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WORKING FOR A SUSTAINABLE FUTURE

Homogenized Planet

by E. Koohan Pak

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Cheese vs. Cheesefood, and the dilemma of global standards

Debby Stetson, of Westfield Farm in Massachusetts, hangs curd in cheesescloth to drain on day three of the four-day fresh cheese-making process. Photograph courtesy Bob and Debby Stetson, www.chevre.com.

by E. Koohan Paik

wenty years ago, while living on Guam, I was befriended by Heiko, an amicable scavenger who always knew where to forage for the tastiest mangoes, or where you could get the cheapest cigarettes. He came pounding on my door one afternoon. "Hey, Koohan! Let's go get our cheese!" The U.S. Navy had had another overrun of the stuff, and was handing it out to anyone who showed up outside the base PX.

Heiko led me to a parking lot paved in coral limestone that baked in the sun. In the distance, a shipping container was parked beside some scraggly coconut palms and a nondescript, typhoon-proof, cinder block building. A throng of cheering civilians clustered around one end of the container.

Like firefighters passing along pails of water, soldiers in fatigues stood inside the container tossing down five-pound boxes of mass-produced processed American cheese. One by one, they pulled the bricks from a monolith of dairy masonry that filled the container. We held our hands high to receive our share of manna, payoff for having hosted the military presence and all that came with it—B-52 headquartering, nuclear warhead storage, and confiscation of a third of the island. I'd heard of beads, stones, paper, and shells used as currency, but never bad cheese.

Heiko ran back grinning, holding his block of cheese in the air as if scoring a touchdown.

Ever since that moment, the five-pound brick of military-issue American cheese has loomed large in my personal mythology as the quintessential icon of colonization. The legacy of American paternalism is one thing, but the fact that we had sold ourselves so readily for as little as unlimited Spam, powdered milk, and processed cheese sets my teeth on edge. The unsavory dynamic between benevolent occupier and obsequious occupied may have been less painful had the soldiers been instead passing out wheels of Epoisses, or Roquefort.

There's a reason why the cheese we were given was distinguished more by geometry than flavor. It had been manufactured for maximum shelf life. Back during World War II, when the United States served as breadbasket to the Allies, the priority in food production was that it should withstand long-distance travel. The answer was pasteurized, processed cheese —made by heating natural cheeses to a liquid and adding emulsifiers and preservatives before reshaping it into a brick whose shelf life was positively Faustian. Needless to say, soft European-style and farmstead cheeses, many of which are not pasteurized (and which therefore contain a spectrum of bacteria), would never have survived the trip across the Pacific, let alone the tropical sun.

Now that globalization has emerged as the turbocharged reincarnation of colonization, industrial cheese again rears its yellow head. In this round of history, it stars as the edible manifestation of global monoculture. It is the easiest cheese for the few mega-corporations to produce, sell, and distribute across the planet, even at the expense of the gustatory pleasure of millions.

eave it to Italian-style revelry to defy the cultural homogeneity that looms over the new century. Cheeseart 2000, a celebration of artisan cheesemaking, was held last May in the Sicilian town of Ragusa Ibla. The honeyed-stone village, clinging in tiers to the side of an anise-scented mountain, was transformed into an exposition of dairy rarities from Cypress, Italy, France, Spain, Egypt, Israel, Turkey, Greece, and beyond. At each gargoyled turn spiraling up to Ragusa's summit, another tray of tidbits appeared, to challenge the limits of cheese diversity and human digestion. The University of Ragusa, overlooking a fertile valley, was devoting itself to a series of lectures on everything from flavor chemistry to grazing ecosystems, and from lost cheeses to genetically engineered gouda (or, rather, gouda bacteria). Tastings were held in a monastery, in an ancient stone wine cellar, and in the city's most flocked and tapestried restaurants. And there was the Palio di Maiorchino, a seventh-century Sicilian game that involves rolling a 22-pound wheel of Maiorchino throughout the winding alleys of the town.

The festival was organized by the Consorzio Ricerca Filiera Lattiero-Casearia, a team of 60 experts—breeders, agronomists, forage specialists, microbiologists, milk analysis technicians, and aroma researchers—dedicated to protecting Italian artisan cheeses. The team has two goals, the first of which is to document the characteristics of DOP, or *Denominazione di Origine Protetta* (Denomination of Protected Origin) cheeses and canonize them as "national treasures," thus protecting them from the standardizing effects of global processing regulations. The second goal is to educate consumers on the economic, epicurean, and historical implications of cheesemaking.

In the United States, the most immediately threatening aspect of streamlining world dairy production is the possibility of mandatory pasteurization for both domestic and imported cheeses. This would mean the disappearance of such raw-milk stalwarts as Parmigiano-Reggiano, Brie de Meaux, and Gruyere.

Pasteurization, the heating of milk for the purpose of killing nearly all microorganisms, truncates otherwise infinite possibilities for flavor and texture. Cheese artisans believe that with cheese, as with wine, quality results from skilled manipulation of bacteria, through temperature, timing, and aging. Without bacteria, they believe, certain cheeses become as lifeless and bland as "near beer." Although Americans (who at one time pasteurized all California wines) tend to feel safer with this "sterile" approach, the specter of mandatory pasteurization has farmstead cheesemakers up in arms.

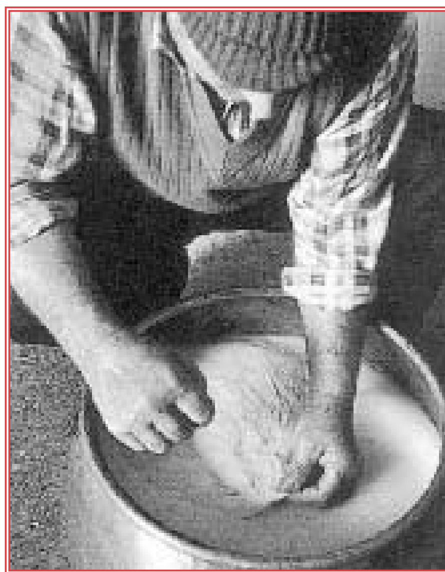
In Europe, many artisan cheeses have already been lost, either through the inability of rural producers to meet new hygiene standards or through the failure of rare cheeses to compete in a world market where transportability, shelf life, and fast production reign supreme. For example, British health authorities have virtually declared war on unpasteurized cheeses. Humphrey Errington, maker of a raw-milk blue cheese, Lanark Blue, was put out of business when his cheese was taken off the market in the early 1990s. After spending £200,000 ($292,000) and 13 long months in court, Errington proved that Lanark Blue was not dangerous. Even though he lost his livelihood, he chose not to join the many other cheesemakers who have quietly capitulated to official pressure. Many Europeans view this pressure as a bureaucratic witch-hunt of bacteria, and a demonization of their culinary heritage.

A minivan awaited me and one other Cheeseart guest, an Italian journalist named Elio Ragazzoni, at the Catania Airport. With a regality that contradicted his rumpled black suit, Ragazzoni smiled and stepped up into the van, declaring, "Journalism is my profession; cheese is my passion!"

Catania's shabby suburbs gave way to orchards of figs, olives, grapes, and carob on the long drive south to Ragusa. The driver decided to break the pastoral monotony by popping in a tape of fellow Sicilian Frank Sinatra singing the virtues of Manhattan. As we sped through the golden countryside to the sound of "I want to be a part of it! New York! New York!" Ragazzoni struck up a conversation. In very loud French (our common language), he described the rare Castelmagno cheese which had been made for centuries in his home region.

"It's supposed to be a cheese which is blue, something that happens with the aging process. But now, with the trade so competitive, producers no longer want to wait for the cheese to ripen long enough to turn blue. As a result, people have forgotten that it is a blue cheese. They think it's a white cheese. There is only one producer left who makes it correctly. But when he puts his cheese on the market, nobody wants a blue Castelmagno!" He sighed. "The same thing happened to the wonderful blood oranges which are famous in Sicily. Oranges that are orange have been marketed so successfully to Europeans that even the Sicilians don't want their own specialty anymore."

This was the tireless refrain at the conference: the erosion of consumer standards. Cheesemakers, affineurs, retailers, chemists, anthropologists, and shepherds were among the throngs who converged to resist what they view as the most invasive type of colonization: that of the senses. One of the most vocal of the participants was activist Piero Sardo of Slow Food, an Italy-based organization committed to preserving food traditions, who suggested that what makes this style of colonization particularly insidious is the *illusion* of consumer choice. The food industry's rationalization, he said, is that "It's what the consumer wants." He cited the success of Slow Food's *Salone del Gusto*, an international festival of regional cuisines that attracted 126,000 people to Torino in 1998, as proof that there are still plenty of consumers who would rather do business with small-scale food artisans.



An Italian cheese-maker closing a single ball of curd, a phase in the curd-kneading process. Photograph from www.cheeseart.com.

That isn't to say that industrial food serves no useful function. Sardo recalls that it was American processed food that saved starving, post-war Italy. But now, in a country rich in agriculture and artisans, food that is notable mainly for long shelf life no longer makes sense.

Ana-Rita Mayol, a young Cornell Ph.D. and Research Coordinator of the Consorzio's Dairy Products

Division, took me on a tour of the organization's sparkling facility, once an elegant 19th century manor. Upstairs offices overlook a view of rolling fields. Downstairs, beakers, sinks and computers fill a state-of-the-art flavor research lab. Sheets of clear Plexiglas neatly cover the raw stone walls, ensuring a controlled, contaminant-free environment.

The Consorzio's mission is to establish scientific techniques to verify a cheese's DOP (heritage) status. A DOP cheese is defined by how the cheese is made, what tools are used, milk quality, and aroma markers to ascertain breed of cow and species of forage. If the cheese does not meet the qualifications, it cannot be protected by law as a DOP cheese. If the cheese measures up, this authentication will provide concrete defense against its demise.

Making Parmigiano-Reggiano in Reggio Emilia, Italy. Photograph from Oldways Preservation & Exchange Trust, www.oldwayspt.org.

Tools and techniques required for DOP status often conflict with new hygiene rules, presenting daunting challenges to the Consorzio. "They're making stricter and stricter laws against using raw milk, you have to use gloves, you cannot use wood, you cannot use straw," said Mayol. "You need that microflora in the wood, or the hands, in copper, or in raw milk, to have your artisan cheese, your DOP cheese." For Americans, it seems foreign, indeed, that bacteria found in soggy wood might actually be an ingredient essential to a long-established recipe.

Equally absurd to the Puritan sensibility of germ-free functionality were Cheeseart's guided tastings. Imagine sitting in a dining room of well-dressed people babbling in a buffet of languages. The wait staff is comprised of young scientists from the Consorzio (Mayol being one of them) scurrying to refill wine, replace silver, or place the next course of multiple cheeses on pressed linen tablecloths. To one side of the room, the tasting guide intones, in Italian, "Pick up the cheese." The person seated beside you leans over to translate for you. "The first thing is to look at the cheese. What is the color, the texture? What do you smell?" Everyone brings a morsel to their noses. "Can you smell the grasses that were eaten by the animal whose milk made this cheese? Can you smell the hazelnut? Or is it chestnut?" The guests nod.

"Finally, we taste the cheese." A man at the next table takes a bite with such concentration that he appears to be reading invisible text floating in the air as he chews. "Does the flavor on the tongue meet the expectation of the nose? Find the balance between taste and aroma. Is it a well-balanced cheese?"

The queso in question is la Vastedda del Belice, considered the "jewel of low-fat cheeses" and the only string cheese made from sheep's milk. It is a sweet, young thing that must be consumed fresh, making it available only in the vicinity of its production. "If taste corresponds to smell," continues the guide, "then this is a well-balanced cheese."

As silly as that moment seemed, nonetheless, it was then that I realized how much I had been conditioned to dismiss my sense of smell in favor of the more glamorous, media-driven senses: sight and sound. Even the place that should be a temple of scent—not the cosmetics counter, but the food market—has become an aromatic void, displaying foods sealed in plastic, aluminum, cardboard, glass—anything to conceal odor. If our supermarkets smell of anything, it is "nose Muzak"—artificial fragrances pumped into the air to subliminally induce spending.

The sense of smell evolved as one of the most vital means of discerning distinctions important to survival: the edibility of food, the compatibility of a mate, the imminence of danger. When smells are expunged from the supermarket, we are stripped of an essential defense mechanism, like a declawed cat or a bird with clipped wings. As a result, we make buying decisions based primarily on sight. This leaves the consumer at the mercy of packaging designers and genetic engineers who troll for purchases with day-glo cereal boxes and gene-tweaked tomatoes that remain red and unblemished for weeks.

At Ragusa's meticulously appointed Ristorante Il Duomo, Carlo Fiori, an attentive, fifth-generation

affineur, describes the histories and characteristics of five distinct ricotte: buffalo ricotta with citron honey, sheep with orange marmalade, goat with bergamot honey, brocciu (a sheep-goat blend from Corsica) matched to fennel honey, and ricotta al forno with citron peel marmalade. With the final sample, the ricotta al forno, a hard, smoked cheese, he visibly stiffens with annoyance. It is true, what he says—the specimen has the texture of an old shoe.

Why? Fiori explains that they were unable to obtain the true ricotta al forno, fresh from the oven. This had been vacuum-sealed in plastic, a process that had sucked out the oxygen and liquid, causing it to dessicate. He laments that cheesemakers are compromising quality and tradition to get their products on shelves in distant regions, a practice unheard of until very recently.

"Producers have been vacuum-packing in the last five years because there has been sudden demand for our cheeses in Tokyo, New York, Buenos Aires. These are cheeses that had been sold no more than 30 kilometers' distance from here, and now there's sudden demand all over the world." Fiori sees the global sanitation standard of vacuum-packaging as self-defeating. "They think it will stop bacteria from growing. It doesn't. Many bacteria do not need oxygen, so the bacteria live and change the cheese." He analogizes, "You might want to wash a cat, but if you put it in the washing machine, you kill it."

He describes the findings of a national study that was presented last year at a milk convention in Cremona. Results revealed that the five most popular cheeses in Italy were surprisingly compatible with American tastes, despite American assumptions about the "sophisticated" Italian palate. They were: Parmigiano-Reggiano ("because it goes so well on pasta"), pecorino romano ("good, but less expensive than parmesan"), mozzarella ("for those on the low-fat bandwagon"), gorgonzola ("a thousand years of history"), and then one more.

He pauses for dramatic suspense.

"Philadelphia!" he finally anguishes, referring to the cream cheese manufactured and distributed by Kraft Foods. With the passion of a Carthaginian refusing to surrender Sicily to Rome, he quivers as he describes a television commercial hawking the invading cheese. In the ad, an old man is offering a small boy a selection of traditional Italian *formaggi.* The boy shuns them for the most appealing looking one of the lot: Philadelphia cream cheese. Fiori believes Italians are being brainwashed to turn on their own heritage.

The bane of Carlo Fiori's profession, Kraft Foods, was also slated to state its case, to an auditorium packed with European cheese critics. What wicked fun to watch the pert, smart Jane Leland apologize for the mundane quality put out by her company, a subsidiary of tobacco conglomerate Philip Morris and the inventor of aerosol cheese.

As sheepish as a wheel of pecorino, Ms. Leland began her lecture by confessing her meager qualifications as an American speaking in a country that defined cheesemaking centuries ago. For this reason, she announced she would limit her material to how American cheese differs from Italian, and why.

The illustration on the overhead projector said it all: a Star Wars-meets-Safeway computer graphic depicting a view from space of Earth, eclipsed by a constellation of perhaps 40 oversized processed-food logos. True enough, nowhere on the planet can you escape "mega-brands" (defined by Leland as reaping over a billion dollars a year in sales) like Post, Oscar Meyer, and Maxwell House. She held up the ubiquitous shimmering green cylinder that Americans know as parmesan cheese. "This is really a product that was driven by consumer demand for convenience, and also by technology. I know it's comfortable in Italy to buy your cheese and grate it all by yourself. But Americans really want to shake it out already grated, and want to shake it out of the can." She shook the container over an imaginary plate of spaghetti. "We

Making feta cheese on the Island of Lesvos, Greece. Photograph from Oldways Preservation & Exchange Trust, www.oldwayspt.org.

sell about ten times as much of this dry grated variety as the full-moisture kind you would grate yourself." She failed to mention, however, that Kraft spends millions of dollars to advertise the pre-grated parmesan and virtually nothing on the full-moisture.

Ms. Leland detailed how the parmesan product was also driven by Kraft's cost-cutting "Proprietary Ripening Technology." Normal American parmesan requires a ripening time of 12 months. By reducing the time to a fraction of that, Kraft's secret "recipe" saves the company millions in storing cheese that would otherwise take up warehouse space waiting to ripen the slow, natural way.

Hans Peter Reust runs a family-owned molkerei (cheese and milk shop) in Switzerland. He makes cheese in the old tradition, but using a modern facility. Here, he holds a 100-year-old wheel of cheese which has been kept by the family as a momento of its heritage. Photograph by Greg Mycek.

The bulk of Ms. Leland's presentation covered the history of Kraft Foods, since the days of James L. Kraft's patent on processed cheese in 1915. She spoke of an unending quest to please the consumer. Before cheese was processed, according to Kraft lore, the consumer complained. There was a rind, there was often waste at the retail stage, it dried out, it got moldy, and there was no consistency in flavor and texture. So when Kraft invented processed cheese, consumers rejoiced. And processed cheese begat processed cheese food, which begat processed cheese spread, each one containing proportionally less and less actual cheese. Today, Kraft holds 40 percent of the North American cheese market, half of which is processed cheese.

Ms. Leland summarized succinctly: "A company like Kraft wants to produce the most cheese and serve the most number of consumers and make the most money that they can. It's not really driven by quality. That's not to say that our cheeses are poor quality, I don't mean that. But it's really not driven by quality, like I think it is here. There's the opportunity that our market may evolve along the production of more sophisticated tastes again. We'll see what happens."

But wait a minute, I thought. Didn't she know that Kraft is the most powerful member of the U.S. National Cheese Institute, which is working on a proposal to require pasteurization "or an equivalent process" for all cheeses sold in the United States? Didn't she realize that "sophisticated" cheesemaking cannot take place when raw milk is prohibited or discouraged, and when the main goals are volume and sales? Despite the pedagogical trappings and Leland's Ph.D. in chemistry, it was as plain as a dollar bill that we were watching the Kraft dog-and-pony show.

In the break that followed, participants were able to sample the Kraft line of processed cheese, cheese food, and cheese spreads. Whereas the usual recess refreshments at Cheeseart 2000 had been platters of Italian delectables such as stuffed eggplant, roasted peppers, or baba au rhums, this time hundreds of orange clay-like cubes on crackers and several cans of Cheez Whiz were offered. Curious sniffing, followed by hesitant nibbles, provoked responses ranging from the outraged ("This isn't cheese!") to the bemused ("hmmm.... Tastes like mayonnaise").

I passed on the Cheez Whiz, and instead struck up conversation with Danish food historian Rie Boberg. The statuesque Scandinavian informed me that, in Denmark, as in the United States, efforts to outlaw raw-milk cheeses are in full throttle. She recounted how in the 1950s, Denmark's goal was to become the world's cheesemaker. The nation succeeded, and is now one of the most industrialized food processing countries in the European Union. Boberg, who has been producing olive oil in Tuscany for the past 20 years, frowned, "When I go back to Denmark, I can't believe how the people are living! There is no taste in the cheese you buy in the supermarket. Even the eggs are pasteurized—they come in a box!"

It quickly became evident that pasteurization at the policymaking level in Europe had taken the tired, nationalistic form of a North-versus-South issue. Rather than recognize how standardization would

rob the continent of the opportunity to celebrate regional differences, governments had turned on each other and formed two stubborn camps. England, Germany, and Denmark were viewing raw milk as a threat to sanitation, while Spain, France, and Greece saw pasteurization as a violation of heritage. For example, I'd heard Italians blame Scandinavia for the recent mandate to tile prosciutto-curing caves. As long as the Codex Alimentarius, the World Trade Organization's de facto regulatory commission, is charged with imposing a single standard, North and South will remain stalemated. The deadlock is so intractable that not even pressure from the herculean National Cheese Institute to require pasteurization has yet had much impact.

The National Cheese Institute was formed in the early part of the last century to provide American consumers with truthful product information. Now, its members, who produce approximately 80 percent of all cheese in the United States, operate under the industrial imperative. That means ocean barge quantities of milk shipped in from several large dairies to stand in holding tanks for days at a time, mechanized production of immense inventory, global transport, and the goal of relentless expansion. At this mammoth scale, pasteurization is not only routine but is absolutely necessary to ensure safety.

Rudi Wehren makes cheese outside the town of Gstaad, Switzerland. The work starts in the late spring and finishes in late summer. Fermentation is assisted by a wood fire under the kettle. Some parts of the process use electricity, but most of the effort is human powered. Photograph by Greg Mycek.

Fresh raw-milk cheeses, straight out of the vat, have been illegal in the United States since World War II. A 60-day aging period is required, allowing sufficient time for pathogens to die off. But last year, research conducted by the U.S. Food and Drug Administration (FDA) showed that pathogens inserted into raw-milk cheeses survived past the 60-day period. As a result, the FDA is considering the removal of all raw-milk cheeses from the market.

American farmstead producers question the validity of the research. No farmer deliberately inserts pathogens into the milk as is done in these tests, and raw-milk cheesemakers say such testing is out of touch with reality. They believe that their style of cheesemaking is equally safe, and perhaps safer, than industrial production, because their smaller size enables them to oversee individual animals, monitor the milking, and assure that there is little delay between milking and cheesemaking (the period when pathogens are most likely be introduced), as well as to maintain scrupulous sanitation. Raw-milk cheddar has been made in Tillamook County, Oregon, for 91 years without incident. At the industrial scale, where robots and conveyor belts do most of the labor, tainted milk can go undetected far more easily.

The American Cheese Society (ACS), a small organization of fewer than 500 members, 112 of whom are farmstead producers, believes that forced pasteurization would erase an American heritage that pre-dates Kraft. The ACS's Debra Dickerson explains, "Governmental regulations, for the most part, don't lend themselves to exceptions. They lend themselves to the majority, and when you're dealing with the majority of cheeses produced in this country, pasteurization is a great thing. The goal of the FDA and the USDA [the U.S. Department of Agriculture] is to eliminate food borne illness. And no one would argue with that. But the issue is that you can regulate to mediocrity."

Despite the imbroglio over proper cheese production, precious few people, including policymakers, have a clue as to how cheese is actually made, or even what pasteurization is. Those of us who feed at the trough of an industrial distribution system, distant from, and ignorant of, sources of nourishment, were able to benefit from Cheeseart's excursions to farms. One such excursion was to watch caciocavallo, the regional cheese of Ragusa, being made.

Salvatore and Masari Di Pasquale own a humble, yet state-of-the-art, *masseria*, one of many farmhouses which populate the Ragusan landscape. Salvatore Di Pasquale looks as if he has just stepped out of one

of Van Gogh's early canvases, as he displays the couple's 40 *modicane*—a red, indigenous breed of cow. Caciocavallo, like all raw-milk cheeses, is a microbial reflection of locale, so the Di Pasquale caciocavallo differs from that produced in a terroir 10 kilometers away, simply because the same breed of cow grazes on a slightly different variety of grass. Flavor nuance is inextricably linked to biodiversity.

Hans Ueli, like Rudi Wehren (opposite page), makes his cheese from late spring until the end of summer, on Ausserberg Alp. Both he and Wehren sell their cheese to Hans Peter Reust's molkerei (see photo, page 25). Photograph by Greg Mycek.

Over the din of bawling cattle, Salvatore explained how, every morning, he pours about 13 kilos of raw milk, straight from the cow, into the *steccu*, or large copper cauldron. A pile of wood beneath it is torched to heat the milk. Side by side with the wood stove is a high-tech, high-BTU burner, a juxtaposition reflecting the transition to recent state hygiene requirements.

The Di Pasquales buy their rennet from a local shepherd. The shepherd slaughters lambs in the spring, and in the tradition of wasting no part of the animal, collects the stomach enzymes to sell to caciocavallo makers. When the rennet is added to the heated milk, the enzymatic action coagulates it so that a sweet, watery whey rises above the tofu-like curd. "Cheese," as defined by the *Appellation d'Origine Contrôlée*, is curd that has been separated from milk through the rennet process. In the United States, most rennet originates in laboratory petri dishes.

Salvatore drains the curd overnight, shapes it into a rectangular brick, and places it in a bath that resembles a Japanese *furo*. The salt in the brine hardens the surface of the cheese into a rind. After a month, it is lifted out of the bath and hung by a rope—the caciocavallo trademark—in order to age with maximum ventilation. With each month of aging that passes, the living bacteria in the raw, unpasteurized milk increase sharpness. Most people prefer the nutty *semi-stagionato*, aged for four months, and the harder, more pungent *stagionato* of 8–12 months is called "the peasant's parmesan" because of how well it grates over pasta.

According to Salvatore, the majority of caciocavallo producers have folded, for failure to comply with new standards codified in anticipation of expanding global markets. He spent 30 million lire, or about $12,000, to upgrade his masseria to the tiled and painted facility required by the state. That also included installation of a fully automated water-disinfecting cistern, which dwarfs the ancient stone well on the side of the building.

I asked Salvatore what the brining room had looked like before the renovation to meet code. He shrugged noncommittally, "No tile." I pushed the translator for more detail. "What do you mean? What else? Please be more specific." Salvatore brushed a hand over his mouth, again mumbling, "No cement tub."

"Well, before the cement, what did you soak the cheese in?" I asked, expecting him to describe a well-worn brining barrel, or some equally romantic, rustic relic. He lifted his chin, visibly gathering the resolve to come clean, and straight away blurted: "Asbestos."

Regulation does have its place, evidently. Preserving authentic traditional methods is one thing. Preserving outdated industrial hazards, such as asbestos brining tubs, however, is quite another.

One of the other masserie that we visited—a veritable microbe mecca—was surely destined for closure. The crumbling walls were not tiled—though the kitchen was clean and tidy—and the brining room doubled as a storage room for all manner of decaying bric-a-brac: old bottles, candelabras, picture frames, bridles. The clean-freak's final insult was a barrel made of rotting wood, containing caciocavalli weighed down in brine by dirt-specked limestone boulders.

But Daphne Zepos, a professional cheese consultant who was present at both farm tours, commented, "Of the two farms we saw, one was more modern and the other was more traditional. You saw a difference in cleanliness, but in reality, there wasn't much. The high salt content in the brine repels flies. If you noticed, the instruments that were used in both farms

Nina and Jonathan White, founders of the Grasslands Cheese Consortium, with Beulah, a Jersey calf whose mother is producing milk for the Consortium's project to help small, grassland-based dairy farms survive by making artisanal cheeses right on the farm. www.cowsoutside.com. Photograph by Miki Duisterhof.

were equally clean, they were equally sanitized." She continued, "These cheeses have been the sustenance for the Sicilian diet for thousands of years without anybody getting sick. And now it's very traumatic to the continuity of this history to suddenly impose these industrial regulations."

In the months that have followed Cheeseart 2000, a groundswell of opposition to forced pasteurization continues to gain momentum. The American Cheese Society, with the Oldways Preservation and Exchange Trust, joined in the International Coalition to Preserve the Right to Choose Your Cheese. The European Raw Milk Alliance, which includes such weighty organizations as the Consorzio Parmigiano-Reggiano, boasts membership representation from every EU country. And at a press conference last fall, Slow Food announced its "Manifesto in the Defence of Raw-Milk Cheese." Present in the audience was Ana Soeiro, Portugal's Janet Reno for Product Quality with the Ministry of Agriculture.

Ms. Soeiro stood up and condemned forced pasteurization as nothing short of cultural assassination in her country, where all cheese has always been made with raw milk. The idea of a single international standard in our age of diversity, she suggested, is brutishly naive.

Through the very channels of communication that have sought to structure a homogenized world economy, symphonies of ideas pass in perpetual exchange, synthesizing with each other, reinventing themselves, and always seeking expression. As metastasized as are the Philip Morrises of the world, a planetary citizenry stretching from Africa to Europe to America is determined to protect dairy heritage.

E. Koohan Paik is a writer, farmer, and filmmaker who divides her time between Hawaii, San Francisco, and Italy. In Kauai, her family raises construction-grade bamboo on a solar-powered farm. In San Francisco, she directs a program that connects inner-city schoolchildren with farms and food artisans. In addition, she is working on a book about the sensory pleasures of the agricultural economy in Sicily.

Resources

The Cheese Reporter, Madison, WI: www.cheesereporter.com, (608) 246-8430

Consorzio Ricerca Filiera Lattiero-Casearia website: www.cheeseart.com

American Cheese Society website: www.cheesesociety.org

"A Forced Evolution? The Codex Alimentarius Commission, Scientific Uncertainty and the Precautionary Principle," International Institute for Sustainable Development, www.iisd.org

Slow Food Manifesto in Defence of Raw-Milk Cheese, www.slowfood.com/activities/Manifesto.html

www.philipmorris.com