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# The Riesling Predicament

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**E**VERY VERY GOOD WINE is a trifecta of variety, place, and style. *Variety*, of course, refers to the wine's varietal composition. *Place* denotes the wine's geographic origin. And *style* is shorthand for most other factors, such as whether the wine was made still or sparkling, heady or light, sweet or dry. These three parameters are kaleidoscopically interwoven and subtly interdependent, but in the end they all determine a wine's individual properties—from color, strength, structure, taste, and smell to reputation, cost, price, and suitability.

The pages that follow discuss one wine grape variety, Riesling, made as monovarietal wine, grown in dozens of different sites across the Northern Hemisphere, and vinified so that the finished wine is dry. Before we begin this exploration of specifics, a bit more attention to the wine's background is appropriate.

### VARIETY

In the universe of wine grapes, varieties are in fact cultivars—natural seedling progeny of cross-pollinated parent vines chosen and propa-

gated by human intervention. Varieties have been with us more or less as long as people have made wine and cultivated grapes, but they were not an object of systematic attention or a key element in wine nomenclature until fairly recently. Familiar as varietal names now appear to wine consumers around the world, ranging through the alphabet from Albariño to Zinfandel, most varieties were not segregated in vineyards, made monovarietally, or featured on wine labels until the past 150 or so years. And the science that has finally begun to make sense of the large universe of varieties, and to reveal parental and sibling relationships among them, developed only in the 1990s. Today at least 1,400 wine grape varieties are known to be present in the world's commercial vineyards, and each has been genetically fingerprinted and is distinguishable from all others. While this number seems enormous at first blush, the count would be considerably higher if varieties grown noncommercially or experimentally were added in, along with varieties present only in conservatory collections or known to have existed in the past but not to have survived.

And this figure does not include the varieties—not cultivars—that existed only for the lifetime of a single vine plant that was never chosen or propagated by a curious farmer.

On the other hand, the number of varieties that have attracted widespread, significant, and sustained interest from winegrowers and therefore are grown today in many corners of the global vineyard—varieties generally known as classic, major, or international—amount to only a few dozen. This list, largely a product of European immigration to the New World in the 19th century, expands from time to time as European varieties of hitherto only local interest are discovered by New World vintners and transplanted. Consider the sagas of Vermentino and Grüner Veltliner, for example, barely known 20 years ago outside their habitats around the Tyrrhenian Sea and in Austria, respectively, but now looking suspiciously international. But the converse trend is stronger: already-dominant varieties such as Chardonnay are more widely planted everywhere, largely because nothing succeeds like success and thus these varieties make eminent economic sense. Meanwhile, less-visible varieties are abandoned and disappear.

## PLACE

If our contemporary preoccupation with grape varieties, our growing knowledge of varieties and their relationships, and our increasing reliance on varietal names for the taxonomies of wine have made variety seem to be the *primary* element in the trifecta of excellent wine, place deserves at least as much attention, and arguably more. Until the past century, wine taxonomies were overwhelmingly geographical, not varietal, because as early as Roman times, we had recognized that regions and sites differ from one another, even if our understanding of the science of differences was imperfect. The names of wines *were* the names of vineyards or vineyard blocks, themselves often derived from physical, cultural, or ecological features of the landscape or chose as references to nearby vil-

lages, towns, administrative districts, or ports of embarkation. In this context, no feature of the land where grapes are farmed is, or ever was, *prima facie* irrelevant to the wine produced. Certainly, a site's latitude and climate are relevant, as well as its elevation, orientation, aspect, proximities, and exposures; the physical and chemical properties of its dirt and even the microflora in it; and the uses imposed on neighboring land. As the legendary English wine writer Hugh Johnson is supposed to have summarized it, "In the case of wine, where it comes from is the *whole* point" (quoted in Blanning 2009).

In recent decades, much of the conversation about place and wine has invoked the French word *terroir*. Print appearances of the word are now so ubiquitous that it is rarely italicized in English; whole books have been written about *terroir* by geologists and plant scientists, and no issue of any wine magazine, in any European language, is *terroir-free*. Never mind that the word itself, in anything approximating its current meaning, is younger than the Industrial Revolution and has been used to denote the "somewhereness" of individual wines for barely a century. Individual commentators and winegrowers have permitted themselves personal and sometimes idiosyncratic redefinitions of the word. *Grosso modo*, *terroir* is modern shorthand for the imprint of site-specific properties on individual wines. The word has evolved into an umbrella term that subsumes everything mysterious about the properties of wine, and it is now a touchstone for everyone who contends, as many do, that all very good wine is made in the vineyard, not in the cellar.

## STYLE

Style, the third part of the trifecta, is less familiar to wine consumers than variety or *terroir*. It is also more troubled territory, but no less important for its handicaps. It has recently attracted attention in spite of itself as ultraripe flavors and concomitant increases in alcohol content, especially in New World red wines,

have provoked pushback from many sommeliers and some wine writers, and as barrel-fermented Chardonnays, redolent of oak, butter, and vanilla and kissed with residual sweetness, have become so ubiquitous that many consumers erroneously think of these attributes as properties of the grape variety itself. The pushback is illustrated by the creation, in 2011, of an organization called In Pursuit of Balance, which focuses on encouraging “balance” in California winemaking, especially as it affects Chardonnay and Pinot Noir, and by the publication of a book by *San Francisco Chronicle* wine editor Jon Bonné celebrating winemakers “who are ‘rewriting the rules of contemporary winemaking by picking grapes earlier and seeking to reduce alcoholic strength’” (Bonné 2013). Although the object of attention in both cases is wine style, the *s*-word itself is barely mentioned in language that concentrates instead on the “promotion of varietal characteristics” and on varieties as “vehicles for the expression of terroir,” per In Pursuit of Balance’s website. Winemakers themselves seem uncomfortable with the idea that style is an essential parameter of wine, endlessly repeating the catechism that very good wine “makes itself” as long as the grapes have been properly grown. In these pages, I argue the converse: style is *everything* about wine that is *neither* terroir (mediated through viticulture) *nor* variety, and it is the outcome of a long list of winemaking choices. Some relationship always exists, of course, both logically and empirically, between the expression of place and the way a wine is made; winemaking is critical to very good wines, and it is a conscious, thoughtful, and usually beneficial symbiosis with raw material. Nevertheless, style is different from both variety and terroir.

Style begins with the protocol that governs the harvest. This includes such factors as whether the vineyard is picked in a single pass, for example, or several times to segregate fruit of different maturities; how mature the grapes are when they are picked; and whether grape clusters are pressed directly, partially crushed, destemmed, or even partially dried before

pressing. Whether botrytis is present, and whether botrytis-affected clusters are kept separate from the rest. Whether the juice is clarified before fermentation or afterward, or both. Whether the fermentation environment is heated, chilled, or otherwise modified. How much contact is permitted between juice and skins and between new wine and lees. Whether the fermentation is deliberately interrupted, left to itself, or encouraged to consume all available sugar. Whether anything is added to the wine, briefly or permanently, to flavor it, alter its natural chemistry, deactivate bacteria, or prevent secondary fermentation. And, in the time since distillation was “invented,” whether the wine is fortified, or, in very recent years, whether some of the alcohol produced by fermentation was removed. Style-based choices have been part and parcel of viticulture at least since classical antiquity, ceaselessly reflecting the status of wine among other drinks, the ebb and flow of consumer tastes, and the determinative effect of consumer preferences and valuations on markets.

## RIESLING

Vintners and wine writers widely agree that Riesling, the object of attention in these pages, is an important international variety. It occupies a total of more than 50,000 hectares worldwide, overwhelmingly in the Northern Hemisphere, but it is also solidly anchored in the antipodes. It is grown on every wine-producing continent, in at least a dozen European countries, and in no fewer than nine American states and three Canadian provinces. While Chardonnay, a variety that has become almost synonymous with white wine in much of the wine-drinking world, beats Riesling in terms of surface planted almost four to one, Riesling is almost as widespread as Pinot Gris and more than three times as widely planted as Chenin Blanc.

Its desirable varietal properties, wherever it grows, include late budding and late ripening, high tolerance for cold winters, considerable

drought resistance, good concentration, truth to variety even at relatively high yields, high adaptability to a wide range of mesoclimates and soil types, a large and brilliant flavor palette, and wines that age astonishingly well. David Schildknecht, the eminent American wine writer, summarizing Riesling for the Internationales Riesling Symposium held at Eltville, in the German Rheingau, in 2010, called attention to Riesling's "fragrance, finesse, freshness, elegance, and reflection of vintage and terroir."

Riesling underwent a period of quantitative decline during the middle of the 20th century owing to the passing infatuation with the high-yield variety Müller-Thurgau—a Riesling cross with an earlier cross of uncertain parentage called Madeleine Royale—in cool-climate parts of Europe and losses to the Chardonnay tsunami in Australia, California, and parts of South America. But it has been on the rebound since the 1990s: its planted surface increased by 14 percent in Germany between 1985 and 2012 and by 16 percent in Austria between 1999 and 2009; doubled in California between 2004 and 2011; and surged 60 percent in Washington State between 1997 and 2006. In the United States, the market for Riesling-based wines has been impressively strong, although only as compared to their earlier, very weak sales. Point-of-sale data, primarily from large supermarkets, shows a 54 percent increase in Riesling sales between 2005 and 2007, which established Riesling as the fastest-growing varietal wine in American markets between 2006 and 2011, with increased sales at all price points. Wine imports to the States from Germany also nearly tripled between 1999 and 2007, rising from 1.2 to 3.2 million cases, of which Riesling was a substantial share. As early as 1990, Washington surpassed California as the area of greatest Riesling production in the States, and it is now home to the world's largest Riesling producer, the formidable Chateau Ste. Michelle.

The suitability of certain varieties to certain geographic locations, and of certain locations to

certain varieties, has been studied for more than half a century, especially in the New World, where the earliest plantings of wine grapes often were an experimental jumble. The work done beginning in the 1940s at the University of California, Davis, by Maynard Amerine and A.J. Winkler on "heat summation" (measured in degree-days) and on regions then classified by heat summation is well known and has been widely used to align macroclimates with appropriate varieties. Their essential insight—that temperature alone controls the botanical process that ripens wine grapes—has been confirmed by subsequent research and experience and is summarized in a book by the insightful Australian agricultural scientist John Gladstones (Gladstones 2011). Yet generally, viticulturists now focus less on the minimum heat accumulation necessary to ripen any individual variety, primarily because most wine regions now accumulate more heat than they did a generation ago, making excess heat more problematic than heat deficit. As vine-trellising systems have also changed, the microconditions surrounding grape clusters have replaced macroclimatic air temperature as an object of attention, drawing interest to berries' flesh or juice temperature and therefore also to factors such as clusters' exposure to direct or dappled sunlight, the effect of topsoil color on the wavelength of light reflected from the ground, and on enzymatic responses to specific light frequencies. A generation ago, ripening itself was construed as a single biochemical process measured by sugar accumulation. Now viticulturists, winemakers, wine writers, and even consumers talk about ripening as multiple concurrent, but not entirely simultaneous, processes, and they routinely distinguish so-called flavor or physiological ripening from sugar ripening. Much of the recent professional literature relevant to Riesling was summarized by Hans Reiner Schultz, the president of Geisenheim University, in his presentation to the 2014 Internationales Riesling Symposium: he said that Riesling needs "cool to intermediate climates to ripen its crop properly," but that it may

tolerate high maxima, albeit with attendant stylistic differences, if the maxima are offset by “cofactors in quality formation” such as diurnal temperature variation, sunshine hours, or water availability. And, although the climatic differences among Riesling-friendly areas are “relatively large,” the impact of such differences on wine styles are quite imperfectly understood (Schultz 2014).

For all its plasticity, however, Riesling is scarcely insensitive to environments. On the contrary, it is widely appreciated for its great transparency to site, a property it appears to share especially with Pinot Noir. In other words, the expression of Riesling varies quite perceptibly from one vineyard location to the next, responding to very subtle differences in meso- and microclimate, altitude, aspect, slope, proximity to water, air circulation, and many properties of soil. Key soil properties are not limited to the usual suspects, vigor and water retention, but also include porosity, granularity, depth, capacity for heat retention, color, and chemical composition. If the whys and wherefores of terroir are still very imperfectly understood, empirical differences among sites are still clearly evident: dark, slate-based soils are warmer at midday than loess or limestone, hastening ripening, but the wavelength of reflected light affects the activity of enzymes in grapes, which respond to the ratio of red to far-red light. Thus reddish surface soils, usually red because iron oxides are abundant, tend to correlate with faster sugar accumulation—helpful in cooler climates but not in warmer spots—and with increased content of anthocyanins in grape skins. The latter is not hugely important for Riesling but could be important for a red variety such as Pinot Noir.

Riesling, as a variety and as a vehicle for the expression of terroir, is almost universally exalted by wine professionals. David Schildknecht’s summary, quoted above, is complemented by the general critical opinion that, if Chardonnay made from vines in Corton-Charlemagne, Montrachet, or Valmur in Chablis constitutes the gold standard for great white

wine of “table” strength and commands the highest prices for such wines worldwide, Riesling is not far behind, except as to price. The late Steve Pitcher (1945–2012), a San Francisco-based wine writer with a special affection for German wines, explicitly compared Riesling to White Burgundy in 1997, calling it “qualitatively equivalent” (Pitcher 1997). A 2006 book by a fellow San Franciscan, Master Sommelier Evan Goldstein, called special attention to Riesling’s “balanced acidity” and its “capacity to explode on the palate with a bevy of flavors that scream fruit . . . while being firmly underscored by slatey and petrol-like earth notes” (Goldstein 2006). For Jancis Robinson, MW, Riesling is “one of the most magnificent varieties in the world and the source of the best white wines that exist”; for Michel Bettane, the dean of French wine writers, it is simply “the noblest of the white varieties,” Chardonnay apparently not excepted (Robinson XXXX; Bettane XXXX).

The consensus about Riesling begins to crumble, however, when the focus turns from variety and terroir to style. Here Riesling’s persona is almost unique among wine grape varieties, though it shares some properties with Chenin Blanc, another international white variety that originated at high latitudes. Riesling’s many styles differ primarily in their levels of residual sweetness, although other parameters, notably alcoholic strength, are also important. The differences in residual sweetness span virtually the entire range of possible sweetness in wine, from dry-as-a-wine-can-be-fermented to sweet-as-a-wine-can-be-made-naturally, which translates analytically as anything from less than 3 grams per liter (g/L) of unfermented sugar to more than 300 g/L, a differential that spans a mind-boggling two orders of magnitude. At the low end, the wine is lean, brilliant, and even electric, worthy of raw oysters; at the high end of the scale are Rieslings of luscious sweetness that are often described poetically and are usually best enjoyed in lieu of dessert. Between these extremes is a virtually infinite range of wines whose sweetness ranges from

barely perceptible to dominant. When the wine has been made from grapes grown in very cool sites, often at especially high latitudes, where it barely ripens, the middle registers of sweetness can be associated with alcoholic strength not much greater than that of most lager and Christmas ale. From warmer sites, Rieslings typically are stronger, hovering between 12 and 14 percent alcohol unless winemaking choices have intervened. (Note: This book expresses alcohol percentage with the degree symbol: e.g., 14°.) This picture is *prima facie* difficult to describe, and the array of Riesling expressions confounds most attempts at taxonomy. English terminology for wines that are neither dry nor lusciously sweet—off-dry, medium-dry, and semisweet, for example—are typically inadequate, while the German words *lieblich* and *feinherb*, the first haplessly rendered in English as “fruity” and the second generally left untranslated, are not much better. Other German terms properly associated only with the potential alcohol of grape juice before it is fermented—*Kabinett*, *Spätlese*, and *Auslese*—are sometimes also used to describe styles of Riesling, but they correlate imperfectly.

To further complicate the picture, Riesling (like Chenin Blanc) is a so-called high-acid variety, meaning that the grape retains more acid than most varieties when it is physiologically ripe. Because most grape acid is stable, it remains in the finished wine. While acid does not react with unfermented sugar, it does offset the sensory perception of sugar, and vice versa. More acid makes the same sugar content taste less sweet, and vice versa, all other things being equal. Independent of other variables, higher alcohol usually gives an impression of sweetness by itself or by enhancing the impression of sweetness that derives from sugar alone.

Multiple styles of Riesling have been made in the Rhine Basin for as long as Riesling has been made into monovarietal wine, and multiple styles of blended white wine, dependent on combinations of Elbling, Gouais, Savagnin, Orléans, Muscat, Silvaner, and Riesling have been made there for much longer—at least

since the 11th century. By the end of the 19th century, and probably earlier, the dominant Riesling style—albeit one among several—was an occasionally dry but typically off-dry wine, fermented until the fermentation stopped naturally, almost always with concurrent malolactic conversion. It was held in large casks for several years before it was sold, and it was racked multiple times. It was not bottled until three to five years after the vintage (if it was bottled at all; most was sold in barrels or kegs). This was the style most associated in most markets with German white wines at the end of the 19th and the beginning of the 20th centuries, when these were Europe’s most respected light and elegant white wines. They were praised especially for being made “naturally,” without reliance on dried berries, addition of sugar before or after fermentation, dilution with water, or fortification with brandy, unlike most European white wines and many red wines at the time. Between the 1930s and the 1970s, this style virtually disappeared from the Rhine Basin, the victim of a political history that disrupted traditional markets for German wines, the renewed taste for sweeter wines, the advent of cellar technology that enabled mass production of stable wines with an infinite range of sweetness, and pressures to make German viticulture efficient and successful, along with the rest of its agriculture and the balance of its economy, beginning in the 1950s. The wine styles birthed in this period, although they reflected sweeter styles that had coexisted with dominant naturally off-dry and long-*élevage* wines for several centuries, were essentially new. (*Élevage* denotes the time that a new wine spends in tanks between fermentation and bottling.) These wines dominated the German wine scene and represented German wine exports to all markets for a generation, until another sea change washed across postwar Germany, birthing dry German Riesling as we know it today.

This is the wine now legally known as *trocken*, fermented to fewer than 4 g/L of residual sugar regardless of acid content, or to fewer

## BOX 1 HOW IS “DRY” DEFINED?

In wine, sweetness is determined by the presence of some amount of sugar. Dryness is the absence of sugar. In theory, a completely dry wine should contain no sugar at all, but some sugars are unfermentable, some yeast perish in low-sugar environments, and the human palate cannot perceive sugar in very low concentrations. Thus, in practice, wines are generally considered dry if they contain less than 3 or 4 g/L of sugar. However, sensory perception of sweetness is substantially affected by the amount of acid that coexists with sugar in the wine. Within certain thresholds, more acid makes the same amount of sugar taste less sweet. The sugar-versus-acid parameter makes little difference when total acidity in the wine is low, but it can be important when acidity is high, as often happens with naturally high-acid varieties such as Riesling and Chenin Blanc and when grapes of any variety are grown in very cool sites.

The consensus about dryness, expressed as a 4-g/L sugar ceiling, was incorporated into a resolution passed by the General Assembly of the International Organisation of Vine and Wine (OIV Resolution no. 18) in 1973 as part of its historic work toward an international code of enological practice and associated terminology. Three years later, much the same definition passed into the European Commission rulebook as Regulation 1608/76, with an exception to cover high-acid wines: the terms *sec*, *trocken*, *secco*, *asciutto*, and *dry* may be used only if the wine concerned has a maximum sugar content of 4 g/L irrespective of acidity, or 9 g/L maximum if sugar does not exceed acidity by more than 2 g/L. This sounds more complicated than it actually is. Basically, a wine can be considered dry with 8 g/L of sugar if it also contains at least 6 g/L of sugar, or it can contain 9 g/L of sugar if it also contains 7 g/L of acid, neither of which is unusual in Riesling from cool regions or cool years. Ergo, as a practical matter, most European Riesling with fewer than 9 g/L of sugar has been legally dry since 1976, except in the case of jurisdictions that imposed, consistent with European

law, more stringent definitions of dryness, as Austria did until it joined the European Union in 1995. Both the 4-g/L ceiling and the 9-g/L exception were supposedly based on the opinion of expert OIV committees, filtered upward in the OIV and thence to the European Commission, but neither the OIV nor the Spokesperson's Office of the European Commission has been able to explain how either parameter was decided upon. Scientists outside both organizations say they do not believe that the present provisions have any specific basis in sensory science.

Outside the European Community, for better or worse, no relevant definitions for dryness in wine exist. In the United States, before Prohibition, the term *dry* referred to unfortified wine under 14° while *sweet* denoted any wine richer than 14°, whether fortified or not. *Light* has replaced *dry* legally, and *dessert* has replaced *sweet* when the wine is fortified, leaving *dry* undefined in the United States, as it is in Canada. However, in the United States, unlike Europe, what is not prohibited is permitted, so *dry* can appear on any wine label, irrespective of sugar or acid, more or less at the whim of the producer. There are numerous examples of dry American Riesling that are not legally dry by European standards.

A greater problem is that, on both sides of the Atlantic, some legally dry Rieslings do not taste dry, often (but not always) because substantial alcoholic strength has contributed to an impression of sweetness. Others that are not legally dry taste brilliantly dry regardless, usually owing to a combination of modest alcohol, very high acidity, and lean structures. Worse, at least for the consumer, is that mentions of wine style on labels are entirely optional throughout the European Union, so many wines go to market with alcoholic degree the only visible clue to their style. To mitigate this problem, at least in theory, schemes with no official basis have emerged and appear on the back labels of wine bottles, in producer catalogues, and in importer lists when the wines travel outside their countries of birth.

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(BOX 1 HOW IS “DRY” DEFINED? *Continued*)

Many are the invention of individual vintners, especially in Alsace, where Bott-Geyl, Zind-Humbrecht, and Dirlinger-Cadé, to name just three, have embraced producer-specific sweetness indexes (*indices de sucrosité*) that aspire to express sweetness or dryness with single-digit numeric values, generally varying between 5 and 10 degrees. American importer Terry Theise has devised his own avowedly intuitive sense-of-sweetness (SOS) scale for German wines only, also composed of single-digit values that in his case extend from  $-2$  to  $+4$  as his perception of sugar increases. The International Riesling Foundation's Taste Profile, a voluntary set of computational guidelines for producers, begins with a

wine's content of unfermented sugar, adjusted for pH, which can then be used to localize a caret along the length of a short horizontal bar divided into dry, medium-dry, medium-sweet, and sweet segments. It has gained significant acceptance among American producers and a few German ones and now appears on several million bottles annually. The profile's main problem, however, is the discretion it leaves to individual vintners. They are permitted to adjust the outcome of the computation to reflect their personal perceptions, and they may also place the telltale caret in the middle of the appropriate bar segment or skew it toward one end or the other of that segment. Caveat emptor.

than 9 g/L in the presence of high acidity. The grapes are pressed to minimize contact between skins and juice, malolactic conversion is interdicted, and new wine is bottled very young, just months after the vintage, and almost invariably is sterile-filtered before bottling. These wines were first promoted in the late 1970s as an alternative to the sweet wines that had, in the view of some producers, become a national albatross that threatened to shrink the market for German wines to those suitable only as an aperitif or with dessert and to isolate Germany from its neighbors exactly when a leadership role in the “new” Europe had become a national priority. Initially not very successful, dry wines finally acquired traction in the second half of the 1980s. Across the state of Rheinland-Pfalz, which encompasses most major areas of Riesling production except the Rheingau, the share of total Riesling production that was dry increased from 23 percent in 1985 to 38 percent in 2003, while the share that was sweetish declined in the same period from 53 to 25 percent. Similar data for the Rheingau shows that the share of dry wines there rose from 40 to 55 percent between 1989 and 2007, while the share of sweet or sweetish wines fell

from 35 to 16 percent. These numbers are more than statistically significant; they represent a new balance point among styles and reflect a consumer taste that has fundamentally changed. In most German regions, dry wines are the new norm, the preference of most Gen-Xers, and a *raison d'être* for many members of the new generation of vintners, born after 1970 and professionally trained, who built their reputations on dry wines made from low-yielding vines sourced from sites so challenging that their parents' generation had neglected or abandoned them. Despite persistent controversy, dry is the flagship style for most members of the Verband Deutscher Prädikatsweingüter (VDP), Germany's most visible association of quality-oriented producers. There remains significant support for sweeter, “traditional” styles, however. In early 2014, the impressive wine list of Wiesbaden's Michelin-starred Ente vom Lehel restaurant, just beyond the borders of the Rheingau, comprised more than 300 German Rieslings, and was rich in sweetish bottlings from top producers in all regions and only slightly biased in favor of dry wines. And most producers, even those specializing in dry wines, are happy to pour something with a bit of residual

sugar for tasting-room visitors who seem open to the idea. “The glory of Riesling is the multiplicity of styles,” reads the headline at the top of an extensive list of Rieslings on offer at Paul Grieco’s Hearth Restaurant in New York. Just below those words, however, is a second sentence, in only marginally smaller type: “The problem of Riesling is the multiplicity of styles.” Indeed.

While the spectrum of styles associated with Riesling is regarded by many Riesling champions as *prima facie* evidence of its greatness—as American importer Terry Theise put it in a recent blog post, “Its signal genius is to be successful over a wide continuum of sweetnesses”—the fact of continuum distribution is also problematic, not least because small differences in acid or residual sugar are nonetheless perceptible and can impact a wine’s suitability for specific uses, seasons, food pairings, and wine sequences. Neophyte consumers are obviously most disadvantaged by unsigned stylistic continua, but the hazard is also great for serious professionals. Consider the 2011 experience of Benjamin Lewin, MW, recounted in his blog, *Lewin on Wine*. Dining at the Setai restaurant in Miami, Lewin sought to identify a dry Riesling suitable, in his opinion, for Setai’s Asian-inspired cuisine. He and the restaurant’s sommelier first agreed on an Alsatian Riesling that both imagined was dry, but then made another choice after doubts arose. The replacement choice, which came from the German Pfalz, turned out to be “palpably sweet” to Lewin’s palate. At this point, Lewin and the head sommelier examined the other Riesling options on the list but found none that was likely to be “completely dry,” leaving Lewin to opt instead for a Grüner Veltliner from the Wachau. The experience confirmed Lewin’s view that Riesling, in restaurants, is “a pig in a poke.” I can testify to similar experiences, even in fine restaurants with well-trained staff and award-winning lists. Occurrences of this sort probably underlie recent survey findings that more than a third of American Riesling consumers had bought a bottle that they thought

was dry but which tasted sweet, while a similar fraction of American wine retailers admitted to difficulty in recommending Riesling to their customers, owing to “staff uncertainty” about whether a given wine was sweet or dry (Wine Opinions 2013).

Outside Germany, across the rest of its habitat, multiple styles of Riesling coexist with varying degrees of tension or comfort. In Alsace, just across the Rhine, Rieslings were as reliably dry a generation ago as they were reliably sweet in Germany, except for a homeopathic production of lusciously sweet wine known locally as Vendanges Tardives or Sélections de Grains Nobles. This picture changed bit by bit through the 1980s and 1990s, with slowly rising alcoholic strengths and an increasing incidence of off-dry wines containing 12 or more g/L of unfermented sugar. Although most vintners ascribe this change to riper grapes caused by global warming, the style change is probably better understood as a perverse “elbow” effect of Alsace *grand cru* appellations, the first 25 of which were implemented in the late 1970s. Wines from these new appellations, which were generally sites with long-established reputations for high quality, were made subject to lower maximum yield limitations. Since lower yields led vintners to charge higher prices and simultaneously increased ripeness, and since consumers of Alsace wines already associated high prices with the aforementioned lusciously sweet wines, many producers chose to implement a slightly sweet, off-dry style for *grand cru* bottlings. In essence, they bet that wines a tad richer and sweeter than the main run of Alsace product would be acceptable at the necessarily higher price points. All this, however, was done without any on-label signposting. The consequence was a circumstance that other winemakers and some sommeliers likened to Russian roulette: the consumer could not know if a wine labeled as *grand cru* would be traditionally dry or newly off-dry. In his 1999 book, published by the influential *Revue du vin de France*, superstar chef Alain Senderens cautions readers to avoid drinking Alsace Rieslings with “too much residual sugar” with

some of his signature dishes, such as asparagus, leeks, and shellfish with Maltese sauce, suggesting that the reader might be well advised to choose wine from a producer “who lives by the creed of dry Riesling” (Senderens 1999). Now the Alsace trend seems to be turning dry again for even the best wines, at least as far as Riesling is concerned. Gewürztraminer and Pinot Gris are another matter.

Diagonally across the Alps in Austria, a howling scandal involving the addition of diethylene glycol to already sweet wines made almost entirely for the German market—done to make these wines even sweeter and fuller-bodied—effectively eliminated sweet white wine production in Austria after 1985, save for a tiny quantity of lusciously sweet wines. It also established the country as a benchmark producer of serious, classy, and reliably dry Rieslings, alongside its signature Grüner Veltliners, which (see above) were also made dry. Austrian vintners, however, usually pick grapes for their best wines in several passes several weeks apart, harvesting the last fruit in late October or even early November and thus putting some upward pressure on alcoholic strength. Some producers also tolerate significant botrytis in grapes destined for nominally dry wine. The combination can produce wines that taste off-dry, either because the botrytis stops the fermentation before the sugar has been fully consumed or because high alcohol makes the wine taste slightly sweet.

In North America, the meteoric growth of the wine industry in Washington, from a handful of producers and barely 7.5 million liters of wine in 1981 to more than 400 producers and 76 million liters in 2010, combined with the state’s enthusiasm for Riesling, which was deemed well suited to the state’s cold winters, has driven a renaissance of consumer interest in the variety across North America. This interest was, and remains, stylistically anchored in relatively sweet segments of the variety’s stylistic bandwidth. A similar preponderance of relatively sweeter styles characterizes Oregon and California, where the variety has rebounded a

bit from massive losses to Chardonnay in California and to Pinot Gris in Oregon. Vinifera-based wine industries are younger in New York and Michigan and in the Canadian provinces of Ontario, British Columbia, and Nova Scotia, but Rieslings from these areas also tend to follow Washington’s pattern of preponderantly sweetish wines.

Across the Northern Hemisphere in the second decade of the 21st century, a style map of Riesling *by market*, if such existed, would look rather like a crazy quilt. In German regions save the Mosel, as we have seen, Riesling is assumed to be dry and most consumers expect it to be so, even as sweeter styles persist alongside dry ones. In Alsace and Austria, the next most significant Riesling-producing regions, production styles and consumption patterns are well aligned. In Italy, where demand for Riesling is increasing and a bit more is planted nearly every year, the taste is for dry wines, as it is in Austria and Alsace. In the rest of Western Europe, where Riesling is little grown, Riesling is generally desired and expected to be dry, which was not the case half a century earlier. In Britain, by contrast, the “informed consumer recognizes Riesling as a low-alcohol, fruity wine of natural sweetness,” as Neil Fairlamb summarized the situation for the Circle of Wine Writers, contrasting this picture with “German drinkers of their own wine who believe their best wines are dry with alcohol levels of 12–13°” (Fairlamb 2009). Although only the tiniest dribble of Riesling is actually grown in England, and that only in East Sussex as far as I know, the British market reflects British consumers’ preference, which remains overwhelmingly sweetish—exactly what they liked a generation ago. They do seem to make an exception for Alsace, whose genuinely dry Rieslings from houses such as Hugel et Fils, Léon Beyer, and F. E. Trimbach sell rewardingly in England.

The U.S. market for Riesling is difficult to parse reliably, but it is enormously important, if only because the United States, since 2010, has been the single largest wine market in the

world, consuming more than 3.2 billion liters of wine, or about 14 percent of all wine consumed worldwide. About 90 percent of this is varietal table wine, a category in which a large percentage of so-called off-premise consumption is tracked by Nielsen, an international company that studies what consumers watch and buy. Chardonnay is the kingpin in this category, accounting for 21 percent of total dollar sales; Pinot Gris distantly trails Chardonnay at 8 percent. All other varieties, including Riesling, command just tiny market shares. There is considerable anecdotal evidence, however, and some data suggesting that the American market for Riesling is anomalous in important ways. Nielsen data reveal that Riesling consumption is skewed geographically *away* from the overall large U.S. wine markets. Overall, the big markets are the northeastern and middle Atlantic states, Florida, Texas, and California. By contrast, most Riesling is sold in the Pacific Northwest, with Seattle and Portland each consuming more Riesling than the entirety of California.

Data from a 2013 survey commissioned by the International Riesling Foundation (see *Wine Opinions 2013*) appear to show that the U.S. Riesling drinker is younger than the average wine drinker—that is, less likely to be a baby boomer and more likely to belong in the Gen-X or millennial groups, but also more likely than the average U.S. drinker to buy relatively higher-priced wines. Abundant anecdotal evidence, gathered at all points of wine sale nationwide—supermarkets, wine stores, wine bars, restaurants, and winery tasting rooms—suggests that consumer interest in Riesling is disproportionately influenced by the consumer’s *image* of Riesling’s style, especially its sweetness. Overwhelmingly, the American consumer expects Riesling to be sweetish or sweet and seeks or shuns the wine as a function of that expectation. Variations on “No, thank you, I don’t like Riesling, it’s sweet” are repeated in tasting rooms and wine bars across the country, unless the prospective consumer likes, or thinks he or she likes, a sweetish or

off-dry wine, in which case the Riesling is embraced instead. This impression is consistent with real data about Riesling by style and inferences that can be drawn from the survey’s additional findings. Consider, for example, that the best-selling Rieslings in the States are the so-called Columbia Valley tier of wines produced by Chateau Ste. Michelle and that the sweeter wine in this tier, sold as Columbia Valley Riesling, outsells the dry wine, sold as Columbia Valley Dry Riesling, 10 to 1, with no price difference between them. The most successful American-made “premium” Rieslings, each produced in a partnership with a respected and high-profile German vintner, namely Long Shadows’ Poet’s Leap Riesling and Chateau Ste. Michelle’s Eroica, are an off-dry wine and a sweetish wine respectively, and both have attracted very favorable attention from critics. Finally, the two largest wine producers in America, Constellation Brands and E. and J. Gallo, have both launched Riesling brands since 2000, both of them grown and made in Germany with catchy English-language names and both of them sweetish. There is, in short, little reason for the American consumer *not* to assume that Riesling is sweet, since a huge fraction of what is offered in the American market is sweet.

The image of Riesling as a sweet wine is further reflected in the offerings of restaurants. At the Melting Pot, a chain of restaurants specializing in fondue with more than 140 locations in 38 states, two of the top-selling wines in 2012 were German Rieslings from the Mosel, and the chain’s vice president for branding explained that these were fruit-forward, sweeter wines that appealed to the restaurants’ core demographic. Sweetness and consumer preference also coincide in more affluent demographics. At Canlis, one of Seattle’s most reputed restaurants, there were almost 150 Rieslings on offer early in 2014, of which just 8 were dry.

All of this appears to confirm findings of the 2013 consumer survey done on behalf of the International Riesling Foundation. The American Riesling “fan,” the survey found,

self-avowedly prefers wines that are “sweet,” “light,” and “delicious,” gravitates toward Gewürztraminer or Muscat (marketed as Moscato) as alternatives to Riesling, and is “less likely to drink Chardonnay than the average” wine consumer. Meanwhile, 55 percent of staff in U.S. bars and restaurants agreed that “Riesling is most useful by-the-glass when you need a sweet or off-dry wine, while 45 percent agreed that “Riesling is useful as an aperitif or cocktail wine” (Wine Opinions 2013). These findings are consistent with the picture painted for an audience of his trade colleagues in 2002 by Dennis Martin, who was until 2005 the chief winemaker for Hopland-based Fetzer Vineyards, the sixth-largest U.S. wine producer and the third-largest U.S. producer of Riesling. Martin said that Riesling is “marketed to a consumer with a sweeter palate who is looking for something that is not white zinfandel” (Martin 2002).

This picture has its roots as far back as the 1950s, when more Riesling than Chardonnay was grown in California, when table wine was just beginning to outsell dessert wine in the American marketplace, and when Riesling was virtually synonymous with soft, fruity, slightly sweet, and inexpensive table wine. It may also be reinforced, in some U.S. markets that are also important regions of domestic Riesling production, by local habits and taste preferences. In Michigan, for example, the state’s producers concentrated on sweet wines made from native American grape varieties and hybrids, and on similarly sweet “wine” made from berries and tree fruits, until the 1990s. Even today, the state’s largest and most successful Riesling producer, the pioneering Chateau Grand Traverse, still relies on cherry wine for a significant share of its in-state revenue.

Dry styles of Riesling sell poorly in Ontario, where all wine must be marketed either directly by the wineries or via the Liquor Control Board of Ontario, a corporation operated by the provincial government, which is one of the largest buyers of alcoholic beverages in the world. Ontario’s young vinifera-based wine industry also has

strong ties to the German Mosel, relying on Weis Reben, the nursery owned by the Weis family of Weingut St. Urbans-Hof in Leiwen, for a majority of the plant material used for Riesling throughout the province. Although dry styles of Riesling have slowly begun to account for a larger share of production in upstate New York around the Finger Lakes, most vintners still find sweeter versions easier to sell in their tasting rooms and to local restaurants.

Notwithstanding this sweet and sweetish picture, however, there are now signs that dry Riesling is slowly making inroads and gaining traction in the North American market. On the production side, a noticeable cohort of serious winegrowers and winemakers have made significant investments in dry Riesling, occasionally as the focus of a tiny brand and otherwise as a sidebar project, in New York’s Finger Lakes and Ontario’s Niagara Peninsula, on the shores of Michigan’s Grand Traverse Bay, around Okanagan Lake in British Columbia, and in several areas of California and Oregon. Many of these producers are profiled in part II of this book. At the same time, a few larger producers have seen sales of dry Riesling increase substantially in just the past few years. Notwithstanding that Chateau Ste. Michelle’s sweetish Columbia Valley Riesling outsells its dry sibling, as noted above, sales of its dry wine quadrupled from 2005 to 2012, from fewer than 20,000 cases annually to more than 80,000, largely because Chateau Ste. Michelle decided to market the wine nationally instead of regionally. Meanwhile, a handful of restaurants with special enthusiasm for Riesling, especially in markets known for receptivity to trends and discoveries, have made good room for dry *cuvées*. At San Francisco’s ocean-oriented Farallon Restaurant, which has an exceptionally serious wine director, an innovative seafood-based cuisine, and a savvy clientele, 54 Rieslings were on offer early in 2014, of which 35 were dry—including wines from Germany, Austria, Alsace, and California. Embrace of Riesling’s dry idiom is even more impressive in New York City. In 2014, Eleven Madison Park, originally

created by the legendary restaurateur Danny Meyer in 1998 and now among the city's most respected tables, greeted guests with a wine list that offered an astounding 235 Rieslings, of which at least 100 were dry. Not far away as the crow flies, in New York City's Tribeca neighborhood, Paul Grieco's Hearth offers 11 pages of Rieslings, including three pages headed "German Trocken," two dedicated to Austrian Rieslings that are dry almost without exception, and a page each for Alsace and New York State, offering additional dry options alongside sweeter wines.

American wine writers, who are often tastemakers, have taken dry Riesling more than seriously. Steve Pitcher, previously mentioned, was an early champion of dry styles, observing approvingly that "completely dry wines made from Riesling are regarded by some connoisseurs as being among the finest dry wines on earth" (Pitcher 1997). Syndicated wine columnist Dan Berger, long a fan of Riesling, was another early adopter, embracing dry Rieslings with enthusiasm when German and Austrian exemplars first became visible in American markets. Although *New York Times* wine columnist Eric Asimov confesses to longtime affection for the "distinctive" and "beautifully balanced" German Rieslings made with substantial residual sugar, he has also enthused about dry editions of German Riesling, the best of which he describes as "complex, layered and bold, with great energy, texture and depth" (Asimov 2013a). In 2012, Asimov anointed a *very* dry Riesling from New York's Finger Lakes—the 2009 Argetsinger Vineyard bottling from Ravines—as "the best Finger Lakes Riesling ever made" Although there is no data, as far as I know, documenting a quantifiable flight of Chardonnay or Sauvignon Blanc drinkers toward dry Rieslings, it makes sense to suppose that this happens occasionally, at least in restaurants such as Hearth, Eleven Madison Park, and Farallon and in scores of modest establishments in wine-savvy markets, where a dry Austrian or even a California may be one of a half-dozen white wines offered by the glass, and the only Riesling.

The most striking thing about the Riesling-style map of Northern Hemisphere wine markets is not how it first appears: one sees an overwhelming contrast between most of Europe, where the prevailing style and preference are dry wines, and virtually all of North America and Britain, where prevailing style and preference are exactly reversed. Yet the most striking thing about this map is its revelation of changing consumer preferences in these markets, especially Germany. Put succinctly, the sea change that has transformed German preferences and production since the 1980s has aroused passions and furious debate across the land, attracted considerable attention from national media, and put winemakers on television to debate the alleged merits or demerits of various wine styles. Nothing analogous has ever happened in the States with respect to any style of wine or any grape variety, unless it was Prohibition between 1919 and 1933 (which was certainly not about style or variety). Periods of vogue for individual grape varieties have come and gone in North America, but these changes have had little impact beyond the style and fashion pages of a few newspapers and newsmagazines. The European context is different. As we will see in subsequent chapters, wine was an essential piece of the European economy as early as the 12th century and was a focus of attention for the burgesses of new towns and cities across Northern Europe. At least as early as the 14th century, merchant and political authorities recognized important interests in the authenticity and purity of wines, which necessarily involve wine styles, and they did so with heightened urgency when dubious technical interventions affected winemaking. Wine was hotly debated by German governments at the end of the 19th century, giving rise to a tradition of extensive and prescriptive wine law after 1891. Seen against this background, the passions aroused in the 1980s, when advocates appeared on both sides of the so-called *Trockenwelle* ("dry wave") issue, arguing for and against a fundamental "redesign" of German white wine, become more understandable than they

first appear, especially from the perspective of the United States, where wine is a matter of more recent concern, little cultural ramification, and scant political involvement. On the one hand, some German vintners assert that Riesling is intrinsically flattered by a dry style, that dryer wine styles are a more transparent expression of wines' geographic origins and therefore friendlier to terroir, that the persistence of a predominantly sweeter style would have consigned German Riesling to niche use as an aperitif and dessert accompaniment, and that a dryer style is necessary to maintain an international market for Riesling as global tastes shift broadly toward dry interpretations of many grape varieties. On the other side are vintners who believe passionately that Riesling is better and more deliciously expressed in a sweeter idiom, that many of the newly dry wines are unpleasantly lean, and that a unique, important, and organoleptically superior expression of Riesling is in danger of disappearance. Brickbats have flown in both directions, with loyalists of sweeter styles reviled as lemonade makers and the proponents of dry wines criticized as architects of a dogmatic taste prison in which any wine that is not analytically dry is deemed unworthy of a sophisticated palate and inappropriate for consumption with any foodstuff. Especially in the Mosel, vintners have deplored what they perceive as threats to the survival of sweeter styles and have cited anecdotal evidence to support their argument that if the word *trocken* (dry) had not emerged as a misguided imprimatur of quality, most consumers, given a blind choice between an analytically dry wine and a dryish-tasting wine with more residual sugar, would choose the latter.

The combat has put many respected vintners in uncomfortable positions. Annegret Reh-Gartner, director of the Reichsgraf von Kesselstatt winery in Trier, interviewed in February 2000 for *Wine Business Monthly*, confessed that "the whole subject of trocken vs. fruity wines" seemed to her "very contradictory. "We do not like our sweet image," she told the *Monthly's* Lisa Shara Hall, "but I love the wines we produce on the Mosel with residual sugar and a perfect balance. However, the image of being sweet has always hurt us and has to be changed. For the Mosel, I hope that we can maintain our classical style." For "the other regions," she confessed, "the trend goes trocken."

And so the situation remains in 2015. Riesling carries more stylistic baggage than any other major international variety. In North America, it is presumed to be sweet to some degree and is avoided by consumers who prefer, or think they prefer, dry wines, even when some wines they consume constantly are not dry in fact. Conversely, consumers who like some sweetness are Riesling's best friends, blissfully unaware that it can be and is made dry. In Germany, Austria, and Alsace, a plurality of consumers presume that Riesling is and should be dry, often shunning wines not labeled as *trocken*, even when a touch of residual sugar might pair better with their tandoori shrimp. Meanwhile, Riesling goes undiscovered by millions of wine drinkers whose white wine repertory consists entirely of Chardonnay and Sauvignon Blanc and who are unaware that greater organoleptic pleasure awaits them with dry Riesling if only they could control their fear of tall, flute-shaped bottles. This book is for all of the above.