

The villagers gathered along the roads of Codolet to watch the “atomic millipede” and the queue for guided tours of Chinon demonstrate that, at least in some respects, residents of the Gard and the Touraine did experience nuclear development as a spectacle. Indeed, their willingness to behave as enthusiastic audiences and eager tourists contributed mightily to the creation of the spectacle. After all, a show without an audience is not a spectacle but a flop. But were Gardois, Tourangeaux, and other French citizens *merely* audiences for a grandiose pageant? How did ordinary people feel about nuclear technology in the 1950s and the 1960s? What impact did the nuclear sites have on the Gardois and the Tourangeaux?

Results of public opinion polls make it possible to draw a rough sketch of public responses to nuclear technology. A small number of polls taken in the 1950s and the 1960s asked adults what they thought about the prospect and the reality of a French atomic arsenal. One poll also tried to determine how people felt about nuclear power and what beliefs they held about the dangers of radioactivity. The responses to such poll questions provide some indication of how “the French” (often an undifferentiated category in these polls) thought about nuclear development. We must be careful, however, to keep in mind the many limitations inherent in these sources. Polls—particularly polls with multiple-choice questions—can make categories of opinion appear where none might exist otherwise. (To what extent, for example, did citizens really think of themselves as having “an opinion” about a French atomic bomb?) Furthermore, multiple-choice poll questions obscure potential diversity by forcing respondents to choose “yes” or “no,” “for” or “against.” The categories of opinion supposedly revealed by polls may in fact be simply those of the pollsters or of the groups that commissioned them.¹

Nonetheless, judicious reading of poll results can provide a useful entrée into public interpretations of nuclear development. For example, these results hint at ways in which ordinary citizens might have distrusted or ignored representations of technological prowess. They also show that some people did indeed embrace the basic concept of French technological radiance. Still, the aggregated opinions depicted in polls can, at best, reflect only the outer layer of experience with technological development. Going beyond polls requires moving to the local level. Juxtaposing the experiences of local residents in the Gard and the Touraine shows that significant variations existed both between and within these two regions. Were it feasible to do a more comprehensive study of local experience, we could expect even bigger differences between these two regions, which confronted large-scale technological development directly, and other regions that did not.

After a brief discussion of polls, therefore, I focus on the local level in the rest of the chapter. I attempt to capture how Gardois and Tourangeaux experienced the construction and expansion of the nuclear sites and the influx of large numbers of outsiders into their regions. Readers will see that in the 1950s and the 1960s—before the development of organized opposition to nuclear power—most residents of these regions were neither “for” nor “against” nuclear power. Pollsters may have tried to classify citizens in stark categories, but for the most part such categories did not adequately reflect how residents thought and lived. For the Gardois and the Tourangeaux, nuclear technology was not a hypothetical issue about which they had abstract opinions. Reactors were an increasingly dominant feature of their natural landscape, and nuclear workers were an increasingly large presence in their social landscape. Residents had complex responses to the sites, which arose from the mundane interactions they had with site workers, from the economic impact of this influx, and from the expectations raised by the producers of the technological spectacle.

Though I have used all the written sources available, a substantial part of my analysis rests on oral interviews. These interviews provide important insights not just into people’s experience but also into the construction of local memory. The relationship between the history narrated here and the evocation of local memory can come through more clearly once the reader has a sense of the stories told by residents. Reflections on differences in the construction of memory in the two regions therefore appear after an examination of local experience in the Gard, but before a parallel discussion of the Touraine.

Representations of Public Opinion

Even if we were to take public opinion polls at face value, interpreting their results would pose a tricky problem, particularly when (as is the case for the polls discussed here) we know nothing about poll design and execution. Without such information we cannot evaluate the representativeness of the responses, nor do we have access to the reasons behind them. Did people base their answers on what they read in the paper? On the opinions of their parents, their spouses, or their colleagues? At best we can only speculate. The importance of these issues notwithstanding, poll results can at least suggest how ordinary citizens might have thought about nuclear technology.

The technological subject that most occupied French pollsters in the two and a half decades immediately after World War II was nuclear weapons. During that period at least thirteen nationwide polls asked French citizens what they thought about their nation's developing its own military nuclear capability (table 7.1).

The poll questions are as interesting as the responses. In 1946 pollsters simply asked "Should France have its own atomic bomb?" It is not too surprising that in the aftermath of the war—and given the efforts to write

Table 7.1

Results of public opinion polls asking whether France should develop its own nuclear military capability.

	Yes (%)	No (%)	No answer (%)
January 1946	56	32	12
January 1955	33	49	18
July 1956	27	51	22
December 1957	41	28	31
July 1959	37	38	25
March 1960	67	21	12
July 1962	39	27	34
January 1963	42	31	27
July 1963	37	38	25
August 1963	34	37	29
November 1963	39	37	24
April 1964	39	40	21
January 1967	23	50	27

France into the history of the two American bombs—more than half of the respondents replied “Yes.” Still, nearly a third responded “No”—not a negligible minority. Nine years later, the same question generated nearly the inverse result.

In July 1956, the question was changed in a subtle but significant manner: “As you know, France conducts atomic science research but does not build atomic bombs. Do you think France should build atomic bombs?” The question hints at ways in which the very act of taking a poll may have itself shaped public understanding. Poll designers almost certainly did not know that the CEA had begun work on a French bomb. Innocently or not, however, their question reinforced the false notion that France was not preparing its own military nuclear capability. That poll also provided a tiny glimpse into the reasoning behind some of the responses. The sample reasons French should not build a bomb included “We have no money, it would mean losing money stupidly, it would mean new taxes” and “If we make a bomb, it’s to use on our neighbors [c’est pour foutre chez le voisin], and I don’t agree.” The sample reasons in favor of a French bomb mostly referred to national prestige (“If foreign countries know that France has atomic bombs, they’ll respect her”; “It’s symbolic to keep the rank of great power”; “Simply to show that she’s as strong as the others”).² When examined along with the data, these samples suggest that, although those who supported the idea of a French bomb did so for nationalist reasons, such arguments had little consequence for at least half of those polled.

In the month immediately after the Reggane test, pollsters asked “Do you think France should have its own atomic *force de frappe*?” The issue was now no longer one bomb but a whole arsenal. The technical success of Reggane apparently fired people’s imaginations. Enthusiasm for French bombs peaked in March 1960. But it waned over the course of the 1960s. In 1967, a poll taken just before a parliamentary election asked voters “What is your opinion of the *force de frappe*?” Respondents could reply “satisfied” or “unsatisfied.”³ Overall support for de Gaulle had hit an all-time low; support for his arsenal apparently followed suit.

Much of the time, 20–30 percent of people did not respond to poll questions. Possible reasons for this include indifference, confusion, and surliness. It is also likely that many people simply did not think in the categories proposed by the pollsters. Whatever the case, these polls made no room for them to express such thoughts. All we can take away from the results is that, despite the best rhetorical efforts of politicians, technologists, Catholic protesters, and the Communist Party, about one-fourth of

Table 7.2

Responses to the question “Have you heard of ‘Zoé’ and can you say what you know about it?” Source: poll conducted in early 1949, published in *Sondages*, 1 March 1949 (cited on pp. 10–11 of Fourgous et al. 1980).

Poll’s categorization of responses	Poll’s sample answers	Percentage of responses
Correct	“First French atomic pile”; “atomic pile built by the Joliot-Dautry team”	36
Fairly close	“An atomic clock”; “I read something in the paper. It’s an atomic thing.”; “Yes, the first manifestation of the French atomic bluff”	3
Vague	“A French pile”; “A weird engine”; “Yes, it can blow us up”	4
Atomic bomb	“Name of the first French atomic bomb”; “Miniature atomic bomb”	2
Other	(none)	2
No answer		53

French citizens usually declined to express a black-and-white opinion of nuclear weapons.

The pollsters apparently surmised that indifference and ignorance went together. They occasionally conducted polls to determine how well informed people were on the subject of their nation’s nuclear achievements. Table 7.2 shows the results of one such poll taken in 1949, along with indications of what kinds of responses qualified people as “well informed.” A similar poll conducted eight years later suggested that the overall level of information had dropped: in 1949, 36 percent of respondents gave answers that pollsters qualified as accurate; in 1957, only 18 percent did. The later poll categorized answers less specifically than its predecessor, noting only that well-informed people included those “capable of providing at least an approximate definition of Marcoule, Saclay, Zoé, and of ranking France fourth or fifth among the great atomic powers.”⁴ The ability to correlate geopolitical prestige and nuclear achievement apparently counted as accurate knowledge.⁵

In 1957–58, one government council commissioned a poll to obtain a more detailed picture of how the French thought about atomic energy.⁶ The poll began by asking “When you hear about the atom, what uses come to mind?” From the nine categories offered to them, respondents chose as follows:

bombs, weapons	35%
destruction, war	20%
energy source	17%
peaceful uses	14%
industrial progress	10%
medical uses	7%
scientific progress	3%
interplanetary rocket	3%
means of transportation	3%

Respondents could choose more than one category, but we do not know where the overlaps occurred. Thirteen percent gave no response. According to the pollsters' breakdown, men, younger adults, white-collar workers, professionals, and more highly educated people seemed more likely to respond "energy source," "industrial progress," or "peaceful uses." Women seemed slightly more likely to think of military uses or give no response at all, as did agricultural and blue-collar workers and less educated respondents. Another question in the same poll tried to determine how people understood the dangers of atomic energy (table 7.3). Women appeared somewhat more likely than men to find atomic energy dangerous. Forty percent of respondents with little to no education thought atomic energy was dangerous for everyone, versus 25 percent of those with university-level education. Less educated people were also less likely to respond to the questions. When asked to be more specific about danger, answers were fairly uniform across the board: "radioactivity" and "accidents" appeared as the most likely sources of danger; "health" the most likely effect. Again, though, more than one-third of those polled declined to specify.

Table 7.3

Responses to various questions beginning "Is it correct that the use of atomic energy for peaceful purposes is . . ." (cited on p. 29 of Fourgous et al. 1980).

	Yes (%)	No (%)	No answer (%)
"dangerous for those who work in atomic plants?"	62	9	29
"dangerous for the inhabitants of the region?"	52	16	32
"dangerous for everyone?"	36	27	37
"not dangerous at all?"	7	53	40

The poll also tried to determine how the French compared civilian and military uses of atomic energy: “Is it more urgent for France to intensify the development of peaceful uses for atomic energy, or to proceed to make atomic weapons?” Sixty-four percent answered that peaceful uses were more important; 15 percent said that weapons mattered more; 3 percent said both were important; 18 percent said they didn’t know. According to the pollsters’ analysis, 20 percent of those who voted in favor of peaceful uses thought it “better to work for peace than for war.” Sample responses cast the matter less in high moral terms than in terms of national prestige: “It would be a great revenge if scientists in France were at the avant-garde of progress while everyone else cares only about weapons”; “France has always been a peaceful nation”; “France’s destiny is to impose itself in intelligence and peace.” Such arguments echoed those made by the Communist Party; the poll, however, offered no correlation between these responses and political affiliations. Another 20 percent of respondents did not want to make weapons because they did not want to use them: “If we make weapons we’ll have to use them sooner or later”; “The USSR-USA antagonism is bad enough without France getting involved.” Twenty-five percent cited the importance of peaceful atomic energy for better living conditions and overall prosperity, in some cases relating prosperity to prestige: “It can create well being for all, in our generation and in future generations”; “It would allow the modernization of our industry”; “It would allow us to attain economic independence”; “Greater industrial development would automatically make us a great power.” Pollsters did not provide sample responses for those in favor of military over civilian pursuits, commenting only that “people who feel it more urgent to pursue atomic weapons all say that it’s the only way to be equal to the other powers, to protect oneself, and to get respect.”⁷

Finally, and most directly pertinent to the rest of this chapter, pollsters asked residents in various regions across France how they felt about the installation of a nuclear plant in their region (table 7.4). Only Normandy and Brittany had more people in favor of than opposed to a local plant. Residents of Paris, its suburbs, and Center-West France (where Chinon was located) came out most strongly against a plant. Still, fully one-third of the Center-West residents polled declared themselves “indifferent.” In the other regions, most responses were split between opposition and indifference.

These numbers certainly suggest that people would not embrace the arrival of a nuclear plant in their immediate vicinity. And indeed, ordinary residents of the Gard and the Touraine did not manifest as much enthu-

Table 7.4

Responses, by region, to question about installation of a local atomic energy plant (cited on p. 28 of Fourgous et al. 1980). Marcoule is in the South/Mediterranean region, Chinon in the Center-West.

	In favor (%)	Opposed (%)	Indifferent (%)
North	12	43	45
Normandy and Brittany	38	13	51
Center-West	15	51	34
South-West	15	46	40
Center	17	41	42
South/Mediterranean	21	43	36
Center-East	13	43	44
East	15	42	40
Paris region	15	65	20
Paris	13	61	27

siasm for nuclear sites as did local political and intellectual elites. However, the attitudes of locals were too complex to be categorized simply as opposition, support, or indifference. Faced with the reality of a nuclear plant (as opposed to a hypothetical question about its desirability), people developed more complex interpretations of a plant's significance.

Peasants and Engineers: Bagnolais de Souche and Marcoulins

The counter-spectacle examined in chapter 6—the play “When the Tale of Marcoule Is Told”—suggested that the Gardois elaborated their own representations and interpretations of local nuclear development. Although the stories told in the play exaggerated events and personalities for the sake of humor, many also had bases in real encounters between local residents and nuclear technologists. Some of these encounters evolved into stock stories that locals told and retold about the early years of Marcoule. Of these, the most common revolved around a wily peasant (embodying the region) and a supercilious engineer (embodying the state). Rather than narrating the reconciliation of modernity and tradition, these tales evoked invasion and distance, representing local customs and ideas not as romantic traditions and preludes to great modern achievements but as real lifestyles facing unwelcome challenges from uninvited technocrats. The outcomes of these stories varied. Sometimes the peasant was a hapless victim of the engineer's desires. At other times

he proved himself more cunning than the expert, sometimes gaining profit, sometimes just grim satisfaction from their encounter.

Several of these tales involved the expropriation of land in the villages of Chusclan and Codolet, on whose territory the nuclear site had been built. In one story that Chusclan's mayor told a journalist, engineers appear as bizarre intruders upon the land. "Mysterious characters appeared in our little village. These strangers called themselves oil prospectors, but they weren't carrying any equipment. They did no boring. These were serious men. All day long, with empty hands and grave [expressions], they surveyed the vines. . . . In the evening, they regrouped in the village square and got back into their car without saying a word. Since they didn't go into either of the two local cafés, we knew nothing. Three days later, they disappeared just as mysteriously."⁸ Here, the engineers violated the customs of the land and distanced themselves from the peasants by failing to frequent the local cafés. In retrospect, the mayor declared that he and his villagers had known all along that something strange was afoot. Not until the prefect of the Gard called him and a dozen other mayors in, however, did they know why those engineers had nosed around their land. Their sense of victimization grew further when the land expropriations began.

In another story, the expropriators preyed on one of the only female landowners, Mme. Vigié, whose property lay in the middle of Chusclan and whose vintage ranked among the very best in the region. She was paid a mere 20 million (pre-devaluation) francs—"a laughable price," as the land would have been worth much more in smaller parcels. In a 1956 interview, one *vigneron* recalled: "It was not without heavy hearts that the entire village witnessed the destruction of Mme. Vigié's vineyard. Oh! If you could have seen those bulldozers. They went right through the vines, tearing up and tossing the roots away. An hour later the ground was razed."⁹ The journalist who published the interview concluded sadly: "One of the most extraordinary vineyards of France, . . . which had made Chusclan's reputation, which Louis XIV had named 'My Garden' and whose wine he demanded to have on his table every day, existed no longer."¹⁰ In this story, modernity did not build harmoniously on tradition. Instead, progress destroyed a piece of land that had been a source of income and pride to the village. The tale thus reversed the message of the national technological spectacle.

Other stories featured shrewd villagers. According to a former aide to the mayor of Chusclan, many landowners soon realized that the longer they held off on selling their land, the more they could get for it. A particularly salient instance occurred when a representative of the state

began to buy land to build a road to Marcoule. At first, the state paid relatively little for the land parcels along the road. Those who waited to sell found themselves in a better bargaining position as the path of the road became increasingly defined. The last one to sell—the mayor himself—ended up getting the best price.¹¹ Another example of villagers' outsmarting the CEA is recorded in the minutes of town meetings at Chusclan and Codolet (and gleefully retold by village residents). Faced with an army of state-sponsored experts who wanted to buy communal lands, the municipal councils of the two villages decided that they needed help from their own experts. Before quoting the CEA a price, they therefore asked a professor from the agricultural school in Montpellier to assess their land values. In the end, they obtained the price they demanded.¹² Villagers could thus learn to manipulate the state's system to their profit.

Not all encounters with Marcoule ended so happily, however. CEA administrators may have accepted local expertise in matters of land assessment, but they seemed unwilling to admit that residents might have valuable knowledge about their own environment. Indeed, the opening scenes of "When the Tale of Marcoule Is Told"—in which the peasant counsels the engineer to build higher levees and returns triumphantly with his cabbage after river flooding proves him right—were dramatically reenacted in the fall of 1958, this time not on a stage but on the Cèze flood plain. The villagers of Chusclan and Codolet had indeed issued ominous warnings about the flood potential of the Cèze river. But Marcoule's administrators refused to believe that such a seemingly calm, relatively small river could cause much damage. They went ahead with their plans, building roads and raising levees in ill-advised places. In one tale told to me by a lifetime Chusclan resident, Marcoule's director imperiously declared that he would feel confident laying his hat by the side of the new road, because even the worst of floods would not reach that far. In October 1958, rivers flooded all over the Gard. Codolet was badly hit. The road leading to Marcoule prevented the Cèze from flowing easily down to the Rhône. Instead, it surged straight into the heart of the village. Waters rose so high that houses had 30 centimeters of water on the second floor. Disaster repairs and reconstruction took several years.¹³ Legend has it that one peasant, crossing paths with the director after the floods, inquired acerbically: "So, Mister Director, what happened to your hat?"¹⁴

Many of these stories appeared in several newspapers in the late 1950s. They also became part of local memory. They were all spontaneously told to me, with many of the same details, in interviews I conducted with long time residents in 1994. Clearly, the memory of these

encounters and tensions was nurtured, told, and retold by residents over the decades. The central message of these tales was that, for all his expertise and sophistication, the naive engineer—in contrast to the wily peasant—could not come close to understanding the land or the vagaries of nature. The memories carried a note of bitter triumph: although state technologists might try to extend their reach deep into the life and landscape of the region, the region—through both its natural features and its people—could thwart the technologists. The state could not completely control the region without the cooperation of local residents, but when locals tried to help they were rebuffed. The memories thus conveyed a tremendous distance between local residents and state technologists—a distance repeatedly perpetuated by the newcomers.

As we saw in the tale of the mysterious land surveyors, from the very beginning residents of the Gard felt that CEA representatives told them as little as possible. The inhabitants of Chusclan, Codolet, and other villages learned about the arrival of an “atomic center” not from the CEA or department officials but from a press release. Offended by this manner of communication, the municipal council of Chusclan issued a statement in 1953 opposing the installation of the center on its territory. Such a statement had no force in the face of a determined state institution such as the CEA, however, and it was quickly forgotten.¹⁵

Locals felt that their sense of distance from Marcoule and its employees was reinforced by their inability to grasp what was being done at the site. Almost all of the residents I interviewed claimed that they did not understand the goings on at Marcoule, and that they never had. The former aide to the mayor of Chusclan insisted that most people simply did not care about such details. Over the course of nearly forty years, he himself had visited the site in his official capacity a dozen times, and had repeatedly heard the basic description of how the reactors and plutonium factory worked; still he could not repeat such explanations. But who bore the blame for this lack of comprehension? In a rare critique of Marcoule, the newspaper *Le Provençal* blamed the experts rather than popular ignorance. Reporting on the CEA’s pavilion at the 1957 Nîmes town fair, one reporter wrote:

Without question—and here we are only expressing the opinion of the man on the street, which is to say the vast majority of visitors—the CEA Pavilion was a disappointment.

It is not the CEA’s effort which is at fault, but rather its conception. . . . The explanations offered were too technical, too dry—in a word, too scientific. Nuclear science is brand new, and therefore practically unknown by the masses. It was indispensable, therefore, to try to popularize [this information] in the

clearest, simplest manner. The means of education were distinctly inadequate: a few diagrams, some photographs, four or five models, and some equipment which may have been easy to manipulate but which, in the end, did not help any bit of actual knowledge penetrate the mind of the visitor.¹⁶

The problem was not that people could not learn, but that experts could not teach.

A kind of socio-political distance deepened this technical gulf. In the 1950s, the CEA refused to hire anyone with communist affiliations to work at Marcoule. Although officially classified, the procedures that eliminated suspect applicants were, in fact, well known.¹⁷ Not that the region was teeming with communists—most residents of this part of the Gard considered themselves centrist or apolitical.¹⁸ But anyone in contact with CEA agents quickly realized (well before the French bomb project became official news) that secrecy characterized Marcoule's activities. No matter how understandable the circumstances, the inability of CEA employees to talk about their work made conversations awkward.¹⁹ Residents conveyed a sense of fatalism about this distance: just as knowledge of the atom and its technologies lay beyond reach, so did knowledge of the state and its purposes.

For locals, the state and its technologies were deceptive as well as inscrutable. The false lure of modernity, personified by the seductive but elusive Parisian researcher in the play, was a theme in stories and memories about the modernization of the region. First to experience disappointment were Chusclan and Codolet. Villagers had believed that Marcoule's presence would compensate for their land sacrifices by bringing modern amenities such as sewage and sanitation. In 1956—three years after the land expropriations—they still had nothing. Frustrated, the municipal council of Chusclan wrote to departmental officials protesting that, even though they had not impeded the march of progress, progress had not yet marched into their village. Would Marcoule need so much land that it would force them out of the village altogether? The council requested departmental money to modernize the village, arguing that dilapidated Chusclan made a poor impression on outsiders visiting Marcoule's "ultra-modern" installations.²⁰ Other villages made similar requests, perhaps hoping to capitalize on elite efforts to make nuclear development a national spectacle.²¹ Codolet residents grew particularly frustrated after the 1958 floods. Apparently the CEA expected municipalities to take care of such matters, while the municipalities expected either the CEA or the state—from their point of view essentially interchangeable institutions—to do so. French industries were supposed to pay a *patente* to the villages whose land they

used—a kind of tax based on their production figures. But Marcoule had been exempted from the *patente* because it was both a national defense site and a research center. After considerable agitation, Codolet and Chusclan realized in the mid 1960s that the only way to extract money from the CEA was by imposing a municipal tax on its electricity consumption.²² The villages did eventually get new schoolrooms, better roads, running water, and sewers—but they had to pay a significant portion of the costs themselves, and getting these amenities took a decade. The minutes of village council meetings make clear that residents felt cheated by the failure to deliver on promises of modernization.²³

The town of Bagnols fared better than the villages, mostly because the CEA and other state agencies, having decided to house most of Marcoule's employees there, played an active role in urbanization. The town received the modern facilities it expected. But the Bagnolais had been promised more: they had been assured that tradition and modernity would blend in peaceful harmony. And many felt the betrayal of this promise in countless small ways. The new and old parts of town, for example, supposedly blended seamlessly in mutual esthetic reflection, the high-rises of the new town echoing the spires of the old town. Yet the Bagnolais felt that the edge of the new town formed a barrier between the two parts. Rather than extending an extant boulevard, urban planners had placed a shopping center and a building perpendicular to it, thereby creating a physical boundary and a visual barrier between the two parts of town.²⁴ Local merchants feared that the shopping center threatened their livelihood.²⁵ Established townspeople—who called themselves Bagnolais de Souche—complained that the newcomers flaunted their greater income; certainly the washing machines and refrigerators that began to appear in stores in the 1960s were beyond the means of most old-timers.²⁶ Even the town council felt that the newcomers were greedily trying to extract special financial favors (such as reduced water rates) from the council without granting equivalent favors in return (for example, the CEA's sporting leagues charged townspeople a membership fee).²⁷ According to a sociologist who did field work in Bagnols in the late 1960s, tradition and modernity had only succeeded in grating against each other:

While there is no will for isolation, the old-time Bagnolais associate with each other and constitute a closed society for the newcomers who, in turn, do feel the difficulties of forming relationships in the town but who also don't realize the upheaval that they created in the small town of 5000 inhabitants. The way of life of the Bagnolais had to change somewhat to face this sudden growth. Thus, faced with the heavy traffic that grew so quickly, certain customs have disappeared; during nice weather in the peaceful neighborhoods of Bagnols, residents used to

bring chairs to their doorsteps to savor the cool evening and chat with their neighbors or with passers-by—for everyone knew each other. Now, with the ever increasing traffic and the large numbers of “strangers,” . . . the town natives no longer feel quite at home, and the custom of sitting in front of their doorways has disappeared in most neighborhoods.²⁸

In these stories and memories of everyday life, the harmony between tradition and modernity promised by the technological spectacle disappeared, revealing instead a stark division between old and new.

Interlude: Reflections on Local Memory

The stories and memories of the Tourangeaux have quite a different flavor from those of the Gardois. Passion and discord propel local narratives about Marcoule. Narratives about the Chinon nuclear site speak more of indifference, acquiescence, or satisfaction. Natives of the areas might attribute the contrast to regional temperament: local stereotypes hold that people from the south of France are fiery, while those from central France are even-keeled. I believe the contrast in memory derives not only from differences in local expectations and experiences in the 1950s and the 1960s but also from how each region handled subsequent nuclear development and how the locals situate themselves in France’s nuclear history. This interlude addresses these last two points.

The region around Marcoule experienced its most dramatic changes in the years covered in this book. Though Marcoule acquired several new research facilities after 1970, these did not produce comparable upheavals. But if people remember the 1950s and the 1960s as the time of most significant change, it may not be due entirely to lived experience. An additional source for this perception may be the scholarly attention devoted to this period of the region’s history. Sociologists, economists, geographers, and ethnographers (both professionals and students) have devoted considerable research to the impact of the nuclear site on the region.²⁹

Interacting with these researchers over several decades has helped to give Gardois a strong sense that this period of change forged a unique place for them in contemporary French history. Everyone I approached either had been interviewed before or knew someone who had. They knew themselves to be interesting scholarly subjects. They told well-rehearsed stories about the arrival of Marcoule. They even talked back to researchers. Consider this blurb, which appeared on July 26, 1994 in the Bagnols edition of the *Midi-Libre*:

Intrigued by an American research mission focused on Bagnols. Californian academics . . . have come to observe the fabric of local economic life, and especially to learn how people from here reacted to the implantation of large enterprises near their homes. Of course one thinks of the Marcoule site and its surroundings. Now we just need to wait for the conclusions. Then we will see whether the Americans have succeeded in understanding us.³⁰

I probably would have missed this paragraph had not a gleeful employee of Bagnols's municipal archives brought it to my attention. I could only presume, from his mischievous smile and his refusal to comment, that he was the one who had told the local press about my work. Of course I was amused to see that I had become an entire research mission. But I also felt an odd sense of disquiet upon realizing that this blurb transformed me from an observer to an object of observation. Accustomed to social science investigations, the Bagnolais saw me as simply the latest in a long line of researchers. If I was interesting at all, it was by virtue of my being American. Could an American understand the Bagnolais? Only time would tell. And only they could judge.

This strong sense of historical subjectivity and ownership contrasted sharply with the attitudes I encountered in the Touraine. While most people I solicited for interviews there responded cordially, many also expressed puzzlement. Why should I want to talk to them? Did I realize that they themselves had not worked at the plant? One woman told me sharply "I have nothing to say on the subject" and hung up the phone. Another gently and humbly insisted that her opinions did not matter. In the end, most people agreed to an interview. But the dynamic of the interviews made it clear that the experience (indeed, the whole concept) was new to many of them. Most did not have well-rehearsed tales to repeat. They tended to reflect more before answering questions. With the exception of the elected officials, they tended to express more deference toward me than the Gardois. In the Gard I was just another researcher, interesting only because I was American. Four years earlier in the Touraine, my nationality had barely registered. (There had been an American military base near Chinon until the mid 1960s, when de Gaulle evicted the US military from France. Between the camp and the steady influx of tourists since then, locals appeared well used to Americans' traipsing about their region.) Instead, people appeared impressed by my status as a researcher—despite the fact that I was a graduate student at the time.

The Touraine's nuclear history since 1970 also helps explain some of the variation in how locals remembered the 1960s. In the 1970s, Chinon became the site for a series of light-water reactors, which covered much

more acreage (because of their cooling towers) than the original gas-graphite reactors. People experienced this construction phase differently from the first one. The new reactors brought a second wave of EDF workers and their families. According to some residents, these newcomers were younger, more snobbish, more numerous, and less interested in local life than the first wave. There was thus a “good old days” quality to the stories they told about the 1960s.

Somewhat paradoxically, however, the 1970s was also a decade in which local community leaders constructed an image of their region as one that accepted—even embraced—nuclear power. During that decade, waves of anti-nuclear protest rippled across the nation.³¹ The residents I spoke with insisted that these protests had largely bypassed Chinon, and that what little anti-nuclear rhetoric they heard was instigated by outside activists. Many people contrasted their region with Brittany, where the “ecologist movement” (as French environmentalists refer to themselves) had successfully put anti-nuclear contestation on the local political agenda. National parliamentary deputy André Voisin expressed great pride in the excellent relationship between departmental officials and EDF’s administration during the 1970s. EDF, he said, viewed Chinon as its model site. Utility managers would invite elected officials from other regions there, where they would provide a tour of the plant and a good lunch. Voisin would then help EDF persuade these officials of the benefits of a nuclear plant in their midst:

I remember some general councilors from Brittany. I had been invited to give them my perspective. They were very surprised when I said that we had had our first plants built for fifteen years already, functioning with no problem except the fact that they brought lots of money to the department! They asked me if people didn’t lose hair [by being] near the plant, and I answered that I went to the plant quite often, and that I still had all my hair. The fact that I went to EDF to make sure that everything was going okay—well, this helped EDF, and it was grateful to the department.³²

The Bretons made an impression on other local residents, too. Listen to this couple, who ran a grocery and a café in Avoine:

Woman: I don’t think that people here were really scared like in Brittany. We never said that we were scared of this or that. We just accepted things as they happened. While as in Brittany—

Man: It was a political affair. And anyway, the plants here had proved themselves, but in Brittany they were opposed to the construction.

Woman: They would call us and ask “Aren’t you afraid?” A man who wanted to open a campground asked me that!

Man: Because they had been told that around this nuclear plant, nothing grew, the land was arid, there were no trees or birds, and that nothing was fit for consumption. They had been inculcated with this, and they really thought that!

Woman: Whenever we went on a trip, and said that we lived near a nuclear plant, people would say: “You’re not sick? You’re not tired? No problems?” It had gone that far!

Man: There were one or two anti-nuclear demonstrations, with people from neighboring departments. What was strange was that people came to demonstrate to tell us, the locals, that there was danger, and they demonstrated at the gates of the plant. There were mothers with their little babies. It was political.³³

“Political” here clearly meant irrational and interest-bound. During the 1970s, it appears, many local residents ended up viewing themselves and their region as the rational, reasonable ones who did not buy into the anti-nuclear “hysteria” that had swept the rest of the nation (especially Brittany). The continued fertility of their soil served, for them, as proof that there was nothing dangerous about living near a nuclear reactor. Personal or social conflicts with “arrogant” EDF workers went unremarked; they appeared to think of these as internal matters not to be shared with outsiders.

To the Tourangeaux, what was at issue in the 1970s was the *nuclear* quality of the site—a quality separate from politics. These nuclear characteristics, they insisted, posed no problems. With elected officials taking the lead, they began to see the Touraine as the model for nuclear development elsewhere in France. Further, they naturalized their acceptance of nuclear power by attributing it to regional temperament. In the words of another resident I interviewed: “Brittany has not accepted [nuclear power]. But the Bretons are more chauvinistic, while we are more welcoming.”³⁴ Indeed, the Touraine cultivated an image of serenity, which locals dated back centuries. Consider this passage from a 1980s tourist brochure published in Chinon:

This is a land of balance; nothing is excessive, neither the cold of winter, nor the heat of summer, nor emotions, nor the language which remains the purest in France. This is a land of harmony: harmony of the landscape bringing a harmony of thought and of character. There is not even a local dialect; the few expressions or words that might surprise the ear date from eighteenth-century French.³⁵

Accepting nuclear power fell into the natural, historical order of things—which, in turn, made it easier to forget the conflicts that did occur in the 1950s and the 1960s.

Of course not everyone forgot. A few people remembered interpersonal conflicts that had accompanied the site’s initial development, and dwelled

on those rather than on stories of harmonious integration. And those who had sold their land to EDF had strong memories of conflicts over land prices. But it seemed to me that the Tourangeaux—unlike the Gardois—had not developed a collective memory about the 1950s and the 1960s.

I do *not* mean that the collective memory of the Gardois has produced uniform agreement on the place of nuclear technology in their region. The termination of the gas-graphite program in 1969 created a kind of reconciliation between Gardois leaders and Marcoulins, in which the two groups affirmed a common set of economic interests. In the 1970s and later decades, a budding sense of solidarity coexisted with periodic anti-nuclear demonstrations. I encountered a wide spectrum of attitudes among the Gardois with whom I spoke in 1994, ranging from enthusiasm to tolerance to opposition. Many of the people who spoke of conflicts in the 1950s and the 1960s had since become strong supporters of Marcoule.

Therein lies my point: In the Gard, collective memory made room for conflict, regardless of current attitudes. In the Touraine, conflict appeared to remain mostly hidden, an uncertain part of the nuclear story. The Tourangeaux had evolved an identity that involved nuclear acceptance. A collective memory that made room for early conflict had not emerged. Those who spoke about problems did so hesitantly, and they did not have stock anecdotes to illustrate their general points. Perhaps in part because the Touraine's early nuclear history had not been a focus of much scholarly attention, locals had not spent much time rehearsing the details of that history and interpreting its significance.

With these reflections in mind, let us now turn to the tales of the Tourangeaux.

The Little Kuwait of the Indre-et-Loire

"Land was sacred then," the mayor of Savigny-en-Véron told me in an interview.³⁶ Like Chusclan and Codolet, the villages of Avoine, Savigny, and Beaumont were dominated by agriculture before the arrival of the nuclear site. Wine grapes and asparagus prevailed, but most farmers also grew smaller quantities of other produce. Not surprisingly, they were reluctant to sell the land that ensured their livelihood.

Considerable disagreement existed, both in the 1950s and in 1990, over whether EDF had adequately compensated landowners for their property. According to the mayors of Savigny and Avoine, it had not. The price offered by EDF had been "laughable." The utility had "acquired parcels dirt cheap" and "paid five times less than what they were worth."³⁷

In contrast, parliamentary deputy Voisin (who had been a member of the department's general council in the early nuclear decades) asserted that EDF had been generous: "If a [parcel] was worth 10,000 francs, EDF didn't hesitate to pay 12 or 13,000 francs." In fact, while some landowners sold their parcels easily, others forced the utility to expropriate their land.³⁸ Not all the parcels were for the site. Some went toward EDF's housing developments, and still others were for roads. Some Avoine residents expressed reluctance to sell their land for a mere road (a considerably less prestigious development than a nuclear site). Others did not want large roads running past their homes. But Avoine's municipal councilors had little patience with such reluctance. Recalcitrant owners, they opined, were motivated by greed or other "personal" reasons, and the municipal council declined to support them.³⁹ By the end of 1956, EDF had acquired much of the land it would need for the next decade.

Some local officials hoped that this rapid rate of land acquisition meant that the site would immediately lead to a wave of hiring. In the fall of 1956, however, EDF had still not hired any local residents to work on the site. People began to wonder about the economic benefits of the new project. Most disturbing to local officials, EDF had begun construction without keeping them updated on its plans. Rumors and grumblings drove Auguste Correch, Chinon's mayor and general councilor, to write the site's top engineer asking for explanations. Did EDF plan to extend its site beyond the foreseen limits? The engineer responded "no." Did EDF plan to hire local labor? The utility itself, explained the engineer, would not hire anyone until the reactor was built, but the private companies in charge of construction would surely hire locals. Would the "factory" be dangerous? No, categorically not. And finally, did the utility intend to zone land specifically for the construction companies, and to create a zone where no construction would be permitted? EDF had not yet considered this matter, admitted the engineer. Correch seemed satisfied with these answers, which he presented to his fellow general councilors. But the council expressed its displeasure with the utility. "Surprised," it declared "by the secret conditions under which the activities preliminary to implanting the nuclear factory are occurring," it asked that the utility keep the local authorities and population informed about events as they occurred.⁴⁰

Site administrators eventually understood that things would go more smoothly if they kept locals at least nominally involved in the site's development. In this respect, they demonstrated more savvy than Marcoule's administrators had. EDF made a bigger and more sustained effort to

court local officials. Site directors regularly invited officials to lunch with them.⁴¹ In 1961, the utility invited elected officials from the whole region to a four-day seminar on atomic energy, held at a civil defense training school near Paris and led by scientists, medical doctors, and engineers from the CEA and EDF. The program included lectures on the basic principles of fission, descriptions of how reactors worked, and explanations of the safety measures EDF took to protect workers and the local populace. Not many councilors accepted the invitation, but those who did returned to their municipalities armed with a huge volume containing transcripts of the lectures.⁴² Jean Chamboissier, a young pharmacist recently elected to Bourgeuil's municipal council, returned brimming with enthusiasm for nuclear physics and eagerly shared his new knowledge with his fellow councilors.⁴³ Thirty years later (during which time he had served as Bourgeuil's mayor), Chamboissier's enthusiasm had not waned:

They explained everything they were going to do, what the potential dangers were, and all the safety measures taken. The lectures were at a very advanced level, and very interesting. . . . This is to tell you that nothing was left out in [efforts] to inform area residents in the most objective manner possible. I insist on this point. The information was transmitted. This is why I've always been scandalized to hear that EDF doesn't inform people.⁴⁴

He went on to denounce more recent accusations to that effect in *Le Monde*.

As we saw in the last chapter, other efforts to inform the population took the shape of displays and lectures at the annual fair in Tours. *La Nouvelle République du Centre-Ouest* had a much better opinion of these than the *Midi-Libre* had had of their CEA equivalent in Nîmes. Describing the lectures given by two engineers (one from the CEA, the other from EDF), one journalist said: "With rare talent, they gave us fascinating glimpses into the prospects opened up by the terrible and magnificent secret of atomic energy, both in this waning century, and in the ones to come."⁴⁵ Not everyone was so articulate; the scientist who spoke the following day "tried hard to make the history and application of radio-elements accessible to his audience"⁴⁶ (apparently without much success). Perhaps EDF had learned from the CEA's mistakes.

Site tours also appeared to be a hit, at least with some locals. Tourangeaux certainly found EDF1 (known locally simply as *la boule*—the ball) to be every bit the promised spectacle. "You could see people welding the ball in the evenings. You felt like you were watching a fireworks display."⁴⁷ Equally spectacular were the "thousands of cubic meters of earth" that were moved to make the land suitable for the reactors.⁴⁸ Some residents went only once. For others, it provided a regular excursion, as

they became tourists in their own region. Few, though, manifested as much enthusiasm as Jean Chamboissier, a frequent member of the Sunday morning tours:

You didn't have to sign up. You just showed up, and then they said "the tour will start now"—just like in a Loire Valley château. . . . I went very often. I remember going with my father, who was a medical doctor and who was always very interested in science. . . . Mostly it was people from the area [who went on the tours] . . . and often it was also friends or relatives of site workers.⁴⁹

For those who were interested, then, the site could function as the display and tourist attraction its supporters had dreamed of.

Villagers in Avoine seemed enthusiastic about the prospects—touristic and otherwise—the site offered their municipality. They also wanted nominal credit for housing the site. They had assumed that, since the plant lay completely within their municipal territory, it would be called the Avoine nuclear site. When EDF began calling it the Chinon nuclear plant, Avoine's residents expressed outrage. Recognizing that the town of Chinon "is naturally known for its historic reputation and [thus] serves as a geographical landmark," the municipal council nonetheless saw no reason to name the plant after a town located 7 kilometers away. "Precedents have already been established in which small communities [have housed] dams or electric plants . . . and seen the name of their municipality on that of the installations built on their territory."⁵⁰ Backed by all the neighboring towns and villages except Chinon, the mayor asked EDF to include "Avoine" in the plant's name. But the utility refused to budge. Its first nuclear accomplishment had to have a widely known, historically significant name. Avoine would just have to swallow its pride.

As money began to flow into the village, this grew easier to do. Besides, Avoine could take credit unofficially, if not officially. In the 1960s, for example, the general store began to sell postcards depicting the site, some of them labeled "the nuclear plant of Avoine-Chinon." Local residents found "the ball" and its water tower compelling. Images of "the ball" appeared on wine labels and on the paper the butcher used to wrap meat. Some, like Avoine's mayor, endowed the shapes with deep modern significance:

Do you know why it was a ball? The ball is one billion times as big as an atom. I learned this from the engineers. EDF asked the advice of an engineer when it built the first plant, and he answered that he envisaged it as an atom and a candle. In fact, when I was mayor of Avoine, I had a [postal cancellation] stamp made with that ball and that candle.⁵¹

Others preferred local historical metaphors. One man called the water tower "Gargantua's cigarette."⁵² Another, referring to the mounds on either

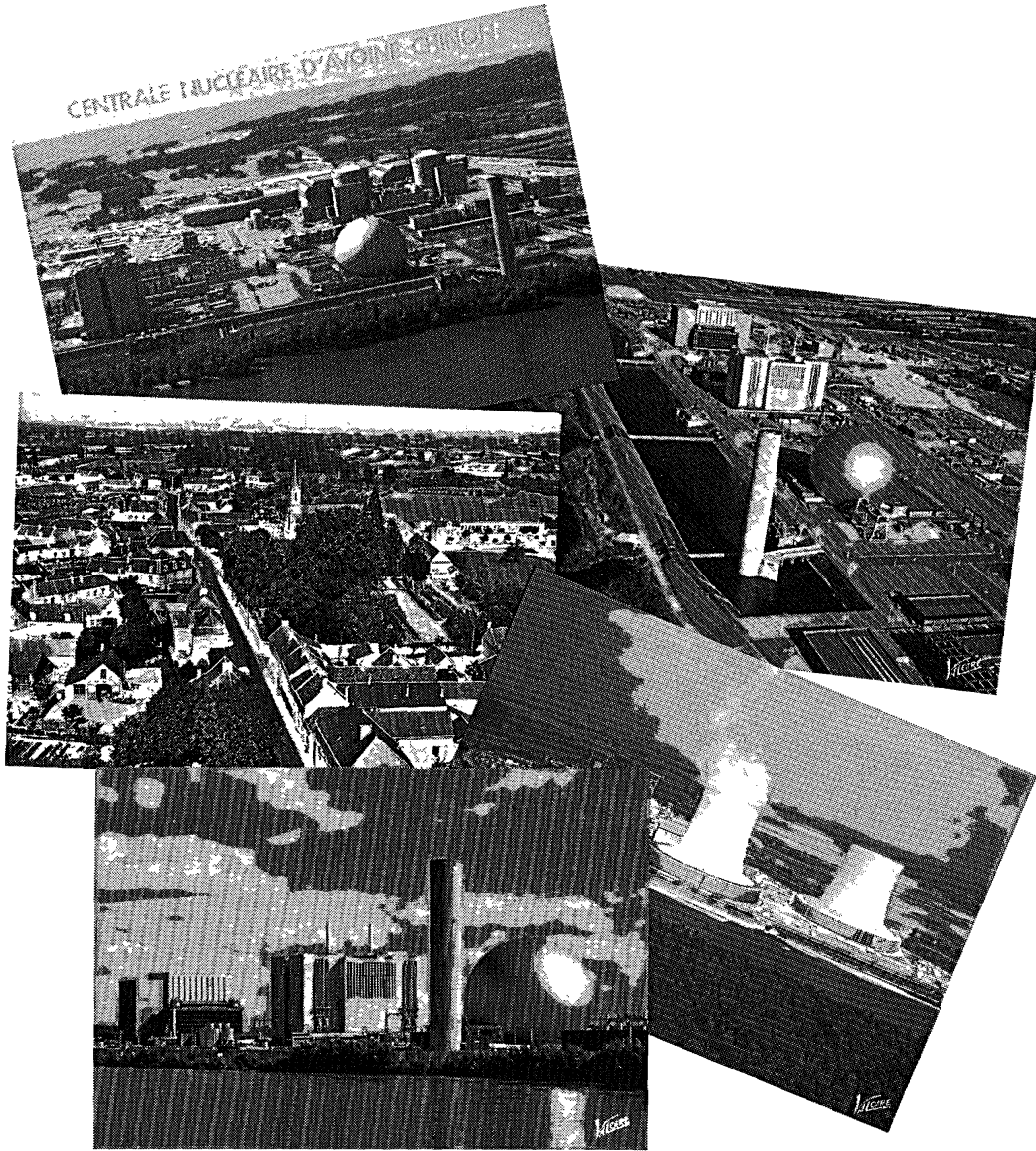


Figure 7.1

Postcards sold at Avoine's general store. Cards courtesy of M. & Mme. Georges Arrault.

side of the reactor, remembered that “people used to say that Gargantua must have scraped his boots there.”⁵³ Still others saw advertising potential in this iconography. Upon noticing a marked increase in sales since the arrival of the plant, for example, vintners in Bourgueil created a “tourist circuit” that included guided cellar tours and wine tastings. The nuclear site figured as a prominent landmark on the accompanying brochure and on the billboard advertising the circuit at the village entrance.⁵⁴ Perhaps the example set by the production of tourist souvenirs relating to Loire Valley châteaux in other Touraine communities

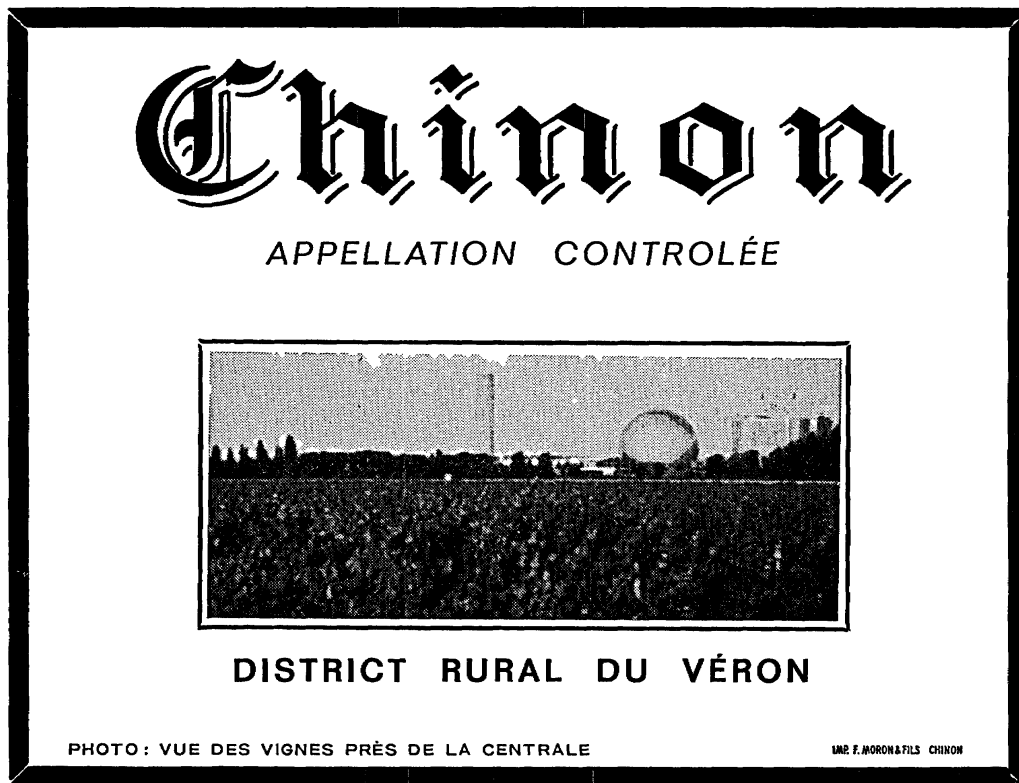


Figure 7.2

A wine label featuring a photograph of the Chinon reactors. The label was initially made by one of the local winemaking cooperatives. Courtesy of M. Raffault.

helped spawn this grassroots production of nuclear iconography. Whatever the case, the contrast between the Gard (where the CEA had commissioned the *cuvée de Marcoule*) and the Touraine (where vintners initially produced a label depicting “the ball” of their own accord) was striking.

Clearly, many merchants and vintners—particularly in Avoine and Bourgeuil—embraced the economic opportunities afforded by the Chinon site and its steadily increasing influx of construction workers and EDF employees. In addition, the site provided a huge income to Avoine through the *patente* tax. As a research and national defense facility, Marcoule had been exonerated from the *patente*. EDF’s plant, however, was a production facility. Even before EDF1 went on line in 1963, Avoine collected regular taxes as well as small *patentes* from the construction companies. This already represented a substantial increase in income for the village. When EDF began to pay its *patente* in 1963, the village budget skyrocketed. Avoine rapidly acquired an enduring nickname: “the little Kuwait of the Indre-et-Loire.”

Avoine spent the first francs of its newfound wealth on basic public

works: running potable water, a sewage and drainage system, complete electrification for the entire village, and repaved roads. The whole village seemed to get into the spirit of modernization. In 1959 it elected several new people to the municipal council, including the first female councilor (the young wife of a prominent farmer) and a new mayor (a young businessman who had moved to Avoine in 1945 to open a small canning factory). These young people shepherded changes in village life that were themselves nothing short of spectacular. Avoine acquired a new school, complete with its own gymnasium. Sidewalks began to line roads in the village center. The main square was remodeled, with a new town hall at one end and access to a new sporting green at the other. Plans were laid for a new cultural center. And, as if to celebrate the end of the village's decline and the new era of youth and wealth, the cemetery moved from the center to the edge of town.⁵⁵ In addition to these community projects, the municipal council spread the wealth to individuals and groups. The woman who delivered telegrams received a 70 percent pay raise. The athletic league and the hunting group got larger subsidies. Even community groups based in other towns and villages received money from Avoine's newly beneficent municipal council. The tremendous influx of workers also generated income for residents who were not merchants. Transient workers who had come from all over the country to build the reactors needed lodging, and villagers provided it. Anyone with a spare room could find a tenant willing to pay an impressive rent. In short, the nuclear site made Avoine and its residents rich—at least compared to their previous incomes.⁵⁶

Departmental officials worried that modernization would be haphazard and wanted to take a hand in managing change. In 1957, they encouraged Avoine and nine nearby towns and villages to form an urbanization consortium to manage regional development. The proposal was novel in that it asked townships on both sides of the Loire to work together. (Traditionally, people on one side of the river did not even socialize with those on the other.) The consortium would ensure that construction companies spread their headquarters throughout the region, oversee rural infrastructural development (including electrification, water, and sewage systems), manage housing development, and formulate plans to attract other businesses and industries to the region.⁵⁷ In principle, the municipalities agreed that the consortium was a good idea. In practice, however, intercommunal disputes thwarted the plan's implementation. Chinon residents found the urbanization plan too restrictive.⁵⁸ Bourgueil's municipal council resented having to obtain

approval from the consortium for every development project it proposed.⁵⁹ In the end, only Avoine appeared happy with the arrangement, and the plan faded.

The other townships thus ended up managing the arrival of the nuclear site on their own, which led to considerable variation across the region. Most villages appeared content to let modernization happen haphazardly. Individual landlords in Beaumont, Savigny, and Huismes rented rooms to transient workers, and some farmers left their land to work at the site. EDF built a housing development for its employees in Beaumont, which required water and drainage. But the municipal councils in these villages made no concerted effort to court industries, and they continued to focus on the traditional agricultural concerns of their constituents.⁶⁰ One inhabitant of Beaumont explained: “At that time Beaumont was headed by a mayor who was a good peasant from the township, but who just found it all to be too much for him to handle.”⁶¹ Chinon, the largest town in the area, appeared no more interested in fostering modernization than its village neighbors. It already had potable running water and other such infrastructural amenities, and it appeared content to bask in the glory of having the site named after itself.⁶² The town’s modernization and expansion efforts before the 1970s remained modest.

The leaders and residents of Bourgueil formed the exception to this rule. Numbering 3000 in 1962, the Bourgueillois considered themselves a town more than a village.⁶³ They too hosted an EDF housing development, and they hoped to make the most out of the nuclear site. They could not do so directly—though the municipal council tried to give its town amenities similar to Avoine’s, for example, it could not convince EDF to finance a municipal swimming pool, and it had to take out a large loan to build a gymnasium. Instead, therefore, Bourgueil’s leaders focused on luring other industries to their township. Reasoning that the presence of the reactors would, with time, attract more business, they wanted to hasten and manage change. They withdrew from the regional urbanization consortium and sponsored a smaller collective that included only townships on their side of the river. They zoned part of their territory for industrial development and passed a decree that would exempt any industry generating twenty or more new jobs from 50 percent of the *patente* for five years.⁶⁴ The municipal council also implemented several advertising campaigns to attract the newcomers to its wineries. Perhaps the most significant symbol of Bourgueil’s eagerness to embrace modernity was the election of a plant engineer to its municipal council in 1965.⁶⁵

The process of modernization thus occurred unevenly in this part of

the Touraine in the 1960s. For Avoine, it happened easily and rapidly, almost entirely through the influx of industrial taxes, with not a murmur of complaint once it became clear that the village could have everything but the name of the plant. The surrounding communities were not so lucky, and their experience depended much more on the initiative of municipal officials.

Like economic and technological modernization, personal accommodation was also uneven. The first wave of workers in the region were not EDF workers but construction workers. At Marcoule, construction workers had stayed in temporary barracks and tents, and only sometimes in local homes; residents remembered very little about them. In the Touraine, construction workers lived in people's homes. From the start, then, locals and newcomers came into close contact. Much depended on the individual, of course, but generally residents had fond memories of these transient workers, who would often keep them informed of events at the site. One couple, who lived in Beaumont at the time, recalled:

Man: Yes, there were some welders near us. The first thing that was built was the ball. We knew what was going on through them, we could more or less follow the development of the site that way. They came with wife and kids.

Me: And they talked to you readily?

Woman: Oh yes, they weren't proud. And I would go get water in their courtyard.

Man: That led us to talk with them. They were used to working outside their homes, so they opened up to everybody. They were from the Midi, and I think they open up more easily, maybe because of the sun.⁶⁶

Transient workers from the Midi (i.e., southern France, including the Gard) left a strong memory in the minds of several residents, who attributed their sunny dispositions to their climate of origin.⁶⁷ Some residents also noted, though, that if the transient workers got such a good reception, it was also because locals were themselves friendly and welcoming. Jean Chamboissier attributed this to winemaking: "In viticultural regions, you know, like Bourgueil—Bourgueil has a good reputation—in viticultural regions there is always a much more open mentality than in other agricultural professions."⁶⁸ Residents thus explained the good relations between transient workers and locals by referring to essential, universally "known" regional temperaments.

Relations with the first wave of EDF employees took somewhat longer to establish, since they resided with their families in separate housing developments. Nonetheless, many appeared to assimilate to local life eas-

ily enough. Consider the participation of several workers in Chinon's annual Gargantua festival. Although the town of Chinon had long cherished the memory of Rabelais, this festival was a recent addition to local culture. Instituted in 1959, it consisted of "two days of jollity,"⁶⁹ culminating in an eating contest whose winner would be crowned Gargantua of the year. In 1964 there were five finalists for the competition: a butcher, a plumber, a cook who worked in the plant's cafeteria, and two plant workers (both veterans of the contest). Dressed in homespun monks' frocks, these five men had one hour to consume as much food as possible. Each sat down to 6 kilograms of Rabelaisian food, which included ten slices of pork snout, half a kilo of chitterling sausages, a goose, a huge camembert cheese, a salad, a baguette, and all the wine they could drink. One of the plant workers won the big prize: several liters of wine and a box of tripe.⁷⁰



Figure 7.3

The Gargantua festival. This photograph is from a 1980s tourist brochure for Chinon. Courtesy of Chinon municipal archives.

EDF workers also mixed with local men regularly by playing in the same sporting leagues. The women appeared to mix well too. “The first EDF agents we had here, we knew them all, we knew the whole family, we would always ask after each other.”⁷¹ One resident contrasted this first wave with the workers who came in the 1970s: “After it was very different. The other generation hired by EDF, to make EDF agents, were trained in schools. While as the first ones [got their training] by experience, through manual skill. The young agents were much less friendly, more distant.”⁷²

Despite the reasonably friendly relationships between local and EDF employees in the 1960s, despite the tours offered by EDF, and despite the seminars given for local officials, some local residents were clearly anxious about the safety of the site. But the traces of this anxiety—both in the historical record and in memory—are faint. In 1962, two general councilors from districts 20 to 30 kilometers away from the site urged the department to engage in independent and systematic monitoring of radiation around the plant. In 1963, an article in the *Nouvelle République* mentioned that the local population had expressed concern about radioactive waste and about the water that EDF1 would reject into the Loire, but dismissed such concerns as unfounded.⁷³

Only one couple acknowledged their anxieties about radioactivity in the interviews I conducted:

Woman: When they said “nuclear,” “radioactivity,” that made you think of Hiroshima. People talked about it, they were afraid that the rivers would get polluted. At first, some precautions were taken, I don’t know if they’re still in place, but I remember that at that time . . . they went every week to sample water from the Loire. There was a staircase that had been fitted to give access to the water. And they regularly took samples of milk from farms in Savigny to analyze it.

Me: And what effect did that have on you?

Woman: I was afraid. But I didn’t analyze things, we didn’t know much.

Man: But really, even after that . . . when we left at 4 in the morning for work, in ’64–’65 . . . we would see these things that looked like mile markers on the side of the road, and those were radiation detectors. And the EDF people would pick them up before dawn, so that people wouldn’t see them. Few people know this, but we were outside at night, so we saw them. But anyway, if you leave the area, you’ll just find another nuclear plant 300 kilometers further away. And if it’s not that it’s something else.⁷⁴

The apparently clandestine nature of the radiation monitoring made these people suspect that if something serious happened at the plant they would not be informed. At the same time, they did not expect to understand any explanations that might have been offered to them. Everyone else I interviewed affirmed that no one had been worried about the radi-

ation. A few people mentioned the Chernobyl accident; they said that people worried more as a result of that than they ever had before.⁷⁵

With such limited information, it is difficult to draw any conclusions about the degree to which residents worried about the dangers posed by the Chinon reactors. Though scant, available evidence does suggest that people worried more than they generally admitted. When asked about their fears, however, they almost invariably answered—like a mantra—that nuclear power had always been well accepted in their region. The 1970s had left an indelible mark on their memories.

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Clearly, at least at one level, the Tourangeaux had a better experience with the implantation of their nuclear site in the 1960s than the Gardois had with Marcoule. Some of the reasons are easy enough to decipher, and have to do with economics and demographics. Chinon brought more money, with fewer strings attached, than Marcoule did. At Chinon, both the construction companies and EDF paid Avoine a *patente*. This meant that the village did not need to raise municipal taxes or take out a loan to finance its modernization projects. This contrasted with Chusclan and Codolet, which suffered from the lack of a *patente* from Marcoule. Bourgueil (on the other side of the Loire from the Chinon site) did require loans to modernize its public facilities, but this did not appear to strain the municipality. Meanwhile, Chinon and nearby villages seemed content to let modernization occur at a leisurely pace. In and of themselves, the special-rate state loans obtained by Bagnols for its urbanization projects did not appear to strain the townspeople (though taxes did rise). But the pace of change in the town was overwhelming for many Bagnolais. The sense of invasion they experienced was heightened by the fact that the vast majority of CEA employees at that time lived in the town of Bagnols. In the Touraine, by contrast, EDF employees were spread out over Avoine, Beaumont, and Bourgueil.

Another set of explanations for why the Tourangeaux had an easier time than the Gardois in the 1950s and the 1960s lies in the expectations harbored by inhabitants of each region. The spectacle of technological progress in the Gard took the form of a drama of salvation. This drama promised a reconciliation between modernity and tradition. The fact that the producers of the spectacle claimed (at least nominally) to include tradition in the drama of modernization may have raised expectations among the Gardois that they would be assigned an active role in this drama. Instead, they felt shut out. Marcoule was largely off limits, the work there a secret. And the alleged harmony was nowhere to be

found. Instead, as the locally produced counter-spectacle and many other stories suggested, modern technological France—incarnated by CEA employees and Bagnols’s urban projects—seemed to want to dominate and destroy, not harmonize with, existing knowledge, customs, and values.

The technological spectacle advertised to the Tourangeaux—more in the nature of a display than a drama—made less extravagant claims. Certainly people were promised jobs and modern facilities. But the emphasis was more on the esthetic qualities of the site; the operative metaphor was that of the *château*. In this spectacle, residents should not expect to be actors—instead, their place was clearly designated as audience and tourists. Site tours thus played a double role: on the one hand, they kept locals informed and made nuclear technology seem more accessible; on the other hand, they provided a way for residents to perform their assigned roles as spectator-tourists. Ultimately it was much easier for Chinon to meet the expectations set up by the producers of the technological spectacle than for Marcoule to do the same. In the Touraine, the new technological France appeared, above all, as a source of income; the state might have invaded, but it brought so many gifts that few people seemed to mind much. Tension around the Chinon nuclear site existed in the 1950s and the 1960s. But with a few exceptions (notably, land expropriations), there appeared to be little space to discuss these tensions, either then or now. Ironically, then, although the Tourangeaux appeared, in principle, better informed than the Gardois about nuclear matters, the silence around their history is greater.

In November 1969, hundreds of CEA employees around the country went on strike to protest the demise of the gas-graphite program and the imminent purchase of an American license for the construction of light-water reactors. Workers, technicians, scientists, and engineers marched through the streets of Paris and staged sit-down strikes at Marcoule and Saclay. “We are in the process of losing our national independence,” they cried. “We are on the path to underdevelopment and colonization.”¹ They also feared that they would lose their jobs: rumor had it that the government would soon announce several thousand layoffs. The French public followed the strikes in newspapers, on radio, and on television.² In southern France, the Bagnolais suddenly became alarmed that the Marcoulins might have to move away, leaving them stuck with the large debts they had incurred for their new public facilities. Gas-graphite engineers and workers at EDF also became angry, but they had more immediate worries which prevented them from staging anything more extensive than a few protests: the day after the termination of the gas-graphite program, the new reactor at Saint-Laurent underwent a partial meltdown. EDF employees thus had to contend simultaneously with the demise of their program and the cleanup of the most serious accident they had ever faced.

Dramatic though these events were, they quickly faded from the official history of the nuclear program. Men who had participated in the strikes or the accident cleanup remembered well, but those who hadn’t soon forgot. Some remembered if I jogged their memories, others did not: one former CEA scientist was not only surprised but also skeptical when I assured him that the demise of gas-graphite had loomed large in the 1969 strikes—all he remembered were protests over the layoffs of cleaning ladies at Saclay.

Such lapses in memory, I believe, stem partly from the fact that the narrative of the *guerre des filières*—the war of the systems—has been