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# The “Wizard of Oz” as a Monetary Allegory

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The *Wonderful Wizard of Oz*, perhaps America’s favorite children’s story, is also an informed comment on the battle over free silver in the 1890s. The characters in the story represent real figures such as William Jennings Bryan. This paper interprets the allegory for economists and economic historians, illuminating a number of elements left unexplained by critics concerned with the politics of the allegory. It also reexamines Bryan and the case for free silver. Far from being monetary cranks, the advocates of free silver had a strong argument on both theoretical and empirical grounds.

## I. Introduction

The *Wizard of Oz* is perhaps the best-loved American children’s story. The movie, starring Judy Garland, Bert Lahr, Ray Bolger, and company, is an annual television ritual. The book on which the movie is based, L. Frank Baum’s *The Wonderful Wizard of Oz*, however, is not only a child’s tale but also a sophisticated commentary on the political and economic debates of the Populist Era.<sup>1</sup> Previous interpretations have focused on the political and social aspects of the allegory. The most important of these is Littlefield ([1966] 1968), although his inter-

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<sup>1</sup> What follows is based on the book. Metro-Goldwyn-Mayer made numerous changes in the text, some of which, such as changing the silver slippers of the book into the famous ruby slippers of the movie, obscure the allegory.

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pretation was adumbrated by Nye (1951), Gardner and Nye (1957), Sackett (1960), and Bewley ([1964] 1970). My purpose is to unlock the references in the *Wizard of Oz* to the monetary debates of the 1890s. When the story is viewed in this light, the real reason the Cowardly Lion fell asleep in the field of poppies, the identity of the Wizard of Oz, the significance of the strange number of hallways and rooms in the Emerald Palace, and the reason the Wicked Witch of the West was so happy to get one of Dorothy's shoes become clear. Thus interpreted, the *Wizard of Oz* becomes a powerful pedagogic device. Few students of money and banking or economic history will forget the battle between the advocates of free silver and the defenders of the gold standard when it is explained through the *Wizard of Oz*.

This paper also serves a more conventional purpose. William Jennings Bryan and his supporters in the free silver movement, who play a central role in the story, have been treated as monetary cranks even by historians who are sympathetic to them on other issues.<sup>2</sup> Here I show that Bryan's monetary thought was surprisingly sophisticated and that on most issues his positions, in the light of modern monetary theory, compare favorably with those of his "sound money" opponents.<sup>3</sup>

L. Frank Baum's early life proved to be ideal preparation for writing a monetary allegory.<sup>4</sup> Born to a wealthy family in Chittenango, New York, in 1856, Baum while still in his early 20s wrote and produced a successful play that made it to Broadway. In 1882 he married Maud Gage, the daughter of one of the leading suffragettes, Matilda Joslyn Gage. Later Baum and his family moved to Aberdeen, South Dakota, where he viewed at close hand the frontier life that gave rise to the populist movement. He was unsuccessful in South Dakota, where among other things he published a small paper, the *Saturday Pioneer*, and several issues of the *Western Investor*. In 1890, the Baums moved to Chicago. While pursuing a number of jobs, he frequented the Chicago Press Club and met some of the city's leading writers. There he undoubtedly heard a great deal about the battle for the free coinage of silver, especially in 1896 when Chicago hosted the Demo-

<sup>2</sup> For the purposes of this paper, it is sufficient to lump the Populists, free silver Democrats, and other supporters of free silver together. But it should be noted that while the Populist party nominated Bryan, many hard-line Populists advocated more radical measures such as greenbacks or a commodity-backed currency and supported free silver only as the best that could be gotten in the current political climate. See Goodwyn (1976) and the appendix by Yohe (1976) for a detailed discussion of populist monetary ideas and their relationship to free silver.

<sup>3</sup> There are many biographies of Bryan. Two of the best, on the issues covered here, are Coletta (1964–69) and Koenig (1971).

<sup>4</sup> This paragraph is based on Baum and MacFall (1961), the major biography of L. Frank Baum.

cratic National Convention at which William Jennings Bryan made his famous “Cross of Gold” speech. Baum’s first book of children’s stories was published in 1897 and, in 1900, *The Wonderful Wizard of Oz* followed. After moving to Hollywood, Baum devoted himself to writing children’s stories, the most successful being sequels to his masterpiece.

Table 1 contains data basic to an understanding of the world that produced the *Wizard of Oz*. The key fact was deflation. The gross national product deflator, shown in column 1, fell steadily from the end of the 1860s until the United States returned to the gold standard in 1879. After a brief upsurge the deflator resumed its fall, reaching its nadir in 1896. Farm prices, shown in column 2, fell even more rapidly, also reaching a post–Civil War low in 1896. Thus part of the farm problem was the decline in the relative price of farm products. It is a fair criticism of the Populists, to which Bryan is not immune, that they did not adequately distinguish between general price trends that resulted from relatively slow growth in the stock of money compared with real output and relative price trends that would be impervious to monetary remedies.<sup>5</sup>

Between 1869 and 1879 the stock of money grew at about 2.6 percent per year and real output at about 5.0 percent per year, so the deflationary pressure from the lack of monetary growth is easy to understand. In the same period, high-powered money—gold and silver moneys, other Treasury obligations that could serve as bank reserves, and national bank notes<sup>6</sup>—increased at a rate of only 0.5 percent per year, so the deflation can be traced ultimately to the slow growth in high-powered money. In the following decade, however, the story is somewhat different. High-powered money actually grew at 5.2 percent per year and the total money stock at 7.7 percent, while the rate of growth of real income slowed to 2.7 percent. Since the United States was linked after 1879 to other gold standard countries by fixed exchange rates, one might expect, on the basis of the actual money and real income figures and the velocity trend in the previous decade, a high U.S. inflation rate paralleled by inflation in other gold standard countries. Otherwise rapid U.S. monetary growth would

<sup>5</sup> Harvey ([1894] 1963, pp. 198–214), e.g., illustrates the deflation with series on wheat, cotton, and silver. Then in answering the criticism that prices other than wheat had fallen by an equal percentage, he points first to debts but then (p. 214) to a variety of prices—streetcar fares, a hotel room, and so on—that were not fixed in nominal terms.

<sup>6</sup> The inclusion of national bank notes in high-powered money is debatable since they were a liability of commercial banks analogous to deposits. But Milton Friedman and Anna Schwartz (who developed the basic series) included the notes in high-powered money, basing their decision on several considerations. The most important was simply that national bank notes were indirectly obligations of the federal government since they had to be backed by federal government bonds.

TABLE 1  
PRICES AND RELATED DATA, 1869–1906

Year	Implicit Price Deflator (1)	Whole- sale Farm Prices (2)	Ratio of Price of Gold to Price of Silver (3)	Percentage Civilian Labor Force Unem- ployed (4)	Money Stock (\$ Billions) (5)	High- powered Money (\$ Billions) (6)	Real Income (\$ Billions 1869) (7)
1869	100	100	20.7		1.28	.760	7.242
1870	94	88	17.9		1.35	.766	7.369
1871	96	80	17.4		1.50	.778	7.240
1872	91	84	17.6		1.61	.782	8.909
1873	90	80	18.1		1.62	.789	8.958
1874	89	80	18.0		1.65	.795	8.726
1875	87	77	19.2		1.72	.773	8.802
1876	83	70	19.9		1.68	.754	9.411
1877	80	70	18.1		1.65	.758	10.078
1878	74	56	18.1		1.58	.763	10.791
1879	72	56	18.5		1.66	.801	11.902
1880	79	63	18.0		2.03	.949	13.646
1881	77	70	18.3		2.44	1.077	13.911
1882	80	77	18.1		2.63	1.140	14.500
1883	79	68	18.6		2.80	1.186	14.237
1884	75	64	18.6		2.80	1.204	14.555
1885	70	56	19.4		2.87	1.233	14.510
1886	69	53	20.8		3.10	1.213	15.282
1887	70	55	21.1		3.31	1.271	15.656
1888	71	59	22.0		3.40	1.318	15.126
1889	71	52	22.1		3.60	1.342	15.578
1890	70	55	19.8	4.0	3.92	1.390	16.820
1891	69	60	20.9	5.4	4.08	1.461	17.506
1892	66	54	23.6	3.0	4.43	1.533	19.117
1893	68	56	26.4	11.7	4.26	1.561	18.373
1894	64	49	32.8	18.4	4.28	1.582	17.259
1895	63	48	31.7	13.7	4.43	1.499	19.248
1896	61	44	30.8	14.4	4.35	1.451	18.758
1897	61	47	34.6	14.5	4.64	1.554	20.563
1898	63	49	35.5	12.4	5.26	1.682	20.924
1899	65	50	34.7	6.5	6.09	1.812	23.353
1900	68	56	33.7	5.0	6.60	1.954	24.121
1901	68	58	35.1	4.0	7.48	2.096	26.928
1902	70	64	39.6	3.7	8.17	2.168	26.883
1903	71	61	38.6	3.9	8.68	2.278	28.090
1904	72	64	36.1	5.4	9.24	2.423	27.487
1905	73	62	34.2	4.3	10.24	2.489	29.676
1906	75	63	30.9	1.7	11.08	2.646	33.624

SOURCE.—Col. 1: Friedman and Schwartz (1982), pp. 122–23, table 4.8, col. 4 (set equal to 100 in 1869). Col. 2: U.S. Bureau of the Census (1975), pt. 1, ser. E42, p. 200 (linked to ser. E53, p. 201, in 1890). Col. 3: For gold: Jastram (1977), p. 143, table 6; for silver: U.S. Bureau of the Census (1975), pt. 1, ser. M270, p. 606. Col. 4: U.S. Bureau of the Census (1975), pt. 1, ser. D86, p. 135. Cols. 5–7: Friedman and Schwartz (1982), pp. 122–23, table 4.8, cols. 1, 10, and 3, respectively (converted to 1869 dollars).

have been cut short by an outflow of gold. But instead all that happened during the 1880s was a leveling off of prices: the rate of deflation declined from  $-3.3$  percent per year in the 1870s to a modest  $-0.1$  percent per year in the 1880s. In other words, after falling at the relatively low rate of  $0.9$  percent per year in the 1870s, velocity fell a surprising  $5.2$  percent per year in the 1880s.

The 1880s were a period perhaps something like the 1980s, in which the economy exhibited a surprisingly strong demand for additional money balances. It would take us too far afield to attempt an explanation of this phenomenon. Suffice it to say that in the 1880s as in the 1980s, there are a number of candidate explanations: interest rates were falling, partially reflecting the fall in prices, but perhaps for other reasons as well; and institutional developments such as the rapid development of the state banking systems may have played a role.

The Panic of 1893 and the subsequent depression were superimposed on these long-term price trends. The depression shows up dramatically in the unemployment data in column 4. Although there is a wide margin of error, it appears that unemployment exploded from  $3$  percent in 1892 to  $11.7$  percent in 1893, peaking at  $18.4$  percent in 1894. The exact cause of the panic is in doubt. One factor was concern over maintenance of the gold standard. In 1890, Congress had passed the Sherman Silver Purchase Act, which provided for the regular purchasing and coining of silver in limited quantities. Silver had been purchased under earlier legislation, but Sherman's act increased the amount. Along with other proposed legislation, it stimulated fears that the United States might leave the gold standard, and this led to a depletion of Treasury gold stocks. In addition, there was a stock market crash prompted by several business failures and a growing tide of bank failures, particularly in the West. Together these developments produced a banking panic, the suspension of gold payments, and a severe depression of an order not seen since the 1830s and not to be seen again until the 1930s.

The response of President Grover Cleveland was to seek (successfully) the repeal of the Sherman Silver Purchase Act. But a brief cyclical expansion that began in June 1894 petered out, the peak coming in December 1895. According to Friedman and Schwartz (1963, p. 111), it was one of the weakest expansions in the cyclical history of the United States. When the Democrats met at Chicago in the summer of 1896 to nominate a candidate for president, the economy, to put it mildly, was in terrible shape and apparently was getting worse. The closest parallel, perhaps, is with 1932. Unemployment was  $14.4$  percent. This was one of the most famous conventions in American history. The Democrats were locked in a battle between those

favoring the gold standard and those favoring a bimetallic standard. After numerous votes, they finally nominated William Jennings Bryan. He and his supporters called for the free and unlimited coinage of silver at mint prices that made the value of 16 ounces of silver equivalent to 1 ounce of gold.

As can be seen in column 3 of table 1, this ratio was far below the ratio then prevailing in the market, about 31 to 1. Had the United States returned to a bimetallic standard at 16 to 1, there probably would have been some outflows of gold and inflows of silver, although the exact amount is hard to quantify. Critics denounced the plan as wildly inflationary. This criticism was weak on two counts. First, it is unclear that resumption at 16 to 1 would have left the United States with an inflated and purely silver stock of high-powered money. The remonetization of silver by the United States would have substantially increased the world demand for silver and brought the bimetallic ratio down toward the ratio set by the U.S. mint, especially if other countries followed the United States back to the bimetallic standard. Note that as late as 1890 the ratio had been at 20 to 1; the extreme departure of the bimetallic ratio from 16 to 1 was a product of recent events.

Second, some increase in the monetary base was justified. As noted, unemployment stood at 14.4 percent; the business failure rate was 133 per thousand (U.S. Bureau of the Census 1975, p. 912), one of the highest in the postbellum era. The same could be said for the number of bank suspensions, which stood at 155, down from the record-breaking 496 in 1893 but up from 89 in 1894 and 124 in 1895. Failure rates of the larger, more prestigious national banks paralleled those of the state and private banks (p. 1038). The implicit price deflator was down 10.9 percent and farm prices were down 24.1 percent from 1893 after 3 years of steady deflation. To reject monetary expansion in such an environment because it might be inflationary seems excessive, reminding us of the concerns over inflation voiced by the Federal Reserve in the 1930s. However, despite the appeal of free silver, Bryan lost a bitterly contested election to Republican William McKinley.

Meanwhile, the economy began to improve rapidly. Four years later, when Bryan and McKinley had their second contest, prices were up—farm prices more than the deflator—and unemployment was down to 5 percent. In part, the rapid recovery was caused by the failure of European harvests, which created a strong market for American crops. The U.S. balance of trade turned from a deficit to a surplus, and gold flowed in. The expansion was fueled by a 41.7 percent increase in the stock of money and by a 29.8 percent increase in high-powered money. Increased supplies of gold from South Af-

rica and other areas were now generating a steady rise in the world's stock of monetary gold.

## II. From Kansas to Fairy Land

The *Wizard of Oz*, conceived over several years, was written mostly in 1899. It is a cautionary tale, recounting "the first battle" of 1896 (the title of Bryan's [1896] immensely popular account of that election) and warning of the dangers that lay ahead. The story is rich in references to the current scene, but it is not a mathematical puzzle. Baum's main purpose was to tell a good story, and his need for symmetry, interesting characters, and so on took precedence over historical accuracy. Nevertheless, the references to the current scene are sufficiently numerous to make looking for them rewarding and informative. The heroine is Dorothy, a little girl who lives with her Aunt Em on an impoverished farm in Kansas. Dorothy represents America—honest, kindhearted, and plucky.<sup>7</sup> Her best friend is her dog, Toto.<sup>8</sup> The populist movement began in the West, so it is natural that the story begins there. But there may also be a reference here to Kansas City, Missouri, where the Democratic convention of 1900 would be held. In 1900, going "from Kansas to Fairyland" (an early title) meant following the campaign trail from Kansas City to Washington, D.C.

Dorothy is in her home when it is carried by a cyclone (tornado) to the land of Oz. This is Baum's fantasy counterpart to America, a land in which, especially in the East, the gold standard reigns supreme and in which an ounce (Oz) of gold has almost mystical significance. The cyclone is the free silver movement itself. It came roaring out of the West in 1896, shaking the political establishment to its foundations. A cyclone is an apt metaphor. Bryan was first elected to Congress in 1890 and made his first important speech in Congress on the silver question in 1893. Three years later he was the leader of a national movement. Dorothy's house lands on the Wicked Witch of the East. The Witch dries up completely, leaving only her silver shoes. These represent the silver component of a bimetallic standard and are given to Dorothy to wear by the Good Witch of the North, who has been

<sup>7</sup> Recently, Dorothy has been identified by Leslie Kelsey with the famous populist orator known as the "Kansas Tornado," Mary Elizabeth Lease ("Raise more hell and less corn") (Meyer 1987, p. 32).

<sup>8</sup> Toto represents the Prohibition party, *Toto* being a play on *teetotaler* (Jensen 1971, p. 283). Prohibitionists' hearts were in the right place on many issues: in addition to opposing alcohol, they supported free coinage of silver in 1896. But they were a minor and eccentric group, always pulling in the wrong direction, and not to be taken all that seriously.



summoned to the scene.<sup>9</sup> The silver shoes have a magical power that the Wicked Witch of the East understood but which the Munchkins (citizens of the East) do not.

On a general level the Wicked Witch of the East represents eastern business and financial interests, but in personal terms a Populist would have had one figure in mind: Grover Cleveland. It was Cleveland who led the repeal of the Sherman Silver Purchase Act, and it was his progold forces that had been defeated at the 1896 convention, making it possible for America to vote for Bryan and free silver. But the American people, like the Munchkins, never understood the power that was theirs once the Wicked Witch was dead. Timberlake (1978) argues that the repeal of the Sherman Silver Purchase Act, rather than the campaign of 1896, was the real end of the possibility of a bimetallic standard. He shows in detail that repeal was a bipartisan movement. He then asks the following question: "Why should anyone then [in 1896] have believed that a Democratic vote would have any greater effect in promoting silver monetization than it had in 1892?" (p. 42). The free silver Democrats had a simple but not naive answer: the Wicked Witch of the East was (politically) dead.

The friendly inhabitants of the land Dorothy enters cannot tell her how to return to Kansas. She is advised to seek the answer in the Emerald City, which can be found at the end of the yellow brick road. The road, of course, is a symbol of the gold standard. Following it will lead to the Emerald City (Washington, D.C.), but the solution to Dorothy's problems will not be found there. Thus the silver shoes and the yellow brick road are Baum's primary symbols of the two metals. But there are many others.

The first person whom Dorothy meets along the way is the Scarecrow. As Littlefield (1968, p. 376) notes, the Scarecrow is the western farmer. He thinks that he has no brains because his head is stuffed with straw. But we soon learn that he is shrewd and capable. He brings to life a major theme of the free silver movement: that the people, the farmer in particular, were capable of understanding the complex theories that underlay the choice of a standard. They did not have to accept a monometallic gold standard simply because the experts said that it was necessary. This attitude is best illustrated in the leading tract of the free silver movement, W. B. Harvey's *Coin's Financial School* ([1894] 1963). The imaginary Coin is a small boy who conducts a series of lectures in Chicago attended by some of the leading sound money men, including Lyman Gage, a Chicago banker

<sup>9</sup> Free silver had some support in New England. Bryan's running mate in 1896 was Arthur Sewall, a businessman and banker from Maine. But I have not been able to identify the Good Witch of the North clearly with one particular politician.

who became secretary of the Treasury, and James Laurence Laughlin, a professor of economics at the University of Chicago. Although first contemptuous of the untutored boy, they gradually find their arguments for a gold standard refuted. Laughlin, for one, was outraged by the use of his name, and a letter by him denying any association with Coin was reprinted in Horace White's answer to Harvey, *Coin's Financial Fool*.

It is one of the ironies of monetary history that William Jennings Bryan gave his 1896 Cross of Gold speech on the South Side of Chicago, only a short distance from the University of Chicago. At the time the university was home to Laughlin, one of free silver's most acerbic critics and a strong opponent of the quantity theory of money, Bryan's basic framework. Later, under Henry Simons, Lloyd Mints, and Milton Friedman, the university's Department of Economics became the intellectual center for the revival of the quantity theory. In *A Monetary History of the United States*, Friedman and Schwartz (1963, p. 134) take a cautious, although ultimately favorable, view of the free silver position when contrasted with maintenance of a monometallic gold standard.<sup>10</sup> They argue that a firm national commitment to either a bimetallic standard or gold would have been preferable to the "uneasy compromise" that existed until Bryan's defeats. But they then consider the effects of an early adoption of a bimetallic standard and argue that, on the whole, the trend of the price level would have been preferable to the trend that actually prevailed. They also suggest, in a cautious way, that the abandonment of a monometallic gold standard might have made sense in the 1890s (p. 115).

Next, Dorothy and the Scarecrow meet the Tin Woodman, Baum's symbol for the workingman. He was once flesh and blood but was cursed by the Wicked Witch of the East. As he worked, his ax would take flight and cut off part of his body. A tinsmith would replace the missing part, and the Tin Woodman could work as well as before. Eventually there was nothing left but tin. This is why the claws of the Cowardly Lion can make no "impression" on him, just as Bryan failed to make an impression on urban industrial workers in the campaign of 1896. But for all his increased power to work, the Tin Woodman was unhappy for he had lost his heart. As Littlefield (1968, p. 375) points out, this tale is a powerful representation of the populist and socialist idea that industrialization had alienated the workingman, turning an independent artisan into a mere cog in a giant machine. The joints of the Tin Woodman have rusted, and he can no longer

<sup>10</sup> A standard based on government-issued fiat money controlled by a monetary rule was not a politically viable alternative in this period. Interestingly, the position of the radical Populists came closest to this formula, although their rule would have imposed a significant inflation (Yohe 1976).

work. He has joined the ranks of those unemployed in the depression of the 1890s, a victim of the unwillingness of the eastern goldbugs to countenance an increase in the stock of money through the addition of silver. After his joints are oiled, the Tin Woodman wants to join the group to see if the Wizard can give him a heart. He, too, will learn that the answer is not to be found at the end of the yellow brick road.

The last character to join the group is the Cowardly Lion. This character is William Jennings Bryan himself.<sup>11</sup> The sequence is not accidental. Baum is following history in suggesting that the movement was started first by the western farmers, was joined (to a limited extent) by the workingman, and then, once it was well under way, was joined by Bryan. The roaring lion is a good choice for one of the greatest American orators. At the convention of 1896, his stirring speech on the silver plank of the platform, ending with his challenge to the Republicans, "Thou shalt not crucify mankind upon a cross of gold," won him the nomination. In the words of one observer whom Baum may have known, John T. McCutcheon, "When he sat down, the convention went wild. . . . We who watched saw a man march relatively unknown to the platform, and march down again the leader of a national party" (1950, pp. 88–89).

Bryan was a lion, but why a cowardly lion? In the late 1890s, as I noted, the world gold supply began to increase rapidly, reversing the long deflation. As a result, the usefulness of silver as a political issue declined. It was obvious almost immediately after the election of 1896 that Bryan would again be the standard-bearer in 1900. But with the return of prosperity, he continually received advice to soft-pedal silver and concentrate on new issues such as opposition to the trusts and anti-imperialism, which would appeal to the eastern wing of the party, advice that to an extent he heeded. After the successful conclusion of the Spanish-American War, the United States, to retain control of the Philippines, was forced to put down a bloody rebellion. Like many regular Democrats and Republicans, the Populists were opposed to the United States fighting to hold the Philippines. But there were many Populists who were afraid that Bryan would push this issue to the exclusion of silver. They considered this line of action pure cowardice. They wanted the Great Commoner to fight for silver in 1900 as he had in 1896.

The little party heading toward the Emerald City reminds me of "Coxey's army" of unemployed workers that marched on Washington, D.C., in 1894. Jacob Coxey was a greenbacker, and his idea was

<sup>11</sup> The Populists liked to give politicians outlandish nicknames. John W. Daniel, a silver Democrat from Virginia, was known as the "Lame Lion" (Hollingsworth 1963, p. 54).

simple: The federal government should build public works and pay for them by printing money (Hicks [1931] 1961, p. 322). At the time the idea seemed to be the wildest kind of extremism. But given unemployment of 18.4 percent and the monetary and fiscal options then open to the government, few modern economists would be prepared to dismiss such a proposal out of hand. Indeed, at the height of the Keynesian period, it would have been taken to be the essence of sound macroeconomics. Although the march addressed serious problems, Coxey's army took on an opera bouffe quality. Characters such as "Cyclone" Kirtland, a Pittsburgh astrologer, showed up to take part (Nye 1951, p. 91). So it is not surprising that Coxey's army should suggest a fairy tale.

Along the way Dorothy and her friends meet a series of challenges that show that each character really has the quality he feels he is missing. The Scarecrow proves intelligent although he thinks he has no brain; the Tin Woodman proves to be kinder than an ordinary man; and the Cowardly Lion is prepared to fight to the death against the deadly Kalidahs, frightening monsters with the body of a bear and the head of a tiger.<sup>12</sup> The most mysterious challenge is the Deadly Poppy Field. The Cowardly Lion falls asleep in the field and is pulled to safety, but with the greatest difficulty. This is another reference to the dangers of putting anti-imperialism ahead of silver. Poppies are the source of opium, and falling asleep in a field of poppies symbolizes the populist fear that Bryan would fall asleep in the midst of these new issues. Anti-imperialism was predominantly a middle-class and intellectual issue. Bryan's Populist advisers were concerned that if he failed to stress the issues of greatest concern to rank-and-file Populists (particularly silver), he would fail to win the overwhelming support from them that was crucial to his election. It is therefore appropriate that it is the field mice, little folk concerned with everyday issues (such as the price of corn), who pull the Cowardly Lion from the Deadly Poppy Field.

At last the little group arrives at the Emerald City. The Guardian of the Gate assures them that the Wizard can solve their problems. The Wizard has, for example, a pot of courage (a colloquial term for liquor) for the Cowardly Lion. The pot is prevented from overflowing by a plate made of gold, another reference to the gold standard and its effects. But before Dorothy and her friends can enter the city they must don a pair of green-colored glasses. Everyone in the city must wear them and they must be locked on with a gold buckle by order of

<sup>12</sup> Michael Taussig has suggested to me that the Kalidahs might represent newspaper reporters. Most of the papers were strongly opposed to Bryan and his cause, and they violently denounced the Populists.

the Wizard. The conservative financiers who run the Emerald City, in other words, force its citizens to look at the world through money-colored glasses.

Dorothy and her friends are taken to the Emerald Palace, the White House itself, where they must stay the night before they can have their audience with the Wizard. Dorothy is led to her room through seven passages and up three flights of stairs. It is not surprising that the layout of the Emerald Palace should reflect the numbers seven and three. The Crime of '73 was a crucial event in populist monetary history. Legislation in that year eliminated the coinage of the silver dollar. At that time the price of silver bullion was well above the traditional mint price, so the decision to eliminate the silver dollar had no immediate impact and aroused little public opposition. But in later years, when the bullion price fell below the mint price, the decision taken in 1873 began to appear as the source of all future difficulties.<sup>13</sup>

The next day Dorothy and her friends are brought to see the Great Oz. First they have to pass through a great hall in which there are "many ladies and gentlemen of the court, all dressed in rich costumes . . . [who] had nothing to do but talk to each other" (Baum 1973, p. 205), a reference to the bureaucrats to be found in any seat of government, but not amiss in a description of Washington, D.C. One by one, each is taken into a big round room (the oval office?) to meet the Wizard. Each sees a different character: Dorothy sees an enormous head, the Scarecrow sees a lovely lady, the Tin Woodman sees a terrible beast, and the Cowardly Lion sees a ball of fire. Each of them receives the same message: the Wizard will help them, but first they must do something for the Wizard. "In this country," the Wizard explains, "everyone must pay for everything he gets" (p. 208). But who is this Wizard who speaks through various figureheads and adheres to such a purely Republican world view? To a Populist at the turn of the century, there is only one answer: Marcus Alonzo Hanna. A close adviser of McKinley and the chairman of the Republican National Committee, he was, in populist mythology, the brains behind McKinley and his campaigns. It was the money that Hanna raised from giant corporations, according to the Populists, that defeated Bryan. To satisfy the Wizard, the group must travel to the West and destroy his enemy the Wicked Witch of the West. That the Wizard wanted them to leave and go West, there can be no doubt. But that he was really an enemy of the Wicked Witch of the West is another

<sup>13</sup> According to O'Leary (1960), the decision to eliminate the silver dollar was a deliberate attempt to avoid the possibility of a de facto silver standard, based on the understanding that secular forces might undermine the price of silver.

matter. The Wizard does not always tell the truth, a lesson that Dorothy will soon learn.

### III. The Wicked Witch of the West

The Wizard's demand is analogous to Hanna's advice to journalists, politicians, and plain citizens to visit McKinley at his home in Ohio. In 1896, McKinley conducted a "front porch" campaign, extolling the virtues of "sound" money to visiting crowds. If Cleveland was the Wicked Witch of the East, slain in 1896, McKinley in 1896 and 1900 was the very much alive Wicked Witch of the West. Dorothy and her friends must face biblical plagues—wolves, crows, and black bees—thrown at them by the Witch. But they defeat each of them. The Wicked Witch is thus forced to turn to her Golden Cap, another symbol of the gold standard, which gives her the power to call the Winged Monkeys. According to Littlefield (1968, p. 378), the Winged Monkeys represent the Plains Indians, free spirits brought to earth by the relentless western march of the frontier. They, too, cannot avoid the overarching power of the gold standard.

The owner of the Golden Cap is allowed three wishes, but the Wicked Witch of the West has already used two, one to drive the Wizard out of the West and one to enslave the yellow Winkies. Although Hanna was a westerner living in the East, he had not really been driven out. Here Baum has departed, apparently, from a strict allegory.<sup>14</sup> But the enslavement of the yellow Winkies is clear enough. After winning the Philippines, the United States, as I noted above, had to put down a bloody rebellion to maintain control of the islands. The Wicked Witch of the West's enslavement of the yellow Winkies is a not very well disguised reference to McKinley's decision to deny immediate independence to the Philippines. To a modern ear there is a condescending tone to "yellow Winkies," but clearly Baum was sympathetic to the plight of the Philippines (and to the Plains Indians).<sup>15</sup>

The Wicked Witch commands the Winged Monkeys to attack Dorothy and her friends. They drop the Tin Woodman on jagged rocks and pull out the Scarecrow's straw. The Lion is taken to the

<sup>14</sup> This is one of the few points at which the allegory does not work straightforwardly. I would be interested in hearing alternative interpretations of this piece of Oz history.

<sup>15</sup> Several readers of a previous draft suggested that there might also be a reference here to the plight of Asian immigrants in California. The coincidence of the events in the Philippines with the composition of the *Wizard of Oz* leads me to discount this possibility. But the analogy is broadly consistent with the populist view of the relationship between western financial interests and the immigrants. But although sympathetic, the Populists supported efforts to limit Asian immigration on the grounds that it undermined the wages and working conditions of native Americans; support for unrestricted immigration generally came from the Republican side.

castle and penned up. Dorothy is taken there as well and made to do household chores. The Witch covets Dorothy's silver shoes, for the Witch knows their power. At last she devises a scheme: she trips Dorothy over an invisible iron bar and snatches one of the silver shoes. The Wicked Witch is greatly pleased with this trick, for she realizes that with the silver shoes divided, Dorothy cannot use them. This refers to McKinley's position on silver. McKinley and the Republicans in 1896 did not argue that only gold monometallism would do. Their position was that bimetallism should be reestablished, but only after an international agreement. The Republicans argued that this would raise the world demand for silver sufficiently to prevent the United States from being flooded with silver and protect the dollar from being devalued when bimetallism was reestablished. This position had a number of respectable academic supporters, and McKinley followed through on his promise to support an international conference on bimetallism. But the Populists believed, perhaps correctly, that this was merely so much talk designed to hide the real intention of the Republicans: to maintain a monometallic gold standard. Most of Bryan's Cross of Gold speech and much of his campaign in 1896 were devoted to attacking the Republican position on international bimetallism.

Dorothy is so angry with the Wicked Witch for tripping her that she pours a bucket of water over her. To her surprise, the Witch melts away. For Littlefield (1968, p. 379), to whom the Wicked Witch represents the malign forces of nature in the West, the point is that all it takes is some water to make the dry plains bloom. In the 1890s the "rain line" moved east, causing farmers in Kansas, Nebraska, and the Dakotas who had moved west in the 1880s, on the basis of a few good years, great hardships in addition to those generated by the depression in agricultural prices. Kansas was one of the areas hardest hit. To the western farmer, it appeared that what he needed to get out of debt was some good rain and some good crops.

Inflation was to some extent simply a substitute for rain. But the usefulness of inflation to the farmer depended in large measure on its effects on farm debt. Although the percentage of farmland that was mortgaged was low for the nation as a whole, western farmers, especially in certain areas, were heavily mortgaged. Kansas had one of the heaviest levels of indebtedness, with 60 percent of taxed acres under mortgage (Emerick 1896, p. 603). But not all the indebted farmers would have benefited from inflation. One of the most telling criticisms of free silver was that the prospect of inflation would lead to the renewal of mortgages at higher interest rates; many farmers would be no better off than before. One important statement of this point was made by Fisher (1896). His paper, one of the most influential in the

history of monetary economics, argued that anticipated increases in the rate of inflation would be reflected in higher interest rates, although he acknowledged that as a historical matter debtors did tend to lose during periods of deflation and gain during periods of inflation.

Fisher pointed out that most farm mortgages were relatively short. He gave 4.67 years as the average length so that the typical mortgage had only 2.33 years left. It is obvious that a large proportion of existing mortgages would mature, and have to be renewed, between the time when free silver became a fait accompli and when farmers saw any benefits in the form of higher farm prices. The expected inflation would be incorporated in interest rates, so for many farmers there would be little or no debt relief. Bryan was aware of this argument but had no convincing answer. In his Madison Square Garden speech, he tried to meet this criticism by arguing that the lag between the election and the adoption of free silver could be shortened by calling a special session of Congress (1896, p. 336).<sup>16</sup> But he quickly moved on to other issues.

With the Wicked Witch dead, Dorothy is able to free her friends. Tinsmiths repair the Tin Woodman, and he is given a new ax. The handle is made of gold, and the blade is polished until it “glistens like burnished silver.” The new ax is a good symbol of a point often made by the Populists: that they did not want to replace a gold standard with a silver standard; they wanted a genuine bimetallic standard. In *Coin's Financial School*, Harvey likened the gold standard to a one-legged man and the bimetallic standard to a two-legged man. Baum's image is even more vivid. The Tin Woodman is also given a silver oilcan inlaid with gold and precious stones, just the thing to prevent a recurrence of unemployment. Toto and the Cowardly Lion are given gold collars without any silver, and the Scarecrow is given a walking stick with a gold head. Here Baum did not follow through explicitly on the bimetallic theme (although given the purpose of a collar this may not be surprising), and we are not told what the stick itself was made of. Bryan frequently received gifts of this sort to portray the battle of the standards. There was an ink bottle made of gold and silver, a gold pen with a silver holder, gold-headed canes like the one given to the Scarecrow, and so forth (Bryan 1896, pp. 537, 619–20).

The advocates of a gold standard argued that bimetallism was un-

<sup>16</sup> The Madison Square Garden speech was Bryan's most complete analysis of the money issue during the campaign. The speech, eagerly anticipated after his stirring Cross of Gold speech in Chicago, was expected to be filled with fire and brimstone. Instead, to allay fears of his radicalism, he wrote a detailed defense of free silver, treating his audience to a lecture on the quantity theory of money, the meaning of the purchasing power of money, and related issues.



workable because a rise in the bimetallic ratio could produce an outflow of gold and an inflow of silver that left only silver in circulation; a fall in the ratio might leave only gold in circulation. There could be alternating gold and silver standards, but there could not be a true bimetallic standard in the sense of two metals circulating side by side, except in the accidental case in which the mint ratio was equal to relative prices in world markets. Although not always consistent, the Populists at times made correct counterarguments. First, with a nation as large as the United States on the standard, the world ratio might adapt to the U.S. ratio, and gold and silver might circulate simultaneously for a long period of time. Second, the really important things about a standard are the implications for the stock of money and the price level. Under a bimetallic standard, a decline in the production of one monetary metal would not necessarily imply a drastic fall in the supply of money because the other metal was ready to fill the gap.

These arguments were laid out clearly by William Stanley Jevons and other scholars whom Bryan read. The extent of the increase in price stability to be expected is debatable. Fisher ([1922] 1971, pp. 325–26), who accepted the theoretical argument and had his own gift for the telling analogy, likened the benefits from a bimetallic standard to “two tipsy men locking arms. Together they walk somewhat more steadily than apart, although if one happens to be much more sober, his own gait may be made worse by the union.” In short, bimetallism offered no more than an “indifferent remedy” to the problem of long-term price instability.<sup>17</sup>

#### IV. The Discovery of Oz the Terrible

Dorothy and her friends return to the Emerald City confident that the Wizard will grant them their wishes. But they soon unmask the Wizard and learn that he is nothing but a humbug who has been fooling the people. It is clear that the Wizard has been lying, but how much of the story that he now begins to tell is true is open to question. He claims to be from Nebraska, Bryan's state. But this is doubtful. There may be a reference here to Hanna's own transition after the election of 1896. He entered politics behind the scenes and soon became the sinister figure of populist mythology. Shortly after the election, he was appointed to the Senate from Ohio. But to win a full term, he was forced to take to the stump. Here he was a surprising success. His down-to-earth “I'm just a common man” (Baum 1973, p.

<sup>17</sup> Fisher, although mildly sympathetic to bimetallism, was strongly opposed to its adoption in 1896 at the ratio of 16 to 1.

264) style was a hit, effective even with farmers and workers. If I read Baum correctly, he accepts this transformation, up to a point. The Wizard is to be accepted as an ordinary man, but that does not mean that we can believe everything he says. With a little shrewd psychology, the Wizard solves the problems of Dorothy's friends. The Scarecrow is given brains in the form of a mixture of bran and pins and needles (to be sharp-witted), the Tin Woodman is given a heart lined with silk and filled with sawdust, and the Lion is given courage in the form of a green liquid. But Dorothy still cannot get back to Kansas. The Wizard promises to take her in a hot air balloon. But at the last moment, the line holding the balloon breaks and the Wizard is carried away, leaving Dorothy behind. The promises of the Wizard of Oz (like those of the newly reformed Hanna) are partly hot air.

Dorothy then decides to seek out Glinda, the Good Witch of the South. The South was generally sympathetic to free silver, so it is not surprising that it is ruled by a good witch. All her friends join Dorothy, including the wise Scarecrow, who has been made ruler over the Emerald City. The inhabitants of the city are proud to have the Scarecrow as their leader because it makes them, as far as they know, the only city to be ruled over by a stuffed man. Along the way, Dorothy and her friends encounter the Dainty China Country, a land in which the inhabitants are actually figurines made of bone china. To enter the Dainty China Country, the party must crawl over a high wall that has been likened to the Great Wall of China (Hearn 1973, p. 303). Once inside, Dorothy and her party accidentally damage some of the figures, and after a China Princess explains how delicate the figures are, Dorothy and her friends decide to leave so that they will do no more damage. The attitude of the China Princess has been compared to that of the Dowager Empress of China, Tzu Hsi. Chinese resistance to the West culminated in the Boxer Rebellion in the summer of 1900. But, as Hearn notes (p. 311), all the damage in Baum's story is done by the foreign invaders. This point of view, like Baum's attitude toward the Winkies, is a reflection of his populist anti-imperialism.<sup>18</sup>

After further adventures the party reaches Glinda, the Good Witch of the South, where, incidentally, the favorite color is red like much of

<sup>18</sup> China, as well as several other Asian nations, was on a silver standard during the period 1879–96 when the United States, along with the rest of the gold bloc, was experiencing deflation (Fisher 1971, pp. 243–45). The silver standard countries experienced, predictably, a mild inflation. Bryan and his allies in the free silver movement, however, do not appear to have made much use of the argument, perhaps because they wanted to avoid being labeled as inflationists or because they did not want to reinforce the argument that it was the “advanced” countries that were moving to the mono-metallic gold standard.

the soil in the American South. Glinda solves all the party's remaining problems. The Scarecrow returns to rule the Emerald City, the Tin Woodman becomes ruler of the Winkies, and the Cowardly Lion becomes ruler of a jungle. The populist dream of achieving political power with the help of the South is realized. Dorothy is told how to return to Kansas. All that is necessary is that she click the heels of her silver shoes together three times. The power to solve her problems (by adding silver to the money stock) was there all the time.

When Dorothy awakes in Kansas, she finds that the silver shoes have disappeared, just as the silver issue was disappearing in the late 1890s. As Littlefield (1968, p. 380) notes, another lesson here may be that the battle for silver added a measure of excitement to the lives of the westerners, even if in the end the battle could not be won. In any case, Baum's observation that the silver cause would become a distant memory proved to be true. The Gold Standard Act, committing the United States firmly to the gold standard, was passed in 1900.

## V. Some Thoughts for the Skeptics

There is always a danger that a critic may see symbols where the author has merely placed the concrete reference points of his story. Baum left no hard evidence that he intended his story to have an allegorical meaning: no diary entry, no letter, not even an offhand remark to a friend. But this need not be conclusive. He probably considered his references to current events to be a series of sly jokes, like the puns that dot the text, rather than something to be worried about by future generations. The creative process, moreover, is highly complex. An author's experience may be transformed in ways he is only dimly aware of, before it issues forth in a work of art. The critic may be uncovering elements beyond the explicit intentions of the author.<sup>19</sup>

There is, moreover, considerable circumstantial evidence for the populist interpretation. It has been recognized independently by a number of thoughtful readers. It is consistent with what we know of Baum's politics, for although he was not an activist, it is known that he marched in torchlight parades for Bryan and voted Democratic (Baum and MacFall 1961, p. 85). References to current affairs appear in a number of his later works. The most obvious are a comic opera Baum worked on in 1901, *The Octopus* or *The Title Trust*, and *The Marvelous Land of Oz* (1904), which was a satire of the suffragist movement.

<sup>19</sup> Just how complex that process can be is illustrated by Lowes's (1927) account of how Samuel Taylor Coleridge's imagination fashioned some of his most memorable poetry from the books he had been reading.

An allegorical interpretation of a story can be viewed as something like a model in economics. The test of an economic model is whether it can be extended in a "natural" way to explain additional phenomena. Here I have tried to extend Littlefield's populist interpretation by using what we know of populist monetary thought to explain additional episodes in Baum's story. That this can be done with a relatively moderate amount of pushing and pulling strengthens the case for the populist interpretation. If this interpretation is right, then Baum's story gives us some real insight into how a detached but informed Populist viewed free silver. In any case, economists should not have any difficulty accepting, at least provisionally, an elegant but controversial model.

## VI. Williams Jennings Bryan and Free Silver

Bryan was not a deep or original thinker; he was a politician with a gift for the telling analogy in an age of high oratory. But historians have been too hard on Bryan the monetarist, influenced more perhaps by their antipathy to the religious beliefs that engaged his attention in later years or other aspects of the populist creed than to a real examination of his monetary views. An early statement by Bryan, to the effect that he was for silver because Nebraska was for it and he would look up the arguments later, has been often quoted against him. But he did his homework better than most politicians. He read Jevons, Laughlin, and other scholars well enough to understand the case for a bimetallic standard and for expanding the stock of money in periods of deep depressions. He understood the rudiments of the quantity theory of money, including the relationship between velocity and the rate of price change. He understood the mechanics of a bimetallic standard. He recognized that a bimetallic standard could keep both metals circulating side by side for long periods of time and that the problem of alternating metallic flows was secondary, in any case, to the problem of maintaining price-level stability. If he sometimes claimed too much for monetary expansion, he was at least on as strong a theoretical basis as his critics.<sup>20</sup>

Not all economists who started from the quantity theory agreed that an inflation resulting from the free coinage at 16 to 1 would restore prosperity. Clark (1896*a*, 1896*b*) imagined a stagflation: prices would rise, alleviating debt burdens as the advocates of free silver

<sup>20</sup> In a series of recent papers, Milton Friedman has reexamined the case for free silver. He agrees that the general case for bimetalism, as opposed to a monometallic gold standard, was strong (1990*a*), and he argues that returning to a bimetallic standard at 16 to 1 would have made sense in 1873 (1990*b*). But he argues that it would have been a mistake to return at 16 to 1 in 1896 (1989).

claimed, but the uncertainty would rock credit markets and produce a business "convulsion." The counterclaim that an increase in the stock of money generated by the introduction of large elements of silver into the monetary base would have effects similar to a sudden increase in gold—that prices and real output would both rise—was soundly based on historical experience and an interpretation of the quantity theory of money acceptable to many monetary economists even today.

Changing the monetary constitution to cure the depression opened the door to discretionary policies. There was a danger that milder recessions would be met with changes in the mint prices or other devices. Clark (1896*a*) speculated that the transitional inflation would encourage farmers to go further into debt. The inflation would end and farmers would again be agitating for monetary expansion to alleviate their new debt burdens. The only bailout the second time around would be paper money. Bryan and his allies recognized the danger of a discretionary policy. It was one reason they gave for rejecting the greenback and commodity-backed standards favored by radical Populists. But in the circumstances of 1896, using reentry to the bimetallic standard at a ratio that overvalued silver as a substitute for a central bank operating in its role of lender of last resort made a good deal of sense. It is only because we now know that rising gold supplies would solve the monetary problems of the day, a fact not known at the time, that we can be sure that Bryan's reforms were unnecessary.

Bryan was aware that the expansion of gold supplies had undermined the case for free silver. But as he noted (1900, p. 179), the expansion of gold supplies had dramatically vindicated his basic framework: the quantity theory of money. The stock of money had risen rapidly, and prices, employment, and real output had responded. The case for a bimetallic standard, moreover, remained intact, according to Bryan. For one thing, the monetary stringency that followed the Boer uprising in South Africa showed that the gold standard was vulnerable to threats to the supply of gold (pp. 171–72). More fundamentally, the increased supplies of gold might be exhausted, and prices could again head down.

Others were observing the trend in prices, associating it with rising gold supplies, and concluding that this supported the quantity theory. But if others saw the logic, Bryan still had the gift for expressing his point with a simple metaphor:

Suppose the citizens of a town were divided, nearly equally, on the question of water supply, one faction contending that the amount should be increased, and suggesting that the

increase be piped from Silver Lake, the other faction insisting no more water was needed; suppose that at the election the opponents of an increase won (no matter by what means); and suppose, soon after the election, a spring which may be described as Gold Spring, broke forth in the very center of the city, with a flow of half as much water as the city had before used; and suppose the new supply was turned into the city reservoir to the joy and benefit of all the people of the town. Which faction would, in such a case, have been vindicated?

Just such a result has followed a similar increase in the nation's supply of money to the joy of all—thus proving the contentions of the bimetallists. [Bryan and Bryan 1925, p. 471]

Is it any wonder that in an age in which politicians would be willing to describe monetary policy in such wondrous terms, Baum would incorporate the monetary controversies of the day in his fairy tale?

## References

- Baum, Frank Joslyn, and MacFall, Russell P. *To Please a Child: A Biography of L. Frank Baum, Royal Historian of Oz*. Chicago: Reilly & Lee, 1961.
- Baum, L. Frank. *The Wonderful Wizard of Oz*. New York: Hill, 1900. Reprinted in *The Annotated Wizard of Oz*, edited by Michael Patrick Hearn. New York: Potter, 1973.
- . *The Marvelous Land of Oz, Being an Account of the Further Adventures of the Scarecrow and the Tin Woodman . . .* Chicago: Reilly & Britton, 1904.
- Bewley, Marius. "Oz Country." *New York Rev. Books* 3 (December 3, 1964): 18–19. Reprinted as "The Land of Oz: America's Great Good Place." In *Masks and Mirrors: Essays in Criticism*. New York: Atheneum, 1970.
- Bryan, William Jennings. *The First Battle: A Story of the Campaign of 1896*. Chicago: Conkey, 1896.
- . *The Second Battle; or, the New Declaration of Independence, 1776–1900*. Chicago: Conkey, 1900.
- Bryan, William Jennings, and Bryan, Mary Baird. *The Memoirs of William Jennings Bryan*. Chicago: Winston, 1925.
- Clark, John B. "The After Effects of Free Coinage of Silver." *Polit. Sci. Q.* 11 (September 1896): 493–501. (a)
- . "Free Coinage and Prosperity." *Polit. Sci. Q.* 11 (June 1896): 248–58. (b)
- Coletta, Paolo E. *William Jennings Bryan*. 3 vols. Lincoln: Univ. Nebraska Press, 1964–69.
- Emerick, C. F. "An Analysis of Agricultural Discontent in the United States. II." *Polit. Sci. Q.* 11 (December 1896): 601–39.
- Fisher, Irving. *Appreciation and Interest*. Publications of the American Economic Association, vol. 11. New York: Macmillan, 1896.
- . *The Purchasing Power of Money*. 2d ed. New York: Macmillan, 1922. Reprint. New York: Kelley, 1971.

- Friedman, Milton. "William Jennings Bryan and the Cyanide Process." Manuscript. Stanford, Calif.: Hoover Inst., 1989.
- . "Bimetallism Revisited." *J. Econ. Perspectives* (1990), in press. (a)
- . "The Crime of 1873." *J.P.E.* 98 (December 1990), in press. (b)
- Friedman, Milton, and Schwartz, Anna J. *A Monetary History of the United States, 1867–1960*. Princeton, N.J.: Princeton Univ. Press (for NBER), 1963.
- . *Monetary Trends in the United States and the United Kingdom: Their Relation to Income, Prices, and Interest Rates, 1867–1975*. Chicago: Univ. Chicago Press (for NBER), 1982.
- Gardner, Martin, and Nye, Russel B. *The Wizard of Oz and Who He Was*. East Lansing: Michigan State Univ. Press, 1957.
- Goodwyn, Lawrence. *Democratic Promise: The Populist Moment in America*. New York: Oxford Univ. Press, 1976.
- Harvey, William H. *Coin's Financial School*. Chicago: Coin, 1894. Reprint. Edited by Richard Hofstadter. Cambridge, Mass.: Harvard Univ. Press, 1963.
- Hearn, Michael Patrick, ed. *The Annotated Wizard of Oz*. New York: Potter, 1973.
- Hicks, John D. *The Populist Revolt: A History of the Farmer's Alliance and the People's Party*. Minneapolis: Univ. Minnesota Press, 1931; Lincoln: Univ. Nebraska Press, 1959.
- Hollingsworth, Joseph Rogers. *The Whirligig of Politics: The Democracy of Cleveland and Bryan*. Chicago: Univ. Chicago Press, 1963.
- Jastram, Roy W. *The Golden Constant: The English and American Experience, 1560–1976*. New York: Wiley, 1977.
- Jensen, Richard. *The Winning of the Midwest: Social and Political Conflict, 1888–1896*. Chicago: Univ. Chicago Press, 1971.
- Koenig, Louis W. *Bryan: A Political Biography of William Jennings Bryan*. New York: Putnam, 1971.
- Littlefield, Henry M. "The Wizard of Oz: Parable on Populism." *American Q.* 16 (Spring 1964): 47–58. Reprinted in *The American Culture: Approaches to the Study of the United States*, edited by Hennig Cohen. Boston: Houghton Mifflin, 1968.
- Lowes, John Livingston. *The Road to Xanadu: A Study in the Ways of the Imagination*. Boston: Houghton Mifflin, 1927.
- McCutcheon, John T. *Drawn from Memory*. Indianapolis: Bobbs-Merrill, 1950.
- Meyer, Fred M. "Oz in the News." *Baum Bugle* 31 (Autumn 1987): 32.
- Nye, Russel B. *Midwestern Progressive Politics: A Historical Study of Its Origins and Development, 1870–1950*. East Lansing: Michigan State College Press, 1951.
- O'Leary, Paul M. "The Scene of the Crime of 1873 Revisited: A Note." *J.P.E.* 68 (August 1960): 388–92.
- Sackett, S. J. "The Utopia of Oz." *Georgia Rev.* 14 (Fall 1960): 275–91.
- Timberlake, Richard H., Jr. "Repeal of Silver Monetization in the Late Nineteenth Century." *J. Money, Credit and Banking* 10 (February 1978): 27–45.
- U.S. Bureau of the Census. *Historical Statistics of the United States, Colonial Times to 1970*. Washington: Government Printing Office, 1975.
- Yohe, William P. "An Economic Appraisal of the Sub-Treasury Plan." App. B in *Democratic Promise: The Populist Moment in America*, by Lawrence Goodwyn. New York: Oxford Univ. Press, 1976.