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ARTICLE

Tracking the wines of the Judgment of Paris over time: The case of Stag's Leap Wine Cellars' Cabernet Sauvignon

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Abstract

The outcome of the famous 1976 Judgment of Paris, a blind wine tasting of ten wines by nine French judges, brought American wines to the forefront of the wine business. A Californian wine, the 1973 Stag's Leap Wine Cellars S.L.V. Cabernet Sauvignon, was declared the winner, surpassing four highly prized French wines (Château Mouton-Rothschild 1970, Château Montrose 1970, Château Haut-Brion 1970, and Château Léoville Las Cases 1971). We collect ratings from experts for (almost) all vintages of the same ten wines over the years 1968–2021 and find that the Stag's Leap Cabernet Sauvignon is far from being first. We conclude that either the 1973 vintage was overrated by the experts who tasted it in 1976, or 1973 was merely an outlier in this winery.

Keywords: 1973 Stag's Leap Cabernet Sauvignon; 1976 Judgment of Paris; ratings; tracking quality; wines
JEL Classifications: C18; L15; L66

I. Introduction

On May 24, 1976, Steven Spurrier, a British wine merchant, and his colleague Patricia Gallagher of the Académie du Vin, organized a blind tasting of ten red wines in Paris.[1] They gathered nine French judges,[2] who were acknowledged experts, to taste the ten wines: four Bordeaux and six Californian Cabernet Sauvignons.

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[1]White wines were also tasted, but here we only discuss red wines, as they received more attention in the literature.

[2]Pierre Brejoux of the Institute of Appellations of Origin, Claude Dubois-Millot (substitute to Christian Millau), Michel Dovaz of the Wine Institute of France, Odette Kahn, Editor of *La Revue du vin de France*, Raymond Oliver of the restaurant Le Grand Véfour, Pierre Tari of Château Giscours, Christian Vannequé, the sommelier of Tour d'Argent, Aubert de Villaine of the Domaine de la Romanée-Conti, and Jean-Claude Vrinat of the Restaurant Taillevent. Patricia Gallagher and Steven Spurrier also tasted and rated the wines. Nevertheless, according to Taber (2005), their ratings were not considered in the final ranking of the wines.

Wines were graded on a scale between 0 and 20, and the grades were simply added to compute the final ranking. Table 1 reports the data. As can be seen, the winner was the 1973 Stag's Leap Wine Cellars S.L.V. Cabernet Sauvignon (Stag's Leap Cabernet Sauvignon in what follows), a Californian wine from Napa Valley, while celebrated Bordeaux—Château Mouton-Rothschild, 1970, Château Haut-Brion, 1970, Château Montrose, 1970, and Château Léoville Las Cases, 1971—trailed after Stag's Leap Cabernet Sauvignon (positions 2, 3, 4, and 6).

It is often said that the Judgment of Paris gave worldwide visibility to American wines. George Taber, a journalist working for *Time* magazine, published a book on the event (Taber, 2005). In a segment for National Public Radio News he is quoted saying that the Judgment of Paris "turned out to be the most important event, because it broke the myth that only in France could you make great wine. It opened the door for this phenomenon today of the globalization of wine." Maria Godoy (2016), the senior science and health editor and correspondent for National Public Radio News in charge of that segment, punned that this was "the blind taste test that decanted the wine world."

The outcome of the Paris tasting was, nevertheless, controversial. Ashenfelter and Quandt (1999) stated that tasters should have *ranked* the wines instead of *rating* them, to guarantee that each judge had the same influence on the outcome. This slightly changed the rankings, but Stag's Leap Cabernet Sauvignon remained first. Hulkower (2009) noted that Château Haut-Brion would have been first if the votes had been aggregated via the so-called Borda rule.[3] Ginsburgh and Zang (2012) and Gergaud, Ginsburgh, and Moreno-Ternero (2021) studied other voting protocols, which also changed the outcomes of the Judgment.

In this short paper, we follow another path and check whether the number one position of Stag's Leap Cabernet Sauvignon (as well as the position of the other nine wines) has remained stable over time. As we shall see, we find that Stag's Leap Cabernet Sauvignon is far from being first in most subsequent years. This may be due to one of the two following possibilities: (a) judges overrated the wine in 1976; or (b) Stag's Leap Cabernet Sauvignon was an outlier in 1973.

A. Analysis

To track the quality assessments of these ten wines over time, we collected the ratings of experts (such as *Wine Spectator, Wine Enthusiast, Wine Advocate, Revue du Vin de France*, Jancis Robinson, James Suckling, and others) between 1968 and 2021.[4] Table 2a shows how many wines and their ratings could be retrieved between 1968 and 2021. Table 2b shows the frequencies of available ratings for the ten wines. In 19 cases (years), it was possible to collect the ratings of all ten wines; in 14 cases, this was possible for nine wines, etc. As will be seen, we also need the average rating

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[3]Hulkower (2009) also noted that if the rates of the two non-official judges (Spurrier and Gallagher) had also been considered, Stag's Leap would remain first with the Borda rule.

[4]Individual wine ratings were retrieved from the Wine Searcher website using the following links: Stag's Leap Cab. Sauv., 1973, Château Mouton Rothschild, 1970, Château Montrose, 1970, Château Haut-Brion, 1970, Ridge Vineyards Monte Bello Cab. Sauv., 1971, Château Léoville Las Cases, 1971, Heitz Wine Cellars, 1970, Clos du Val Cab. Sauv., 1972, Mayacamas Vineyards Cab. Sauv., 1971, Freemark Abbey Winery Cab. Sauv., 1967.

Table 1. The Paris 1976 wine tasting: Judges and ratings

Wines	A	B	C	D	E	F	G	H	I	J
(origin)	(US)	(F)	(F)	(F)	(US)	(F)	(US)	(US)	(US)	(US)
Judges										
Pierre Brejoux (French)	14	16	12	17	13	10	12	14	5	7
Aubert de Villaine (French)	15	14	16	15	9	10	7	5	12	7
Michel Dovaz (French)	10	15	11	12	12	10	11.5	11	8	15
Jean-Claude Vrinat (French)	14	14	15	15	11	12	9	7	13	7
Odette Kahn (French)	15	12	12	12	7	12	2	2	13	5
Claude Dubois-Millot (French)	16	16	17	13.5	7	11	8	9	9.5	9
Raymond Olivier (French)	14	12	14	10	12	12	10	10	14	8
Christian Vannequé (French)	16.5	16	11	17	15.5	8	10	16.5	3	6
Pierre Tari (French)	13	11	14	14	17	12	15	13	12	14
Steven Spurrier (UK)	14	14	14	8	14	12	13	11	9	13
Patricia Gallagher (UK)	14	15	14	12	16	14	17	13	9	15
Average rating (11 judges)	14.14	14.09	13.64	13.23	12.14	11.18	10.41	10.14	9.77	9.64
Final rank	1	2	3	4	5	6	7	8	9	10
Average ratings (9 French judges)	14.17	14.00	13.56	13.94	11.50	10.78	9.39	9.72	9.94	8.67
Final rank	1	2	4	3	5	6	9	8	7	10

Notes: Each column gathers the ratings from the nine official (French) judges, and the two non-official judges for the ten red wines. The last rows provide the aggregate ratings and the corresponding ranking that resulted from them when taking all 11 judges or only the 9 official (French) judges. The wines are: A: Stag's Leap Cabernet Sauvignon, 1973, B: Château Mouton-Rothschild, 1970, C: Château Montrose, 1970, D: Château Haut-Brion, 1970, E: Ridge Vineyards Monte Bello Cabernet Sauvignon, 1971, F: Château Léoville Las Cases, 1971, G: Heitz Wine Cellars Martha's Vineyard Cabernet Sauvignon, 1970, H: Clos du Val Cabernet Sauvignon, 1972, I: Mayacamas Vineyards Cabernet Sauvignon, 1971, J: Freemark Abbey Winery Cabernet Sauvignon, 1969.

Table 2a. Number of available ratings per vintage

Year	No. of wines	Year	No. of wines
1968	2	1995	9
1969	1	1996	10
1970	8	1997	10
1971	6	1998	9
1972	8	1999	10
1973	9	2000	10
1974	9	2001	10
1975	9	2002	10
1976	8	2003	10
1977	9	2004	10
1978	10	2005	10
1979	7	2006	10
1980	8	2007	10
1981	8	2008	10
1982	8	2009	10
1983	8	2010	10
1984	8	2011	9
1985	8	2012	10
1986	8	2013	10
1987	9	2014	10
1988	9	2015	10
1989	7	2016	9
1990	9	2017	8
1991	9	2018	8
1992	9	2019	5
1993	8	2020	5
1994	9	2021	5

Notes: Table 2a shows how many wines and their ratings could be retrieved between 1968 and 2021 from Wine Searcher.

of wines produced in the five regions in which the ten wines are grown: California, Pauillac, Pessac-Léognan, Saint-Estèphe, and Saint-Julien.[5]

Table 3 provides some analytics for the ten wines. Column (4) shows the number of times each of them was observed (or rated); Column (5) contains the number of

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[5]Vintage scores can be found on https://www.wine-searcher.com/vintage-chart/all/fine-wines/4671/north-coast for all six Californian wines. For Château Haut-Brion, check https://www.wine-searcher.com/vintage-chart/all/fine-wines/7-bordeaux; the three other French wines can be found on https://www.wine-searcher.com/vintage-chart/all/fine-wines/901-medoc.

Table 2b. Frequencies of available ratings

Number of wines	Number of ratings
10	19
9	14
8	13
7	2
6	1
5	3
2	1
1	1

Notes: Table 2b shows the frequencies of available ratings. In 19 cases (years), it was possible to get ratings for all 10 wines; in 14 cases, this was only possible for 9 wines, etc.

times the rating of each individual wine was higher than the rating of the wine's region (again, California, Pauillac, Pessac-Léognan, Saint-Estèphe, and Saint-Julien). As can be seen, Stag's Leap Cabernet Sauvignon did better than the average rate of all Californian wines only once in the 27 years for which there was information, while, as shown in Column (6), Château Mouton-Rothschild, Château Haut-Brion, Ridge Vineyards Monte Bello Cabernet Sauvignon, and Château Léoville Las Cases did better than the average rate of the region more than half the time. The Californian wine Heitz Wine Cellars Martha's Vineyard Cabernet Sauvignon is close with 49 percent. The fact that Stag's Leap Cabernet Sauvignon has moved below their peers might not be a sign of deteriorating wines but may also reflect that Napa, as a new wine region, has seen a surge of outstanding wineries.

Table 4 displays the results of two regressions. We restrict the sample size to vintages after 1976 (the year of the Judgment) and before 2017 to ensure that each rating is based on a reasonable set of expert ratings.[6] One regression is based on 359 observations for which the score of the wine *and* the average score of the region are available. The other one is based on 190 observations that are complete (ten wines times 19 years). The reference category is Stag's Leap Cabernet Sauvignon. The two regressions can be written as:

$$R_{ijt} = \alpha_i \, wine_i + \beta \, x_{jt} + \gamma + \varepsilon_{it},$$

where R_{ijt} is the rating of wine i in region j and year t, $wine_i$ is a dummy equal to 1 for this wine and 0 otherwise, x_{jt} is the average wine score in region j and year t, which is assumed to account for weather (and other) conditions in region j and year t; α_i, β, and γ are parameters. Estimates α_i account for the differences between x_{jt} and R_{ijt}. They can be interpreted as being the number of points that deviates from the regional vintage rating of the region. Château-Mouton-Rothschild, for example, has 3.986

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[6]The results are similar if one uses all the observations. Results are available from the authors upon request.

Table 3. Number of available ratings per wine and success of wines

Paris rank (1)	Wine (2)	Region (3)	No. of observations (4)	No. of times better than region's average (5)	% of times better than region's average (6)=(5)/(4)
1	Stag's Leap Cab. Sauv., 1973	California	27	1	4
2	Château Mouton Rothschild, 1970	Pauillac	51	26	51
3	Château Montrose, 1970	Saint-Estèphe	51	18	35
4	Château Haut-Brion, 1970	Pessac-Léognan	51	33	65
5	Ridge Vineyards Monte Bello Cab. Sauv., 1971	California	49	29	59
6	Château Léoville Las Cases, 1971	Saint-Julien	51	29	57
7	Heitz Wine Cellars, Martha's Vineyard Cab. Sauv., 1970	California	41	20	49
8	Clos du Val Cab. Sauv., 1972	California	44	10	23
9	Mayacamas Vineyards Cab. Sauv., 1971	California	50	17	34
10	Freemark Abbey Winery Cab. Sauv., 1967	California	37	4	11

Notes: The first three columns list the 1976 Paris rankings (1), names (2), and regions (3) of each wine. Column (4) the number of times each of them was observed in our data; Column (5) lists the number of times the rating of each individual wine was higher than the rating of the wine's region. Column (6) lists the corresponding ratios from the entries in Column (5) and Column (4).

points more than the average rating of the whole Pauillac region. Note also that in both cases (359 or 190 data points), the rankings are identical.

The winners are Château Haut-Brion, Château Léoville Las Cases, Château Mouton-Rothschild, and Ridge Vineyards Monte Bello Cabernet Sauvignon, while Stag's Leap Cabernet Sauvignon, Clos du Val Cabernet Sauvignon, Mayacamas Vineyards Cabernet Sauvignon, and Freemark Abbey Winery Cabernet Sauvignon are ranked at the bottom.

The results shown in Tables 3 and 4 are very similar. In both regressions, seven parameters are significantly different from 0 at the 1 percent level. The standard errors show that there is little, if any, difference in quality between the French wines and two Californian wines (Ridge Vineyards Monte Bello Cabernet

Table 4. Paris ranking and later rankings

Paris rank	Wine	Region	Coeff. (1)	Rank	Coeff. (2)	Rank
1	Stag's Leap Cab. Sauv., 1973	California	0.0	8	0.0	8
2	Château Mouton Rothschild, 1970	Pauillac	3.986*** (0.560)	3	4.514*** (0.641)	3
3	Château Montrose, 1970	Saint-Estèphe	3.229*** (0.545)	6	3.555*** (0.639)	6
4	Château Haut-Brion, 1970	Pessac-Léognan	4.641*** (0.550)	1	5.025*** (0.643)	1
5	Ridge Vineyards Monte Bello Cab. Sauv., 1971	California	3.760*** (0.634)	4	4.421*** (0.621)	4
6	Château Léoville Las Cases, 1971	Saint-Julien	4.415*** (0.525)	2	4.644*** (0.607)	2
7	Heitz Wine Cellars, Martha's Vineyard Cab. Sauv., 1970	California	3.713*** (0.602)	5	3.368*** (0.651)	5
8	Clos du Val Cab. Sauv., 1972	California	−0.534 (0.763)	10	−1.474* (0.830)	10
9	Mayacamas Vineyards Cab. Sauv., 1971	California	2.099*** (0.620)	7	2.105*** (0.686)	7
10	Freemark Abbey Winery Cab. Sauv., 1967	California	−0.750 (0.624)	9	−0.368 (0.649)	9
	Regional vintage rating		0.866*** (0.068)		0.758*** (0.120)	
	Constant		6.895 (6.352)		18.722 (11.358)	
	R-square		0.574		0.700	
	No. of observations		359		190	

Notes: Robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.01$. The first three columns list the 1976 Paris rankings (1), names (2), and regions (3) of each wine. The next two columns list the coefficients, and the corresponding rank, for the regression based on 359 observations for which the rating of the wine and the average rating of the region are available. The last two columns list the coefficients, and the corresponding rank, for the regression based on the 190 observations that are complete (from the 19 years in which the 10 wines were rated).

Sauvignon and Heitz Wine Cellars Martha's Vineyard Cabernet Sauvignon). Stag's Leap Cabernet Sauvignon is ranked number 8; the parameters α_i are not significantly different from those of Freemark Abbey Winery Cabernet Sauvignon or Clos du Val Cabernet Sauvignon.

II. Concluding comments

Our analysis shows that, based on ratings given by a large number of experts over 40 years after the Judgment, Stag's Leap Cabernet Sauvignon was never competitive enough to beat French wines and some other Californian wines such as Ridge Vineyards Monte Bello Cabernet Sauvignon and Heitz Wine Cellars Martha's

Vineyard Cabernet Sauvignon. We stress that our results, based on a large set of data and ratings, are arguably more solid than those from the (one-shot) Judgment of Paris in the year 1976.

This leads us to conclude that either the 1973 Stag's Leap Cabernet Sauvignon was overrated by the experts who tasted it in 1976, or that the 1973 vintage was an outlier in this winery.

Note that (a) if judge Christian Vannequé had given 15 instead of 16.5 points to Stag's Leap Cabernet Sauvignon in the *Paris tasting*, its average rating (when considering the 9 French judges only) would have dropped to the average rating that Château Mouton-Rothschild obtained; and (b) in our world, there are as many first prizes as there are competitions, but the success that winners enjoy is often short-lasting. This is so for books, movies, or musical contests. See, among others, English (2005) and Ginsburgh (2003).

However, Stag's Leap Cabernet Sauvignon is "still going strong." In 2022, a 1973 bottle was sold for $12,300, the highest price for the vintage, and three times the previous largest price (La Gazette Drouot, 2022).

References

Ashenfelter, O., and Quandt, R. (1999). Analyzing a wine tasting statistically. *Chance*, 12(3), 16–20.

La Gazette Drouot (2022). A bottle of stag's leap wine from 1973 sets a record at auction in Dallas. La Gazette Drouot, March 16. Available at https://www.gazette-drouot.com/en/article/-a-bottle-of-stags-leap-wine-from-1973-sets-a-record-at-auction-in-dallas/33205 (accessed June 14, 2022).

English, J. (2005). *The Economy of Prestige*. Cambridge: Harvard University Press.

Gergaud, O., Ginsburgh, V., and Moreno-Ternero, J. (2021). Wine ratings: Seeking a consensus among tasters via normalization, approval and aggregation. *Journal of Wine Economics*, 16(3), 321–342.

Ginsburgh, V. (2003). Awards, success and aesthetic quality in the arts. *Journal of Economic Perspectives*, 17(2), 99–111.

Ginsburgh, V., and Zang, I. (2012). Shapley ranking of wines. *Journal of Wine Economics*, 7(2), 169–180.

Godoy, M. (2016). The Judgment of Paris: The blind taste test that decanted the wine world. NPR, *The Salt*, May 24. Last accessed June 14, 2022.

Hulkower, N. (2009). The Judgment of Paris according to Borda. *Journal of Wine Research*, 20(3), 171–182.

Taber, G. (2005). *Judgment of Paris, California Vs. France and the Historic 1976 Paris Tasting that Revolutionized Wine*. New York: Scribner.