

A Cultural History of Raw-Milk Cheese

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Raw-Milk Cheese Today:
How Did We Get Here?

ACS 2011

Is raw-milk cheese...?

Inherently dangerous
and a public health
disaster waiting to
happen...



“... one of the most
beautiful and romantic
links between human
beings and the earth
that we will ever
know...”

— Steve Jenkins, to
NY Times reporter in
2000.

Cheesemongers report:

some customers will eat only **pasteurized**-milk cheese, believing it's the only guarantee of **safety**

some customers demand **raw**-milk cheese, regardless of variety, believing it's the only guarantee of **quality**



pasteurized milk is the only guarantee of **safety**

raw milk is the only guarantee of **quality**

The disagreement is rooted in historical, **cultural** ideas about “Nature” and our relationship as humans to the organic agencies of microorganisms.

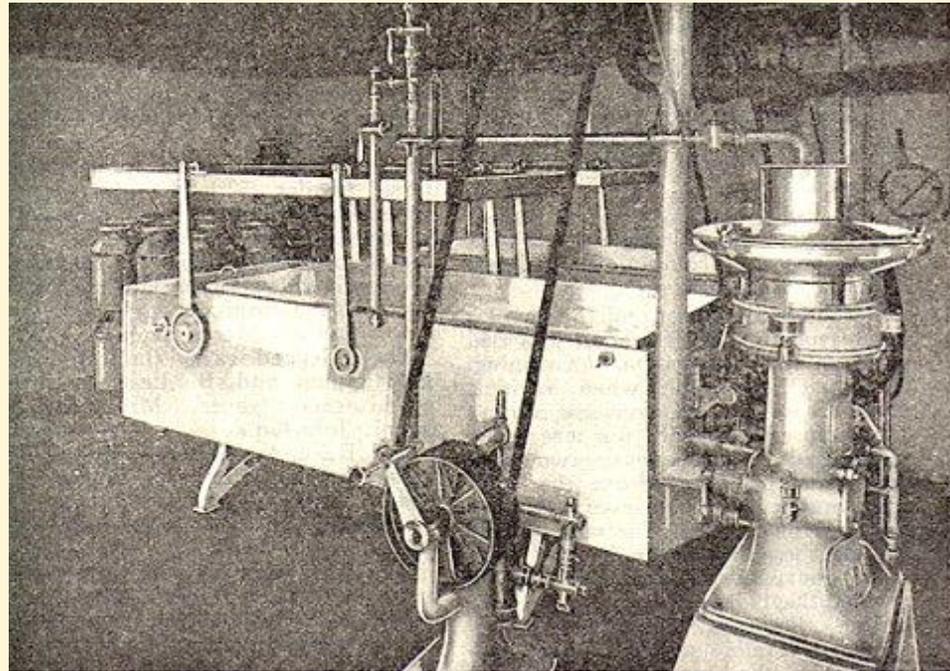
Outline:

- 1) History (brief!) of American cheesemaking, culminating in routine pasteurization.
- 2) Contrast artisan and industrial technoscientific approaches to microbes.
- 3) Consumer demand.
- 4) Focus on artisan *practice* to get beyond binary, oppositional rhetoric.

“Raw-milk cheese” is a modern invention.



raw-milk cheese vs. pasteurized-milk cheese



19th Century dairy pasteurizer

Puritan farmers, 1600s



Pastoral depiction of a dairy maid in *Gleason's Pictorial*, May 1854, Boston



Dairy maids churning butter

Gleason's Pictorial, August 1854

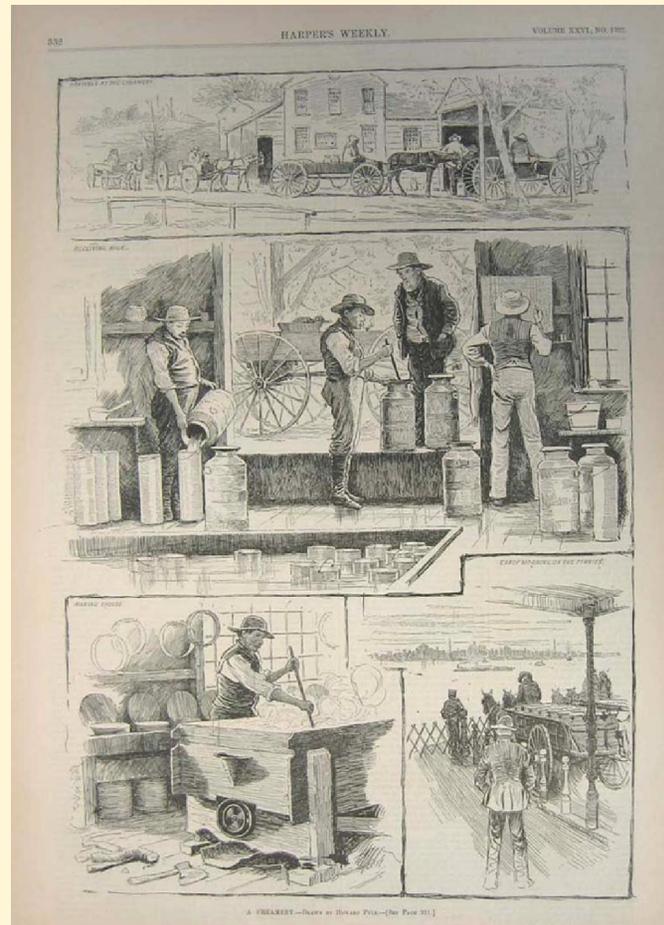


The “art” of crafting cheese

developing “a feel” for the curd and thus the ability to respond to natural, contingent variability

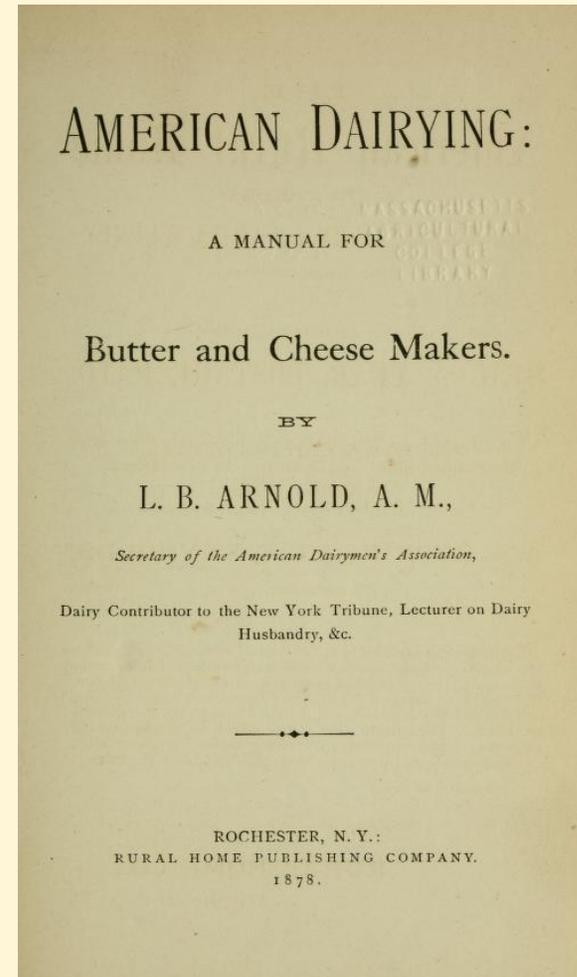


engravings of a creamery, by Howard Pyle from *Harper's Weekly*, 1882



“An occasional expert may be found in family dairying, but it is not possible to find one in every family.”

— Laura Briggs Arnold, 1878
manual for farmhouse butter
and cheesemaking



The Pasteur Institute



Salting cheeses in the Kraft-Phenix cheese factory, 1933.

Harvard University's Baker Library.



KRAFT-PHENIX CHEESE CORPORATION

Cheese = (pasteurized-milk) cheese



Widmer's Cheese Theresa, WI

est. 1922



Crowley Cheese Healdville, VT

est. 1824 (factory in 1882)



from a *Pasteurian* perspective:



+ modern progress



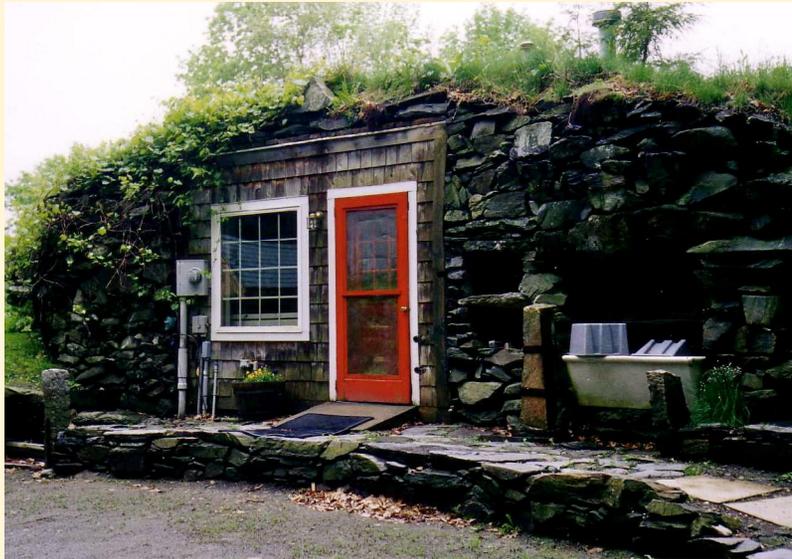
- obsolete, risky

the artisan “Renaissance”

In countercultural opposition to industrial homogenization of food — and culture.



the artisan “renaissance”



Vermont Shepherd,
Westminster West, VT



parallel cultures

industrial technoscience

NATURE is unruly, dangerous
microbes can (should!) be
controlled

working to **overcome** organic
variability by **dominating**
organic processes of
fermentation, ripening

artisan technique

parallel cultures

industrial technoscience

NATURE is unruly, dangerous
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artisan technique

NATURE is beneficent,
pristine
divine; “friendly” microbes
are our allies

working to **express** organic
variability by **collaborating**
with microbial agents of
fermentation, ripening

Post-Pasteurian cheesemaking

Cultivating the microbial environment through humidity & temperature control, salt brine, brushing, etc.

... *and* cleaning, sanitizing, hygienic practice.

[and could include verification]



raw-milk “Renaissance”

1) 1980s strong \$ and weak European currency = more Americans travel to Europe and exposed to European cheeses

— back home: “no *lait cru* Camembert for you!”

raw-milk cheese = “real” cheese:

authentic, traditional, European —
flavorful!



raw-milk “Renaissance”

- 2) interest in “natural” foods is no longer countercultural but mainstream
(now also “organic” and “pro-biotic”)



raw-milk “Renaissance”

- 3) growth of farmers’ markets and direct-to-consumer sales means producers can market an inconsistent commodity (sampling)

raw-milk “Renaissance”

4) anti-regulatory political climate

affecting consumption: notion that “regulation impedes consumer choice”

“personal risk is my rightful choice as an individual consumer” — *but how are these decisions informed?*

affecting production: exponential rise in # of artisan cheese enterprises in 2000’s coincided with underfunding of state and federal safety inspection

raw-milk “Renaissance”

5) in last decade, more *producers* of artisan cheese came to it as former *consumers* of it

— bring to its production a set of quality values established through consumption



raw-milk “Renaissance”

- 1) raw-milk cheese = “real” cheese in light of European traditions, tastes
- 2) Interest in “natural” food is mainstream
- 3) farmers’ markets offer direct sales
- 4) anti-regulatory political climate
- 5) more *producers* of artisan cheese bring to it quality values established by consumption

Cheese making is regulated for safety in dualistic terms:

pasteurized-milk
no aging requirement

raw-milk
60-day aging





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Raw-milk cheese *CAN* be made safely...

BUT safety is not inherent to raw-milk cheesemaking –
just as **quality is not inherent** to artisan food making.

“Safety is relative; it is not an inherent biological characteristic of a food.”

— Marion Nestle,
Safe Food (2003: 16)

In artisanship, “the quality of the result is not predetermined, but depends on the judgment, dexterity, and care which the maker exercises as he works.”

— David Pye, *The Nature and Art of Workmanship* (1968: 7)

Post-Pasteurian cheesemaking

Selectively cultivating the microbial environment through humidity & temperature control, salt brine, brushing, etc.

... *and* **cleaning, sanitizing, hygienic** practice.

[and could include verification]



“80% of cheesemaking is cleaning”



If this is how we got here, where are we heading?

1) How can we regulate **safety** in a way that respects **quality**, e.g., cheese's diversity, including raw-milk varieties?



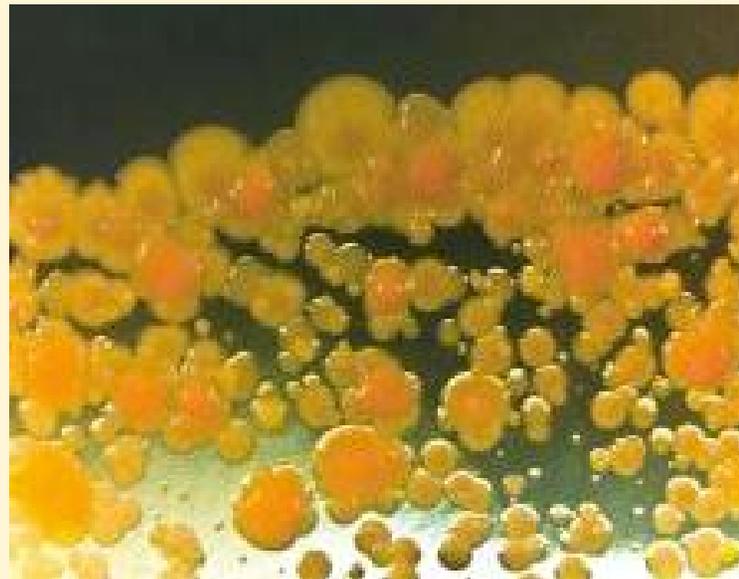
If this is how we got here, where are we heading?

2) Can we promote **shared practical knowledge**?

- Knowledge of pathogens and risk management can be incorporated into standard artisan methods (VIAC).
- Knowledge of artisan methods would aid *safety officials* and *inspectors* — “best practice” may not be what is done, and needs to be done, in automated factory.
- What should a consuming public learn or understand about raw-milk cheese?

If this is how we got here, where are we heading?

3) as scientists learn more about the microbial environments within and around us, how will we come to think about living with bacteria, yeasts, and molds?



Thank you!



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