebecois highway. Not that any of the locals on either side of the frontier have a problem finding it. A simple wooden sign hangs out front with the name and the words "Pain Frais/Fresh Bread". Jean-Pierre Oddo and his wife emigrated from France 5 years ago and they star in the leading roles of the modern artisan baker and his wife.

Jean-Pierre and his younger brother do the baking. His wife, Marie-Christine, minds the shop. A small counter has an attractive arrangement of traditional French pastries and some rustic pizzas in a glass case. The wall behind it is stacked with specialty loaves in wicker baskets – fougasse, pain aux noix, gaullois, all made from naturally leavened sourdough. Jean-Pierre gives a tired smile at 2 pm, as he lifts off his white mitron and



wipes at a flour covered brow. "The village of Stanstead," he says, "hasn't had a real baker in a long time. You almost have to teach

people to appreciate real bread again after they have eaten supermarket loaves for too long.” For the past four years he baked bread and pastry for some of Northern Quebec’s finest restaurants, but the pace of restaurant baking left little time for the creation of artisan breads. “We decided to open a bakery and to become part of the heart and soul of a small community. That’s why we moved here.” And that is exactly what you feel when you walk into the front door of their small suburban home converted to a bakery.

What was once the living room is filled ceiling to floor with bread ovens. The old dining room holds a commercial mixer, bins of flour and work tables for shaping, proofing and rising loaves by hand. Sounds of children trickle down the stairs from the second floor, where the family lives. This is the French bakery tradition at its best, transplanted to North American shores.

Like the villagers in Pagnol’s film, the people of Stanstead are blessed to have a village baker, like Jean-Pierre Oddo at their disposal. And they trust him, something that is abundantly clear when you walk into his shop and crowd into the small space behind the middle-age couple that is carefully choosing loaves for their family table. This trust is warranted by the fact that he watches over his loaves, putting honesty and a personal thank you into each and every one of them. He bakes to satisfy the preferences of his customers and he gives something back to the community in which he lives. More importantly, his customers feel that their bread contains more than just nourishment. It is endowed with an extra ingredient that is hard to measure – the energy and the dedication of the person who made it. A loaf of bread made by your local baker, or in the kitchen of your home, is not only sustenance for the body, it is fuel for the spirit.



B By 1850, there were 2,017 bakeries in the United States, 123 of them serving the 40,000 inhabitants of Washington, DC. However, because of the colonial nature of American society, historians estimate that 90% of the bread was still being baked at home. By 1910, this figure had dropped to 70% of the bread consumed. In 1927, Continental Baking introduced Wonder Bread in its all-to-familiar balloon-decorated, plastic wrapper. In the same year that Continental Baking devised a method to pre-slice their Wonder Bread, the automatic pop-up toaster was invented! Ironically, Wonder Bread is still the largest selling brand of bread in the United States and it is

estimated that less than 1% of American families bake their own bread on a regular basis.

The past 20 years have witnessed a resurgence in artisan bread-making in both North America and Western Europe. Surveys commissioned by bakery trade journals estimate that specialty and artisan breads represent less than 5% of the bread market in the United States.

While most artisan bakeries in 2004 struggle to achieve annual sales of \$250,000 to \$1 million, a few like Acme Bakery in Berkeley California and La Brea in Los Angeles are selling millions of dollars worth of bread in a year. In 1989, La Brea Bakery started a revolution in the way people on the west coast ate bread. European artisan loaves weren't commonly available and Chef Nancy Silverton set about teaching herself the ancient art of sourdough – alive and well in Western Europe, but largely dead in the United States.

Most bakers use commercial yeast to raise their dough – the outcome is predictable and the formula is simple. Silverton, however, learned to harness the temperamental nature of a naturally leavened loaf – unpredictable and subject to the vagaries of temperature, humidity, and time. Unlike commercial yeast, a sourdough starter is a living, bubbling mass of flour, water, and wild yeasts that allow the dough to rise slowly over time – an event which results in a finished loaf with a burnished crust, an irregular, hole-filled interior, and complex flavours. La Brea's breads were in hot demand and requests were pouring in from all over the country. However, the sensitive nature of sourdough baking seemed to prohibit shipping the loaves to other cities, until Silverstein refined a method called par-baking, where the loaf is baked 80 percent of the way, cooled and then flash frozen. On the receiving end, the bread is allowed to finish baking from its frozen state, the loaves are purported to be indistinguishable from those completely baked in the Los Angeles bakery and La Brea breads became the premier bread in grocery stores across the United States.

France, which can hardly be said to have ever lost its taste for bread, had settled on the white flaky baguette of *pain ordinaire* as the bread of the masses. It is this very image of “French Bread” that has been exported around the globe – witness the photograph that hangs in French classrooms across the United States, of the beret-wearing father and son with the crusty baguette strapped over the rear wheel of the bike they share.



supermarkets and more than 150 bread outlets across France.

Leading the charge of French bread exporters was Lionel Poilâne. Born into a family where the baker's mitron was transferred from father to son from time immemorial, Poilâne started working in the bakery at age 14. From a recipe handed down to him by his father, Poilâne managed to introduce his baguette with its tell-tale grey crumb interior to the rest of the world. Faithful to artisan methods, specifically that of natural sourdough rather than commercial yeast, he reinvented the family bakery according to what he calls “*rétro-innovation*.” In other words, he took the best of the old world techniques and the best of modern technology and wedded them to each other. Today, Poilâne's bread is delivered to

In spite of the anecdotal evidence to the contrary, something is still amiss ... From the beginning of time, bread has always been humanity's primary source of food and sustenance, besides being one of its greatest symbols of life and sharing. But when a loaf of bread travels 2,000 miles to your local mega-grocery, we are no longer dealing with a village baker who infuses his loaves with love, friendship and compassion, but rather with a global baker whose concern is primarily how to par freeze the loaf fast enough, how

to incite the consumer to choose his loaf over one encased in plastic ... in other words, even artisan baking has become about bread ... the kind that you spend, not the kind that you eat. This is the hallmark of a once artisan tradition turned commercial, and some would argue, gone awry.

As I amble up and down the aisles in my local grocery, I am struck by the signs identifying foods that qualify for the WIC (Women, Infants and Children) Program. In the U.S., families under the poverty threshold are provided with foods intended to deliver a baseline level of nutrition to a growing population (and an even faster growing underclass). Nutritional guidelines harken back to the Roman dole as basic foodstuffs include loaves of enriched white bread, processed cheese and, yes, breakfast cereal enriched with 8 essential vitamins and minerals.

The concept of enriching the modern diet by supplementing the vitamin and mineral content of white flour still prevails. In fact, a whole host of products are made from enriched white flour – a term which implies *more* than just flour alone. The manufacturers miscalculated in much the same way that the proponents of enriched white flour miscalculated post World War II - they never bothered to study whether enriching a refined food, like white, bleached flour, is effective or causes harm to those who consume it. Compound that error with the addition of innumerable chemical additives and the outcome of this experiment could reach sweeping proportions.

Witness the increase in cancer, heart disease, diabetes and obesity among our youth, the prevalence of autism, the upswing in behavioural disorders, hyperactivity (now known as ADD/ADHD), and violence - all since the 1940's. Theoretically, at least, we could blame it all on a decay of morals in society, the breakdown of the nuclear family, or any number of other societal ills that afflict our modern, post-industrialized societies in the West. We *could* claim that 1940's science was not yet equipped to call an apple an apple, and that these increases can be attributed to our newfound ability to accurately identify these conditions. Yet, the dictum "You are what you eat" seems straightforward enough - as you walk through a grocery store with 12 or 15 aisles, one of which is completely devoted to sugar coated breakfast cereals, another to a dazzling array of bagged breads made with enriched white flour, all targeted at and marketed directly to our children. This is anecdotal evidence that something is amiss, yet no one seems alarmed. The crusty loaf of sourdough bread that could last for a week without going stale and served as trencher, spoon and staff of life has been displaced by a white, fluffy, soft loaf, that never goes bad in its sarcophagus of colourful plastic and is the image of "democracy" that the U.S. exports to developing countries around the globe. As Jef Richards said, "*Advertising is the 'wonder' in Wonder Bread™.*" It would appear that wonders never cease.

Over the last century monumental changes have occurred in the world of bread making and in the production of the grains used to make bread and other food stuffs. Corn is by far the largest grain export from the U.S. But with the advent of genetic engineering and genetically modified crops, we are no longer able to differentiate GM corn from open pollinated varieties in our national stores. The same can now be said for soybeans and wheat. Terminator technology renders harvested seeds sterile in order to enforce corporate patents on GM seeds. To the farmer, this means that the seeds cannot be saved, replanted or exchanged, negating a practice which goes back to the dawn of civilization and promises a future where the world would starve without ongoing access to laboratory developed seed and the money to purchase it. European consumers have so far, had the foresight to reject GM foods in their food supply. In the U.S. the government doesn't limit the use of GM grains and in fact, doesn't require them to be labelled, so the consumer is purchasing blind. And let's face it; developing countries are hardly in a position to be picky about the handouts they receive from the industrialized nations. Tsunami victims are happy for the loaf of bread or the bag of white rice that is provided to them. Post-Hiroshima Japan quietly transitioned from brown rice to enriched white rice under the American-led reconstruction

program. The highly industrialized nations (aka The US and Great Britain) are now using this type of intervention with their own populace.

The U.S. and U.K. governments have carried out “public consultations” where terminator technology is promoted as a means of preventing the spread of GM genes. However, since the beginning of 1990, terminator crops have been field-tested in Europe. More than 132 field trials have been carried out in the U.S. since 1992 ... One of the many unsettling aspects of this lies in the fact that most of the field trials were accomplished in the absence of any risk assessment. The bottom line is that our governments, in partnership with large multinational firms like Monsanto, are smoothing the way for a gradual commercial introduction of a morally bankrupt technology. Pearl S. Buck’s observation seems oddly appropriate. “*To eat bread without hope is still slowly to starve to death.*”

In many ways we have become as hurried as our modern loaves of Frankenbread. If the downfall of ancient Rome and of the French nobility were assured by their inability to put a loaf of bread into the hands of its citizens on a daily basis – can the post-industrialized nations turn around their eventual decline through something as simple as a resurgence in bread baking technology, distribution and quality? Can the world be saved by a home-baked loaf of bread? Bread, the simplest of all foodstuffs, has served us well as currency of exchange, and as a symbol of the presence of God. Bread can be a paradigm for societal decay as in the case of Rome and France. But in the modern era, it can also be a paradigm for societal rebuilding.

Ever since that fateful day in the Boulangerie-Pâtisserie of Sarlat, my family has eaten bread made from the sweat of my brow and increasingly over the years, from hand-milled grain grown in our garden. If “*Bread thrown on the waters of life returns to us three-fold,*” then I’ve taken that dictum literally. As my three children prepare to enter the world as adults, it is my goal to send them off with their bellies full of crusty, whole-grained loaves filled with all the love, care and attention that I can muster. We must all choose what our contribution to this world will be. In its small way, this is mine.

