

Agriculture and Rurality: Beginning the "Final Separation"??*

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ABSTRACT When is a farm a farm? When is rural rural? Has the issue of the rural-urban continuum returned? Decades ago rural sociology worked itself into two blind alleys: rural-urban differences and attempts to define the rural-urban fringe. Although these conceptual problems eventually were exhausted, recent developments in California raise the possibility of a phoenixlike revival, although in new form. Three cases—the success of Napa Valley winemaking and the urban crowding that has accompanied it, the explosion of wine grape acreage in neighboring Sonoma County as demand for premium wine grapes has increased dramatically, and an antibody-manufacturing goat "farm" in Santa Cruz County—have spurred community controversies and are now generating debates over the definition of "agriculture," whether agriculture is rural, and "When is rural rural?"

...the Roosevelt years had witnessed the most profound social revolution in the country since the Civil War—nothing less than the creation of modern America. The small-town America...had passed into history. Over fifteen million Americans had left their home towns to work in war plants and shipyards....Twelve million more had entered the armed services....More than 20 percent of the entire population...had moved from the farm to the factory, from the South to the North, from the East to the exploding states of the western rim. And there would be no return....America had become irrevocably an urban nation. (Goodwin 1994:624)

Definitions of *rural* and *rurality* have long been a preoccupation of rural sociology, whose literature about "rural" is voluminous.¹ In this paper I suggest that, although the intellectual search for conceptual clarity is still necessary, a more pragmatic position would accept an operational definition of rural sociology: *rural sociology is what rural sociologists do*, even though *rural* has become a conceptual atavism in most advanced societies. This is the working definition of most sociologists, rural or otherwise. However intellectually unsatisfying, the definitional problem has become almost unbearable.

One of the subjects of rural sociology for the past two decades has been agriculture. Like the dilemmas confronting rural sociologists as to what constitutes rurality, another problem has begun to emerge: what is agriculture? Here, beginning with rurality, I focus on this question.

It could be argued that rural sociology, and the social science disciplines more generally, have become irrelevant: formerly important for elaborating the social sciences and still valuable for training graduate students, they have reached the stage where theory, problems, and issues transcend particular fields of study. Except for economics, whose mainstream has moved toward isolation as it seeks to become "scientific" or mathematical, most social scientists work on particular problem areas where culture, politics, economics, and spatial and social organization meet.

Rural Sociology and the Problem of "Rural"

Rural sociologists devoted much time exploring the differences between "rural" and "urban" society. Whereas much of the definitional approach sought to find differences in sociodemographic, attitudinal, and cultural variables, an important finding was that *rural* and *urban* were less polarities or elements of a dichotomy than stations along a continuum.

Bealer, Willits, and Kuvlesky (1965), for example, suggested three broad sets of variables to define the rural: ecological, occupational, and cultural, respectively equivalent to population density, agriculture, and values and norms. They examined each variable and suggested that each entailed its own ambiguities and definitional problems; as we shall see later, this is indeed the case. Even with the use of Tönniesian *gemeinschaft* (which also posed problems), "rural sociologists would study Gemeinschaft society and/or culture, in areas of low population density or in cities, in conjunction with agriculture or not. While in principle this is easy, the empirical task of merely locating one's universe may be extremely difficult, time consuming, and expensive" (Bealer et al. 1965:265).

In Bell's (1992) study of Childerley, an English village, the author proposed that the differences between country and city life "remain strongly held popular beliefs...that this fact in itself makes the rural-urban continuum...real" (p. 65).² Quoting W.I. Thomas's "famous dictum that if social actors believe a thing to be real then it is real in its social consequences...[and therefore] sociology must come to grips with the rural-urban continuum" (p. 66), Bell pointed out that the villagers distinguish city and country life "on two principal counts: they feel there is far more community in the country and life in the countryside is closer to nature" (p. 66).³ Bell argues that people in the village feel Childerley to be "countryside": "Most residents, rich and poor, work elsewhere" (p. 66). Childerley is a "two-class village"; geographers "would likely label it exurbs" (p. 67). Residents believe in the superiority of living where they do: "The closeness to nature country living makes possible...a distinctive life-style and pattern of social relations to country life" (p. 69).

As for communitarianism, Bell describes a community in transition. "Residents of Childerley thus define the social situation of the village as that of a *gemeinschaft*..., under stress from the forces of *gesellschaft*" (p. 72) as manifested in the differences between lower-class people and the in-migrant upper-income residents.

Regardless of some skepticism that can be read into the degree of communitarianism to be found in Childerley, and therefore in regard to the utility of holding onto the concept of "rural," the point is that "rural" remains a concept which must be dealt with because people believe it is "real."

Rural Sociology and the Problem of "Agriculture"

The same problem is now emerging around "agriculture." I conflate the conceptual impossibility of *rurality* with the increasing conceptual problem of *agriculture*, arguing that what is now called "agriculture" has become mostly sets of industrial processes physically located in the open air rather than under a roof: that is, they constitute "agribusiness." We continue to use *agriculture* as an overall term that obscures most of its industrial character. Even though "agribusiness" and "agriculture" are both concerned with the production of food and fiber, the social relationships in the two entities differ qualitatively and quantitatively.

Two decades ago I suggested (Friedland 1982) that there was no "rural" left in the United States; that nonmetro areas possessed sociocultural characteristics identical to those in the rest of America. I proposed that rural sociology abandon its focus on the rural and occupy itself with agriculture: that is, the economic base of what had once been rural America. During the 1980s the sociology of agriculture became an important focus in rural sociologists' research (Buttel 2001; Newby 1983).

For pragmatic reasons, rural sociology has remained linked to the "rural" even if "rural" has become outmoded conceptually. American rural sociology was, and still is, institutionally based in land grant universities. That situation created problems of intellectual freedom in the past, but this seems to be less the case today. What deans of agriculture colleges and directors of experimental stations thought about rural sociologists' exploring agricultural problems might once have been problematic, but critical research has been done and its institutional location has benefited rural sociologists' work. In the 1980s there developed a strong populist reaction to the centralizing trends in agricultural production and to the spread of agribusiness; probably for this reason, land grant university administrators hesitated to use the power they had previously exercised to smother critical research (Friedland 1982:596-97). Further, the term *rural* is charged with semiotic magic for Congress and the population at large.

Rurality is often associated with the environment, and in our time, environment has become meaningful to broad segments of the population. Also, significant (if economically privileged) segments of the population seek to escape the problems of urban life by moving beyond the suburbs into the exurbs (Spectorsky 1955) (although other exurbanites simultaneously are returning to gentrified urban residences).

The idea that rural sociology should abandon rurality has proved unviable. At the same time, the three cases explored here demonstrate that the intellectual problem of defining *rural* is now exacerbated by the problem of defining *agriculture*.

Case Studies in Reconceptualizing “Agriculture”

Let us turn to three empirical cases in California in our search for conceptual clarity. The cases involve two California wine counties—Napa and Sonoma—and a third county with a goat-raising operation—Santa Cruz. In each case, “rural” lies in the background, but “agriculture” has entered a similarly ambiguous conceptual realm. When the sociology of agriculture began to crystallize in the late 1970s and early 1980s, most of us took for granted the reality of economic concentration and industrial operations. Some rural sociologists were disturbed by the suggestions that the term *farm* be eliminated from our vocabulary. Nostalgia for old-style multicropping as well as culture lag kept rural sociologists captive to an outmoded conceptualization.

Each of these three cases demonstrates a distinct issue in defining what constitutes agriculture. The Napa case represents the extension of grape growing (clearly agriculture) to winemaking (historically considered agriculture in the form of “winegrowing” but now mostly an industrial process), to wine tasting and retail sales (not related to agriculture), and, in the case of Napa, to the sale of books, food, T-shirts, wine paraphernalia, and cooking classes (most of which have little or nothing to do with agriculture). The Sonoma case illustrates the extension of wine grape growing to land that previously may or may not have been in agriculture but where, to establish vineyards, growers have reshaped the landscape dramatically and have generated community controversy. This process also is occurring elsewhere in California, particularly in the Santa Barbara area. The Santa Cruz case deals with animal raising, traditionally used for production of food and fiber but now transformed into a pharmacological process. The first two cases are somewhat unique to California; the Santa Cruz case symbolizes two processes now ubiquitous in modern agriculture, namely animal concentration and the entry of pharmacology.

Napa: Grape Growing, Winemaking, and Land Use Disputes

The Napa case illustrates how, through three decades of battles over land use, efforts to maintain a rural/agricultural ambience were defeated by the very success of Napa winemaking as the valley became an urbanized, suburbanized, and exurbanized satellite of San Francisco. Napa County, on the northern edge of San Francisco Bay, was a quiet rural agricultural backwater until the 1960s. It contained one true city, Napa; a small town, St. Helena, to the north; the village of Calistoga still farther north; and a few crossroad businesses, hardly even villages, between St. Helena and Napa city.

During the 1960s, two forces reshaped the county. First, in the general exodus of San Franciscans into surrounding areas, many moved to Napa to live or establish second residences.⁴ Some envisioned winemaking as romantic and bought more land than they needed for residences. Second, as the wine "revolution" gathered strength, Napa benefited because of its emergence as the center for premium wines (Lapsley 1996). Early in the 1970s, the Bank of America predicted that wine was a coming phenomenon and that investments in wine would be providential (Hiaring 1973). Investors and large infusions of outside capital accelerated the purchase of wineries and land. Between 1977 and 1999, total vineyard acreage leaped 67 percent, from 24,021 to 40,187 acres (California State Statistical Service, *California Grape Acreage*, various years).

An appreciation of Napa's geography is useful in understanding the battles that unfolded. Napa is a compact county stretching approximately 40 miles from south to north. At its southern edge, near San Francisco Bay, the land is flat and open; there is little sense of a valley. The valley becomes a scenic gem as one moves north, conveying a sense of open enclosure whose serried vines are visually impressive whether bare during the winter months, in budbreak and leafing in springtime, in full foliage during the summer, or in the fall, when the leaf colors match the spectacular hues of New England.

As vineyards and wineries grew, local people and some old and new vineyardists and winemakers became upset. Housing developments also burgeoned, and some Napers explored ways to protect agricultural land.

Beginning in 1968, five major land use battles were shaped.⁵ The first sought to protect agricultural land from development by including the county under the Williamson Act, which permitted agricultural land to be protected from urban taxation. The protectionists included environmentalists, wine grape growers,

relatively small winemakers, and some affluent newcomers. They were opposed by the local Bank of America manager and by John Daniel, former owner of Inglenook Winery, who had sold the historic winery to Heublein and was now a board member of the Bank opposed to any "invasion of rights to private property" (Conaway 1990:84). In 1968, nevertheless, the Board of Supervisors brought the county under the Williamson Act.

County officials continued to make inroads on agricultural land through zoning exceptions; in 1980 these led the slow-growth supporters to formulate Measure A, an initiative limiting county growth to no more than 1 percent in any year (Conaway 1990:255). Measure A was adopted by the voters but because a majority of the supervisors continued to favor growth, the slow-growth forces now had to devise ways to hold the supervisors to a slow-growth policy.

The third battle unfolded during the 1980s through a proposal to create a wine train that would stop at wineries along the moribund Southern Pacific right-of-way. Most city and town councils rejected this idea. Winemakers were ambivalent: they were uncertain whether wineries along the right-of-way would benefit or suffer from the increase of tourists. Eventually a compromise was reached, which limited the number of daily trips and eliminated stops at the wineries.

The supervisors continued to frustrate the slow-growth supporters; thus, by the mid-1980s, the valley had been transformed. Highway 29, the county's sole main highway, had become a traffic nightmare. During the harvest, St. Helena's two-lane main street was the only way to move through the town. It was crowded with local and tourist cars and with large trucks pulling heavily laden grape-filled gondolas to the wineries.

The slow-growth supporters mobilized for two additional battles. One focused on limiting the importation of grapes from outside Napa to be processed locally; the second involved the reelection of two slow-growth supervisors. Some wineries imported grapes from outside the county for economic reasons. Although the wine could not be labeled "Napa," the winery's name and address could show "vinted [or cellared] in Napa County," thus conferring Napa prestige on non-Napa grapes.⁶ By growing and buying grapes from cheaper regions but using the association with Napa, wineries could command higher prices.

In Napa the number of wineries increased phenomenally. Between 1976 and 1988, 132 new wineries were established (Sullivan 1994:394-97). Slow-growth supporters also were activated by the range of

wineries' nongrape and nonwine activities: wineries sold not only wine, T-shirts, and wine paraphernalia but also items that had little or no connection with wine (but augmented income). Wineries held art exhibits and concerts. They opened restaurants, selling food, wine, and cookbooks, and offering classes on cooking. Some wineries hosted banquets and other events (Conaway 1990, *passim*; Sullivan 1994:349-52).

The slow-growth forces proposed to redefine wineries to limit expansion by creating three categories: *heritage* wineries (established before 1974), *charter* wineries (established from 1974 to the time when the legislation was passed), and *estate* wineries (any new winery or addition to an older winery that extended current facilities). The first two would be "grandfathered": that is, they would escape the controls of the proposed legislation. Estate wineries would be prohibited from engaging in activities other than making wine. Heritage and charter wineries could continue to import non-Napa grapes, but any augmentation of their facilities or any new "estate" winery would be held to a requirement that 75 percent of any grapes processed must originate in Napa County. The proposal prohibited estate wineries from conducting tastings or tours.

The battle over the reelection of two slow-growth supervisors intermeshed with the struggle for the 75 percent rule and the proposed definitions. Slow-growth supporters supported the two supervisors and were joined by many independent grape growers. The wineries, however, could not reach a consensus on the incumbents' reelection bid. Small winemakers favored the reelection; larger and corporate wine firms mostly favored removing the incumbents. Individual wineries encouraged their employees to vote for the pro-growth candidates and supported them financially. In 1988, the slow-growth supervisors were defeated.

By the beginning of the 1990s almost all of the unoccupied valley floor acreage had been planted to grapevines. With no space to expand but with demand for Napa grapes leading the prices, the move onto the hillsides began. In 1991 this led to adoption of the first ordinance in California regulating hillside vineyard development: planting on hillsides with a slope of 50 percent or greater was prohibited. A Concerned Citizens for Napa Hillsides (CCNH) leader argued, "The ordinance is woefully inadequate to protect the watersheds and wildlife habitats." The local Sierra Club brought suit, claiming that the ordinance did not conform to the California Environmental Quality Act.

No equilibrium has been achieved. In late 1999 one winemaker, a leader of the pro-winery group Farmers for Napa Valley, said, "It's like Fort Apache in the wine country. Everywhere we turn there is

someone beating on us." The past president of the Napa Farm Bureau, who is also a vineyard manager, reported, "We used to be the good guys, the guys who kept the housing at bay. Now we are the enemy." A leader of CCNH, however, remarked, "Napa County is experiencing an incredible amount of environmental damage due to the vineyards being planted on hillsides. It's at a crisis level"⁷ (Tesconi 1999).

The Napa case is interesting because it involves conflict as a result of the *success* of agriculture. Winemaking, sometimes referred to as "winegrowing," is regarded as agriculture because the juice, transformed into wine, is biologically active. When aged and bottled, wine continues to "live" and to be transformed. This has provided a legal rationale for considering winemaking as agriculture. Of course wineries, storage facilities, bottling operations, and the like resemble factories. Although Napa does not have 330 million gallons of storage as do the Gallo tank farms in the San Joaquin Valley, the density of winery development in Napa, despite interesting (and sometimes stunning) architecture, cannot escape an industrial appearance. Despite its many acres of grapevines and surrounding mountains, Napa has been transformed from a rural backwater into an urban and exurban setting.

Sonoma: Vineyards That Draw a Grassroots Reaction⁸

Residents accustomed to a natural backdrop of tree-studded hills rail against the loss of trees, especially the historic oaks that have long defined the landscape...[and] have raised concerns about impacts ranging from the loss of trees to the spread of pesticides to the effects of vineyard wells on the water table. (Chorneau 1999:A6)

Sonoma County is like Napa, although there are differences. Sonoma has less "valleyness" than Napa because, unlike Napa, it consists of a complex of valleys. Sonoma's area is much bigger, and its population and wineries are dispersed more widely. Most residents are concentrated away from the vineyards and wineries, on the Highway 101 corridor that crosses the Golden Gate Bridge to San Francisco. The county's population grew rapidly, from 148,800 in 1960 to 440,500 in 1998 (California Department of Finance, various years).

Like Napa, Sonoma County experienced a battle over land use that came to a head in a 1986 referendum on a farmland initiative that would have prohibited the conversion of farmland to housing. At that time, the typical reaction was expressed as follows by one farmer: "Farm families have run this county for the

last 100 to 200 years, and if there is going to be a dollar made from development, they want to be the next ones in line" (Sweeney 1999:A6). The initiative failed.

Since then, with Napa Valley floor acreage exhausted but the prices of Sonoma grapes close to Napa grape prices, grape acreage in Sonoma County has doubled from 24,687 in 1977 to 48,969 acres in 1998 (California State Statistical Service, *California Grape Acreage*, various years). Although some new vineyards were planted on land previously in agriculture, approximately 5,000 of the new acres came from woodland conversion, causing significant change in the landscape.⁹ This process brought numerous complaints: about agricultural chemicals and pesticides; about vineyardists, needing water to irrigate, who dug wells that affected neighboring wells; about fenced vineyards, which impinged on wildlife corridors.

The changing landscape was a source of considerable irritation. Widespread tree cutting inflamed the situation, as did a developer's proposal to install a 10,000-acre vineyard. Ernest and Julio Gallo, longtime owners of vineyard acreage in Sonoma, bought additional land and reshaped it. In the words of a prominent wine writer,

Gallo fundamentally alters the shape of the landscape as it creates new vineyards...[using] the equipment they purchased *en bloc* when the Alaskan Pipe Laying Authority had finished its work. You scrape off thousands of tons of topsoil, push the mountain tops into gullies, replace the topsoil, and mulch it into the subsoil, thereby creating an environment in which mountainside vines will grow evenly and predictably. (Halliday 1993:140)

A study of woodlands conducted by the University of California, intended to provide the scientific basis for woodland protection, revealed that as many as 158,000 acres were suitable for vineyards (Appel 1999:A7). As a result, a countermovement intensified in 1999 as some Sonomans sought to control vineyard expansion. Numerous organizations, both for and against expansion, joined the fray.

The conflict drew attention in the national press, in part because similar battles were taking place elsewhere.¹⁰ Kendall-Jackson, a winemaker with headquarters in Sonoma County, bought a 1,400-acre cattle ranch in Santa Barbara County and ripped out 843 oak trees to make way for vines (Sterngold 2000). Oaks in green and "golden" meadows surrounded by rolling hills had been a defining regional landscape element; the new "grapescape" incurred intense criticism.¹¹

In 1999, Sonoma supervisors adopted an ordinance regulating planting on hillsides. The ordinance was the product of a task force that included grape growers, winemakers, and critics, but it did not end the conflict: some environmentalists had resigned from the task force. The situation was inflamed when one winery owner characterized the outcome as a "shellacking" for the environmentalists, who were "forced to accept less than they wanted because our side held the big political cards" (Sweeney 1999:A6).

The growers and wineries thought something had to be done to convey the industry's contributions to the community. According to a survey conducted by the *Santa Rosa Press-Democrat*, 82 percent of respondents believed that the wine industry had a positive effect on the county's quality of life, and 53 percent were concerned that too much land would be planted to grapes ("Sweeney 1999:A6). A former marketing executive turned grape grower found the local press promulgating a "surprisingly negative" view of the grape growers (Barnes 1999).

In a political climate dominated by the wine grape growers and winemakers, the environmentalists sought to supplant the Board of Supervisors' power to make decisions on agricultural land use through a rural heritage initiative (RHI); this would freeze land conversions for 30 years and would require a vote by county residents before rezoning was permitted. The initiative, however, did not appeal to growers in Sonoma County, who responded with rapid condemnation.

One episode symbolized the contradictions of the battle. An RHI supporter, the owner of a small vineyard in Sonoma who is also the chairman of the board of an upscale women's clothing manufacturer and has homes in both San Francisco and Sonoma, held a fund-raiser in his San Francisco Tuscan mansion. The reception was picketed by 50 growers, their families, and "seven dirty tractors." One picketer said, "I find it ironic or maybe even disturbing that we've got a group of wealthy urban environmentalists who seem to think they know what's best for Sonoma County agriculture....Personally, I'm a little leery when I've got wealthy folks from San Francisco telling me what's best for Sonoma County" (Weiser 2000:A1).

Both Sonoma and Napa experienced criticism for expanding vineyards, which formerly had been considered positively as agriculture but now represented just the opposite. Unlike the case of Napa, however, where small growers separated themselves from the large winemakers, the Sonoma growers were united in opposition to the environmentalists. Some of the environmentalists are also grape growers, but many are

wealthy "rural lifestylers"; all were concerned about the rurality of their exurban retreats. The RHI was defeated in November 2000 but the battle has continued. A "solution" to vineyard expansion may come when wine prices collapse because of the massive expansion of wine grape acreage.

Santa Cruz Gets the Goats: Is a Pharm a Farm?¹²

Until the 1960s Santa Cruz County, California's second smallest county, was an agricultural subaltern to Monterey County to its south. Agriculture in south Santa Cruz County was devoted principally to apples, lettuce and related vegetables. In the northern part of the county, on benchlands fronting the Pacific Ocean, Italian settlers had grown artichokes and Brussels sprouts for decades.

During the 1960s and 1970s the county was transformed in population, politics, and agriculture with the opening of the University of California's Santa Cruz campus, the expansion of Silicon Valley, and a changing market for agricultural products. In the south part of the county, apples were replaced by lettuce, vegetables, and housing. Production more recently has shifted to strawberries, a capital- and labor-intensive crop requiring large numbers of Mexican workers (Wells 1996). The north part of the county has remained almost untouched: Brussels sprouts and artichokes dominate production, aided by land use battles that have prevented the conversion of oceanfront benchlands to housing.

In 1996, Santa Cruz Biotechnology (SCB) was established as a company producing antibodies from goat blood. The owners, a couple named Stephenson, bought a 144-acre farm north of Santa Cruz city, where their laboratory was located. The goats began to arrive in large numbers: first about 400, then 1,600, and ultimately expected an estimated 5,000. Tensions arose between the Stephensons and their neighbors. The property was located along a private road; a few neighbors were growers, but most were exurbanites. One immediate source of tension was the Stephensons' intent to block the access road by installing gates: residents would have been required to leave their cars to open and shut each gate. Neighbors also were concerned about the number of goats.

The neighbors insisted that goat raising in the numbers proposed by SCB was inappropriate on land zoned for agriculture; they contended that the goat farm was a laboratory. They also objected on

environmental grounds, arguing that manure runoff would endanger residents living downhill from the goats. The next four years, until July 2000, were filled with litigation.

For this discussion, the use of agricultural land is the key question. Although the neighbors did not use the term *pharm*,¹³ we might rephrase the issue by asking, "Is a pharm a farm?" The Stephensons argued that they were engaged in an agricultural activity appropriate on agricultural land. The County Planning Commission could not reach a conclusion. One commissioner stated, "A goat is a goat is a goat," but others were less certain. Another declared, "I don't think this is farming as we know it." The county's agricultural commissioner and an agricultural vocational teacher testified that the goats fitted into agriculture; the teacher said, "This is the wave of the future." North Coast growers expressed doubts, however (Kimura 1996). The Planning Commission sent the problem to the County Board of Supervisors, which appointed a task force. In March 1998 an ordinance was adopted recognizing biotechnology as a new form of agriculture; at the legal level, as far as the county was concerned, the goat *pharm* was a farm.

Another issue also arose: was this a farm or a feedlot? Was the raising of goats fed almost entirely on fodder brought in from elsewhere an appropriate use of land zoned for agriculture? Each county establishes its own regulations regarding feedlots, but the Santa Cruz situation was unclear. In one proceeding, the contestants were asked to define what might be a *sustainable* feedlot: that is, what percentage of fodder had to be grown on the farm versus what percentage had to be brought in. The result was a "compromise" arbitrarily established at 40 percent of the fodder to be grown on the site (Musitelli 1998; interview with resident and attorney Jonathan Wittwer, July 18, 2000).

Residents downhill from the farm complained that they couldn't let their children play in their yards because of the manure runoff. Neighbors raised concerns about fecal coliform bacteria in the ocean, and hired a firm to collect coliform data that confirmed their worries. In June 2000, the deputy director of the Coastal Commission ruled that the county had to take action to "de-intensify" the goats: "[T]he intensity of biomedical goat raising should be immediately reduced as necessary to address water quality impacts and any other land use impacts such as overgrazing. Excess goat manure on the site should be immediately removed and properly disposed of off-site" (Musitelli 1998, 1999; White 2000a, 2000b, 2000c).

The battle ended when the Stephensons agreed to remove the goats (White 2000b), but the legal and definitional problems remain. Legally, goat raising on the SCB property has been defined by the supervisors as an agricultural use. The Coastal Commission agreed, but took action to remove the goats on environmental grounds. Theoretically, if it were possible to make the goats stop producing manure or to collect it so as to create no environmental consequences, SCB could raise as many goats as it wanted.

In the local dispute, no one brought up the experience of intensive animal production elsewhere in the United States, where contamination from swine and poultry factories has created environmental problems for neighbors. Hog and chicken raising constitute cases different from the Santa Cruz experience because these animals are raised as food, whereas the goats are intended for pharmaceuticals. Changes in agriculture and the intensification of production continue to plague us: is intensive animal raising "agriculture" or industrial animal manufacturing? If the animals are environmental contaminants, they can be banned, but the reasoning is based on environmental grounds, not on whether the activity constitutes agricultural use. In addition, the expansion of biotechnology to produce substances such as antibodies creates significant problems as to the definition of *agriculture*.

ANALYSIS AND POLICY IMPLICATIONS

Growing grapes and making wine have historically been considered agriculture, but classifying the current manufacture of wine as "agriculture" represents a considerable stretch of the imagination because massive wineries resembling petroleum tank farms have emerged. Such "farming" has been expanded beyond recognition by the sales of T-shirts, wine paraphernalia, and books.

Considering the three cases and applying the Bealer et al. (1965) criteria, we find a mixture of situations. Napa, despite the amount of land under vines, is mostly urban and suburban in population and settlement. Culturally, Napa's population is as urbane as San Francisco's. Sonoma encompasses a greater land area; many parts of the county are remote, although the Highway 101 corridor is urban and suburban. Culturally, Sonoma is very much like Napa, although its winemakers like to present themselves as "hicks" and "rubes." This is a public relations ploy: the Sonoma winemakers are as sophisticated and urbane as their Napa neighbors. Santa Cruz is more complicated: the south part of the county is devoted to large agricultural

production, while the north has narrow benchlands along the coast consisting of smaller units that produce Brussels sprouts and artichokes. Ecologically, the rest of the county, except for the four cities, presents a rural appearance that masks its exurban character. Culturally, Santa Cruz County is largely at the cutting edge, complete with up-to-the-nanosecond software producers, although the small-town ambience is cherished and cultivated.

This assessment presents the analyst with some difficulty because each case contains agricultural elements. In Napa, the vineyards were accepted as agriculture on the valley floor; now that the hillsides are under attack, even the presence of the vines is questioned. In Sonoma, expanded vine planting and reshaping of landscape became the basis for questioning whether the outcome is agriculture. And in Santa Cruz, although raising goats seems to be agricultural, we encounter the questions "Is a pharm a farm?" and "Are the 'pharmas' (the pharmaceutical companies) farmers?"

Further, should we continue to characterize large-scale production units as "farms"? What about other activities that still fall—at least legally—under the heading of agriculture but bear little relationship to agriculture as it was traditionally known? Are intensive animal-raising facilities such as feedlots agriculture when they contaminate the environment and make neighbors' lives miserable? What about agriculture-augmenting activities such as agritourism? At a commonsense level, one does not worry much when a farm couple houses occasional guests, but what happens when the farm becomes a dude ranch?

In Napa and Sonoma, wine grape growers felt that they had been blindsided by protests: wasn't a landscape filled with photogenic grapevines preferable to housing tracts? Still only vaguely articulated were protestors' concerns about *landscape*, an idea that still possesses little legitimacy or political significance in the United States. Even so, basic sentiments should not be ignored. In 1962 when Rachel Carson's *Silent Spring* was published, few persons in agricultural circles took her critique seriously. Within a decade, however, environmentalism transformed attitudes. The Sonoma affair indicates that landscape may emerge as a critical element in environmental battles.

The Santa Cruz goats provide a different lesson. Most of the protesters were urban in employment and orientation, whereas the goats seemed "agricultural," if only by tradition. A crucial element worked against acceptance of the goats as agricultural, namely their density. The goat operation was essentially a

feedlot, and because production involved blood from which antibodies were extracted, the basic work was laboratory-biological rather than agricultural. Protests were formulated on the basis of environmentalism: manure and runoff became the reasons for banishing the goats. The pharm remains legally an agricultural use, as would any activity that is economically concentrated, large-scale, and industrial.

This point should not relieve rural sociologists from pondering the meaning of *agriculture*. Over the decades in which agribusiness has prevailed, we have become accustomed to accepting APUs (agricultural production units) of thousands of acres and millions of dollars of capitalization as "farms." Although rural sociologists are disturbed by this trend, they still consider the industrial raising of hundreds of thousands of chickens and thousands of hogs as "farms." Should such concentrations of animals be regarded as "agriculture"? With the addition of pharms, are we approaching a moment of truth in which societal norms may say "Enough is enough" and in which *agriculture*, like *rural*, must be redefined?

During the debates of the 1980s, one wing of agricultural sociologists saw only the penetration of agriculture by capital, while another segment focused on resistance to penetration and the persistence of family-based farming. Most of us, including myself, focused on the dominant forms of agriculture as marked by capitalization, corporatization, and industrialization, and paid little attention to surviving APUs that remained farms in the traditional sense.

Yet these units continue to survive. At the 2000 annual meetings of the Rural Sociological Society, a panel titled "Emerging and Alternate Food Systems" (Bitto and Molnar 2000; Geason et al. 2000; Mascarenhas 2000) dealt with successful surviving small farms. Their survival strategies represented not the flexible specialization currently in fashion with many social scientists but flexible differentiation: that is, multicropping and expertise in multiple tasks.¹⁴

Monocropping specialization, the hallmark of the national agricultural policy of the U.S. Department of Agriculture¹⁵ and the state experiment stations, emphasizes increased size ("get big or get out"), capitalization, and mechanization. Yet diversification of crops, operations, practices, and bodies of knowledge have enabled some small family units to survive. These should be characterized as agriculture rather than as agribusiness. Their success, despite the USDA and the state experiment stations, raises doubts that large-scale

agribusinesses, intensive animal operations, feedlots, and "pharms" should remain under the protective mantle historically embodied in U.S. agricultural policy.

The Sonoma and Santa Barbara experiences also bring up the issue of landscape. In the United States, landscape has not yet emerged as an explicit criterion for resisting changes in land use. In contrast to Europe, where landscape is part of the national patrimony and the subject of intensive planning and regulation, the United States focuses on landscape as wilderness and as national parks and monuments.¹⁶

The battles in Sonoma and Santa Barbara show a conception of patrimony that is beginning to resemble European sensibilities. When Gallo flattens hillsides and Kendall-Jackson uproots stately oaks in picturesque meadows, people's reactions are based on a sense that a certain kind of landscape "belongs" to them and that they have certain "rights" to protect it even if they do not own the land.

Rural sociologists have noted that landscape is socially constructed (Bell 1998:233-35; DuPuis and Vandergeest 1996; Greider and Garkovich 1994; Hinrichs 1996; Vandergeest and DuPuis 1996.) The alteration of landscape from oak-and-meadow rolling hills to flat open fields with vines, once accepted and encouraged to inhibit housing development, has now entered a new phase. Will preservation of landscape (other than wilderness) preempt landowners' historic rights to do what they wish with their property? This "right" has been eroded in many ways, but landscape as an element of control is new, at least in this country. Here too, a new set of policy issues is emerging.¹⁷

The failure of rural sociology to engage agricultural policy, which has been lamented at annual meetings of the Society, might be reversed by the suggestion that the time has come to reconsider the meaning of the term *agriculture*. Perhaps this term will continue to be applied for institutional, political, and nostalgic reasons, just as the use of *rural* has persisted. Such an outcome, however, should not relieve rural sociology of its claim to be scientific, nor excuse it from pursuing conceptual and definitional rigor.

Rural sociologists might take courage from the successes of small-scale agriculture. The growth of organic farming in the United States and elsewhere is impressive (Buck, Getz, and Guthman 1997; Guthman 1998). Similarly, the expansion of fair trade in bananas and coffee has been remarkable, although more so in Europe than here (Murray and Reynolds 2000; Renard 1999a, 1999b). These developments suggest the possibilities for change in the definitions of agriculture and in national agricultural policy.

Now may be the time to begin a redefinition of agriculture, distinguishing agribusiness from agriculture (i.e., small-scale, family-based multicropping) and to call on Congress to rename the Department of Agriculture the Department of Agribusiness and create a new Department of Agriculture. The latter would be dedicated to providing science, social science, community development, and extension services to support what remains of small-scale agriculture and to make "alternative agriculture" a major direction in U.S. policy.

I am not so naïve as to believe that present Congresses or administrations will adopt such policies. Yet the definitions of *rurality* and *agriculture* remain problematic.

Although this paper focuses on only three case studies, it also rests on an extensive literature dealing with the structural transformation of U.S. agriculture (as well as other national agricultures). I use these cases to intensify our focus on conceptual problems which, in turn, have policy implications. The literature on structural transformation, however, is broad and deep. The three cases cited here exemplify the intellectual and definitional problems that must be confronted as agriculture is transformed beyond recognition.

Endnotes

¹ In *Rural Sociology*, for example, see Bultena (1969), Carroll and Wheeler (1966); Copp (1972); Falk and Pinhey (1978); Kaufman and Singh (1969); Kurtz and Smith (1961); Lowe and Peek (1974); Schnore (1966); van Es and Brown (1974). This list is far from complete.

² Bell's (1994) fine community study of Childerley also presents the complexities and dilemmas of class and countryside in a small English village. Almost all the empirical material is found there as well, but without the argument for maintaining the rural-urban continuum that is offered in Bell's (1992) earlier paper.

³ In this statement Bell overlooks the extensive literature of past decades about community in urban settings (Gans 1962; Lebow 1967; Stack 1974; Whyte 1955). Childerly is undoubtedly closer to countryside, but the urban communitarians studied and wrote about communities that were not.

⁴ Between 1960 and 1999, the Napa Valley's population almost doubled, from 66,400 to 124,600. Much of this growth was concentrated in Napa city, at the southern edge of the county, where population increased from 35,978 in 1970 to 69,900 in 1999. Smaller towns such as Calistoga grew from 1,882 to 4,920; St. Helena from 3,173 to 6,100; and Yountville from 2,332 to 3,740. The county's unincorporated area (mostly low in population density—that is, "rural") declined from 33,600 in 1980 to 30,700 in 1999.

⁵ James Conaway's (1990) *Napa* is a detailed, gossipy account of the battles. Although the book is unsystematic, Conaway offers a highly readable presentation of the transformation of a relatively rural county to today's vinous Disneyland. (Also see Sullivan 1994:298-99.)

⁶ This practice, although legal, borders on fraud. Some Napa winery owners have sought to eliminate or limit importation from outside the county. In August 2000 the California legislature passed laws to impede this process, but the issue is still being fought in the courts. Napa grapes are worth much more than the same

varietals grown elsewhere in California. In the 1999 crush, for example, Cabernet Sauvignon grapes from District 4 (Napa) brought an average price of \$2,632 a ton, compared with a statewide average of \$1,064. Prices for Cabernet grapes ranged from the Napa high to \$433 a ton in District 14 (Kern County, at the southern edge of the San Joaquin Valley) (CDFA 2000:7, 22-23). I am grateful to Jim Lapsley for reminding me of the price differences.

⁷ Wine-related community controversies continue in Napa overtly and covertly. Some are generated by environmentalists who believe that Napa winemakers show little respect for the land (McNamee 2001). In the abundant news coverage of the opening of Copia (the Roman goddess of plenty), the American Center for Wine, Food and the Arts, in 2001, reporters almost invariably pointed out the tensions created in Napa city dwellers, who viewed the Copia museum as an invasion by up-valley wine yuppies into their largely working-class community (Brown 2001; Fish 2001; Franson 2001; Martin 2001; Podger 2001).

⁸ Much of the following is based on a four-day series in the *Santa Rosa Press-Democrat*, which ran from October 31 to November 3, 1999.

⁹ Apples were Sonoma's other main fruit crop. Apple acreage has been in decline since the mid- 1960s. In 1965, Sonoma had 9,175 bearing acres of apples; by 1992 the bearing acreage had declined to 5,027 (California Statistical Service, *California Fruit and Nut Acreage*, various years).

¹⁰ In addition to the local newspaper, the *Santa Rosa Press-Democrat*, articles appeared in *USA Today* (Ritter 1999), *San Francisco*, a regional magazine (Snider 2000), *Wines & Vines* (Kane 2000), and *Wine Business Monthly* (Barnes 1999). In Santa Barbara County, a similar battle was also unfolding over vineyard expansion (Sterngold 2000).

¹¹ Kendall-Jackson learned from the Santa Barbara reaction. Company spokesmen announced that they would no longer buy woodland for conversion to vineyards, that they would cut no more oaks or other native trees, and that they would cease using methyl bromide and other dangerous pesticides (Tesconi 2001).

¹² Except for some interviews and observations at legal proceedings, the material on Santa Cruz is drawn from the coverage of the goat farm controversy by the *Santa Cruz Sentinel* in 21 articles by five journalists in 1996 and 1998-2000.

¹³ The word *pharm*, to my knowledge, first surfaced in *The New York Times* where pharm animals (used for the production of pharmaceuticals) were distinguished from farm animals (used for traditional agricultural purposes in the production of food and fiber) (Yoon 2000).

¹⁴ This point is demonstrated especially by Mascarenhas (2000). To survive today, small farmers need expertise in soils analysis, horticultural practices concerning many different plants, automotive repair, market research, and recycling, as well as flexibility in making planting decisions.

¹⁵ As Bunce (1994:31) stated, "Even today the United States Department of Agriculture, despite policies which support agribusiness, perpetuates the myth that the family farm is the backbone of the agricultural economy."

¹⁶ Bunce (1994), a geographer, makes this point using the term *countryside*. "Countryside...is a culturally constructed term. It is also very much an English term" (p. 3); "the word countryside has not carried with it the same emotional connotations in North America as it has in Britain. Indeed it is fair to say that in both the USA and Canada there is a poorly developed sense of the settled countryside as a landscape ideal....Forged out of the edicts of pioneering and survival and developed predominantly around the largely egalitarian and individualistic society and economy of the family farm, the North American countryside evolved as a utilitarian landscape of work and commerce" (p. 35).

¹⁷ Geisler (2000) and Geisler and Daneker (2000) have shown the lack of distinction between public and private rights and ownership pertaining to claims about landscape.

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