

On the Origins of American Business Leaders:

Frank W. Taussig, Carl S. Joslyn and the “Brain Trust” of American Eugenics

Luca Fiorito and Massimiliano Vatterio

Pre-print version (forthcoming on Journal of Economic Issues)

Abstract: In their 1932 volume *American Business Leaders: A Study in Social Origins and Social Stratification*, Frank W. Taussig and Carl S. Joslyn, then a young Harvard graduate, argued that success in business depended more on innate superiority than on other environmental factors such as financial aid, influential connections, and formal education. The aim of this article is to analyze the main contentions of Taussig and Joslyn, as well as the intellectual genesis of, and the general reactions to, this controversial volume. Although our main focus is on Taussig and Joslyn, other figures, all directly affiliated with Harvard, will play a decisive role in our narrative—the economist Thomas Nixon Carver, the psychologist William McDougall, and the sociologist Pitirim Aleksandrovič Sorokin. This makes the scope of this article in many respects broader than its title may suggest—in the sense that it will allow us to place a work like *American Business Leaders* within the context of an important strand of social science research at Harvard during the interwar years.

Keywords: Frank Williams Taussig, eugenics, hereditarianism, business leaders, Harvard
JEL Codes: B1, B15

Luca Fiorito is at the University of Palermo, Italy; Massimiliano Vatterio is at the University of Trento, Italy, and Università della Svizzera italiana, Switzerland. This article represents a substantial extension of a chapter of a broader project of prof. Luca Fiorito on TN Carver and the Harvard tradition in eugenics.

In the United States . . . there is a cult of inequality, a growing faith in the élite, which does not hesitate to associate success with biological worth. Even so normally sensitive an economist as the late F. W. Taussig could write that ‘innate superiority is the secret of the greater productivity of the business and professional classes.’ (Laski 1952, 113)

For more than a quarter of a century, Frank William Taussig occupied in America a position comparable to that of Alfred Marshall in England as “dean of the fraternity of economists” (Ellis 1941, 209; see also Schumpeter 1952). Like Marshall, Taussig could make a persuasive case for progressive continuity—rather than a radical break—between classical and neoclassical economics, and, again, like his English counterpart, he was a charismatic teacher whose devoted students spread his fame throughout the profession. Born in 1859 in St. Louis, Missouri, Taussig studied economics and law at Harvard, where he remained for most of his career—as professor of economics for over forty years and longtime editor of the *Quarterly Journal of Economics*. His main scholarly contributions were to trade theory and tariff policy (see, among others, Taussig 1888; 1920; and 1927), but he became best known for his *Principles of Economics* (1911)—a widely used textbook, which went through several editions, the last appearing in 1939.¹ Although Taussig’s writings reveal a strong analytical bent, Joseph A. Schumpeter (1952, 196) once observed, “[t]he institutionalist opposition that later on arose against the type of theory he taught, seems . . . to have overlooked that a great part of his work was on institutional lines.”² A significant portion of Taussig’s contributions fell in fact into the domain of the “general area [that] may be called economic sociology” (206), which included the study of individual and group behavior within the institutional setting. Among these works, Taussig’s volume *American Business Leaders: A Study in Social Origins and Social Stratification* (1932), co-authored with his graduate student Carl S. Joslyn, deserves special attention. Taussig, Schumpeter explained, was in fact

among those few economists who realize that the method by which a society chooses its leaders in what, for its particular structure, is the fundamental social function—such as, for instance, was the function of the warrior in feudal society—is one of the most important things about a society, most important for its performance as well as for its fate. And he made a bold and original attempt at coming to grips with this problem by collecting, through a questionnaire, extensive information concerning the problem of what the role of the self-made man, or else of his heir, in American industry really was. (1952, 217–218)

¹ Speaking of Taussig’s *Principles*, James Tobin (1985, 29) wrote: “[t]his popular text, still used in Harvard’s introductory course when I took it as a sophomore in 1936–37, was like Marshall’s *Principles* a wise man’s serious attempt to expound the whole field as he saw it. Alas, the days of books like that are past.”

² Reference is made here to the chapter on Taussig included in Schumpeter’s volume *Ten Great Economists* (1952). This chapter was originally published as an obituary in the *Quarterly Journal of Economics* under the joint authorship of Joseph Schumpeter, Arthur H. Cole, and Edward S. Mason (1941).

"Whatever we may think of the merits of the methods Taussig used in drawing inferences from the material assembled," Schumpeter (1952, 218) emphatically concluded, "we cannot escape the fact that . . . this study was pioneer work and a stroke of genius." Schumpeter was on safe grounds in emphasizing the methodological merits of Taussig and Joslyn's inquiry on the sociological origins of American business elite. As we will see more thoroughly below, *American Business Leaders* was based on data derived from questionnaires sent to several thousand businessmen to gather "objective" information about the respondents' present status, the size of the business, the principal occupations of their fathers and paternal grandfathers. One of the advantages of this approach was that it treated the problem of business leaders' recruitment from an inter-generational perspective, thus emphasizing the importance of the family as a factor in social mobility. In this connection, William Miller (1949 and 1950) noted, Taussig and Joslyn did establish a precedent which served as a model for subsequent inquiries of this kind.

Schumpeter, and this is what concerns us here, was instead ambiguously silent on the inherently controversial nature of Taussig and Joslyn's "stroke of genius." *American Business Leaders* was not just an attempt to determine the contributions made by the several social classes to business leadership in America, taking into account the proportions of the different classes in the employed population at large. A further, and by no means secondary, aim of the book was to shed light on the question of whether the disparities that are found to exist are to be attributed mainly to variations in inborn ability or to differences in environmental conditions. Taussig and Joslyn (1932, 264) reviewed at length the environmentalistic ("privilege," in their jargon) and inherent-ability (hereditary) views, and concluded that the results they had gathered, taken as a whole, "lend themselves more easily to interpretation in terms of innate differences." This was certainly not a novel claim. Speaking of the correlation between innate ability and social individual success, Harvard's psychologist William McDougall had written a few years before: "[e]ugenicists have very commonly assumed or alleged the reality of such a correlation. But the lack of empirical proof of it has been a principal ground of many criticisms adverse to their propaganda." In many respects—and this was the way virtually all then contemporary interpreters looked at it—Taussig and Joslyn's *American Business Leaders* can be considered as an empirical complement to this line of eugenic inquiry.

The aim of this article is to analyze the main contentions of Taussig and Joslyn as presented in their *American Business Leaders*, as well as the intellectual genesis of, and the general reactions to, this controversial volume. Before launching into the discussion, it should be pointed out that although our main focus is on Taussig and Joslyn, other figures, all directly affiliated with Harvard, will play a decisive role in our narrative—the economist Thomas Nixon Carver, the psychologist William McDougall, and the sociologist Pitirim Aleksandrovich Sorokin. This makes the scope of this article in many respects broader than its title may suggest—in the sense that it will allow us to place a work like *American Business Leaders* within the context of an important strand of social science research at Harvard during the interwar years. What follows, in fact, also adds to our general understanding of the extent to which eugenic and biologically deterministic considerations permeated American social thought during the first decades of the last century and how, in the specific case of Harvard, this influence persisted after the end of the so-called Progressive Era, the period stretching from the latter decades of the nineteenth century into the early 1920s. This article is organized as follows. The next section analyzes Taussig's early commitments to eugenics and places him in the context of early twentieth-century Harvard; the third section briefly

discusses Sorokin's *Social Mobility* and its decisive influence on Taussig and Joslyn's project; the fourth section properly deals with the scope, method, and content of Taussig and Joslyn's *American Business Leader*, as well as with its general reception within academia; the fifth section presents some conclusions.

Taussig and the "Brain Trust" of American Eugenics

The story presented in this article is to some extent a Harvard tale, in the sense that it deals with an important aspect of Harvard social science study during the first third of the twentieth century. Harvard was hardly the only university that was home to prominent eugenicists—many of the other Ivy League schools offered eugenics courses and produced several of the key figures of the eugenic movement. Yet, as Adam S. Cohen (2016) recently put it, in part because of its overall prominence and influence on society, and in part because of its sheer enthusiasm, Harvard can be considered the "brain trust" of American eugenic thought. In 1926, at least nine members of the advisory council of the American Eugenics Society (AES) were also on the Harvard faculty, and many more were affiliated with Harvard as students and researchers. In addition to Charles W. Eliot, who served as president of Harvard University from 1909 to 1933, the cohort of Harvard's eugenics enthusiasts included, among others, the botanist Oakes Ames, the physiologist Walter Bradford Cannon, the geneticist William E. Castle, the zoologist Cole Leon Jacob, the anthropologist Earnest A. Hooton, and the entomologist William M. Wheeler. The AES's vice-president, Charles Davenport, was a Harvard-trained biologist who also founded the Eugenics Record Office, then the leading eugenics institute in the United States. Two of Davenport's Harvard associates, Robert DeCourcy Ward and Prescott Hall, were among the founders and most active promoters of the Immigration Restriction League. Biological thinking was so central to their mission that Ward and Hall even considered to change the name of the organization into the Eugenic Immigration League (Higham 1963, 152).

The department of economics was by no means immune from this pervading eugenic milieu. In the first edition of his *Principles*, Frank W. Taussig (1911, 2: 250–251) did not hesitate to assert that "[t]he human race could be immensely improved in quality, and its capacity for happy living immensely increased, if those of poor physical and mental endowment were prevented from multiplying." In his view, "[c]ertain types of criminals and paupers breed only their kind, and society has a right and a duty to protect its members from the repeated burden of maintaining and guarding such parasites." Four years later, Taussig was joined by Carver, the other leading figure in the department, who called for specific measures to stop the proliferation of unworthy individuals, with a particular focus on the lower classes.³ Although Carver cloaked his arguments under a mantle of respectable science, his *Essays on Social Justice* (1915) were acclaimed as "a very important step in the coordination of the various sciences which make up applied eugenics" ("Economics and Eugenics" 1917, 120).⁴

Eugenics arguments surfaced more manifestly in discussions related to labor problems. Taussig and Carver, for instance, held an identical position on the eugenic effects of

³ For Carver's own account of his arrival at Harvard, see his autobiography (Carver 1949).

⁴ Carver was among the nine Harvard faculty members appointed to the Advisory Board of the American Eugenics Society, a position he held from 1926 to 1935.

minimum wage.⁵ By pushing the cost of unskilled labor above its value, Taussig argued, a binding minimum would act eugenically, expunging from the labor force the “unemployables” (i.e., those whose labor was worth less than the legal minimum). Among these, Taussig (1911, 2: 332) distinguished two classes “those who are helpless from causes irremediable for the individual, yet not cumulative as regards society, such as old age, infirmity, disabling accident,” and “those helpless from causes that tend to be cumulative, such as congenital feebleness of body and character, alcoholism, dissolute living.” Accordingly, he proposed different solutions for each class:

The first class may be dealt with charitably, or provided for by some system of insurance. The second class should be simply stamped out. Neither the feeble minded, nor those saturated by alcohol or tainted with hereditary disease, nor their retrievable criminals and tramps, should be allowed at large, still less should be allowed to breed. We have not reached the stage where we can proceed to chloroform them once for all; but at least they can be segregated, shut up in refuges and asylums, and prevented from propagating their kind. The opinion of civilized mankind is rapidly moving to the conclusion that so far at least we may apply the principle of eugenics, and thus dispose of what is the simplest phase of the problem of the unemployable. (1911, 2: 332–333)

Exactly like Taussig, Carver had no doubts on the eugenic virtues of a binding minimum wage. First, he explained, “it is apparent that such a policy would tend to weed out the less competent members of the community so that, in the course of time, there would be none left whose services were not worth at least the minimum wage.” Second, he continued, “it can scarcely be doubted that after that was accomplished, the community would be vastly superior to the present one, for it would be peopled by a superior class of individuals, and the general quality of the population would not be deteriorated by the human dregs who now form the so-called submerged element” (1915, 140).⁶

Taussig’s contempt for the “unemployables,” however, did not lead him to assert unequivocally that the higher social strata owed their position to their innate qualities. Taussig phrased his arguments in cautious and somewhat contradictory terms. First, he believed that intelligence and “character” were hereditary, and he rejected the Lamarckian claim that acquired traits were the drivers of evolutionary change (1911, 1: 109). Then, he faced the “difficult question” as to whether there are broad differences in “gifts of mind and character” among the several social classes (1911, 2: 138). Taussig struggled with it through many pages of his *Principles*. On the one hand, he observed, the “analogies of heredity” provide evidence of the transmissibility of intellectual gifts, thus suggesting that the “so-called higher classes of modern times” constitute a “born aristocracy.”⁷ On the other hand, he

⁵ For an exhaustive and well documented discussion of the eugenic impact of minimum wage legislation, see Leonard 2016.

⁶ As to how to deal with those “human dregs” which would be so expelled from the labor market, Carver (1915, 140) was more extreme than Taussig: “[e]nforced colonization, the multiplication of almshouses, or a liberal administration of chloroform would be necessary to dispose of a considerable number of our population.” See Fiorito and Orsi 2017 for a full account of Carver’s eugenic views.

⁷ This led him to assert, in another significant passage, that “the most prosperous strata among the population are those in which intellectual gifts are most likely to appear. They are prosperous in the main *because* they have such gifts.” (Taussig 1911, 2: 249: emphasis in original)

rectified (1911, 2: 132–133), “any one of intellectual capacity who consorts with the average persons of the ‘superior’ classes, and observes their narrowness, their dullness, their fatuous self-content, their essential vulgarity, must hesitate before believing that they and their descendants achieve success solely because of unusual gifts.” Their privileged position appears to be due in large measure to “training, advantageous start, fostering environment.” Taussig eventually found a compromise. He gave primacy to heredity for those exceptionally talented persons in leading positions, allowing at the same time for decisive environmental influences for those in the lower ranks. He made his point with a telling metaphor:

Generals probably are born, not made. But colonels and captains can be trained. In the ranks there may be many men who have it in them to become good officers, yet are kept in the ranks because no way is available for bringing out the sterling qualities which they possess. (1911, 2: 141)

Far less hesitant than Taussig, in postulating a direct correlation between biological fitness and social ranking, was the British-born psychologist William McDougall—a figure only tangentially related to our story but that allows us to better define the pervasiveness of hereditarian thinking at Harvard during those years. In 1920, McDougall moved from Oxford to Harvard to become chair of the psychology department—a position he held until 1927, when he moved to Duke. By the time of his arrival at Harvard, McDougall had already built a considerable reputation among American economists, especially those of an institutionalist persuasion, for his instinct psychology and his related criticism of hedonism (Asso and Fiorito 2004).⁸ Taussig, himself, in his *Investors and Money-Makers* (1915, 8n1), a series of lectures where he had heavily drawn on instinct theory, praised McDougall’s *Introduction to Social Psychology* (1908) as “a book to be ranked with [William] James’s [*Principles of Psychology* 1890], as regards both attractiveness of style and vigor of thought.”

What matters here is that McDougall was also an ardent supporter of eugenics.⁹ Shortly after his arrival at Harvard, he attended in New York the second international congress of eugenics, and, in that occasion, he presented a paper eloquently entitled “The Correlation Between Native Ability and Social Status” (1923). There, he discussed some recent findings indicating that the “economic stratification of society corresponds in some degree with the distribution through the population of the more desirable human qualities” (373). Among British contributions, McDougall mentioned two works—by Cyril Burt (1909) and Horace B. English (1917), respectively—conducted under his direction while at Oxford. Using Charles Spearman’s model of general intelligence to analyze the performance of schoolchildren in a battery of tests, both studies concluded that upper-class children in private preparatory schools did better than their lower-class counterparts in the ordinary elementary schools. More crucially, as McDougall (1923, 374) remarked, “[t]he superiority found seems to be only or in the main to superior inheritance.”¹⁰ As to American

⁸ “If it be granted that psychological knowledge is helpful to economists,” wrote Wesley C. Mitchell (1910, 197) in the *Journal of Political Economy*, “then Mr. McDougall’s criticism of the traditional economic psychology must be faced.” Against the rationality assumptions of classical and neoclassical economists, Mitchell continued, McDougall (1908, 11, quoted in Mitchell 1910, 197) has showed us that “mankind is only a little bit reasonable and to a great extent very unintelligently moved in quite unreasonable ways.”

⁹ McDougall’s name appears among the members of the advisory council of the AES from 1923 to 1930.

¹⁰ “[W]e may conclude,” Burt put it (1909, 176), “that the superior proficiency at Intelligence tests on the part of the boys of superior parentage, was inborn. And thus we seem to have proved marked inheritability in the case of a mental character of the highest ‘civic worth.’” In a slightly more cautious fashion, English (1917, 328) affirmed: “[a]lthough he [the writer] is not prepared to say and does not in fact believe, that environment has had

contributions, McDougall made reference to the recent works on intelligence testing by Arthur W. Kornhauser (1918), Sidney L. Pressey and Ruth Ralston (1919), Ada H. Arlitt (1921), and Lewis M. Terman (1916). All these separate works, McDougall (1923, 374) summed up, “concur in finding a well-marked positive correlation between superior native intelligence (or innate intellectual capacity) and superior social status.” Such a conclusion, “is very distasteful to almost all philanthropically and democratically minded persons and will be resisted to the last ditch.” Yet, and these were McDougall’s final words, “[i]f this paper should stimulate some of those who are inclined to resist it to prosecute exact research instead of repeating benevolent platitudes, it will not have been written in vain.”

From Sorokin to Taussig and Joslyn

McDougall’s hopes were not to be disappointed. The publication of *Social Mobility* in 1927 by Pitirim A. Sorokin gave new vigor, especially in the social sciences, to the whole issue of the biological basis of social stratification. Sorokin, a Russian-born sociologist then at the University of Minnesota, was well aware of McDougall’s work.¹¹ In his encyclopedic *Contemporary Sociological Theories* (Sorokin 1928, 264; see also Sorokin 1927, 314), he listed McDougall among those who had most contributed to the “elucidation of the problem” as to “whether a leading or privileged group is composed of a selected people, or whether they represent a mere conglomerate of people who ‘incidentally,’ . . . have succeeded in climbing up and enjoying their privileges.” Referring to McDougall’s *Is America Safe for Democracy?*, Sorokin (1927, 279) approved the book’s emphasis on the “innate differences between races, social classes, and individuals.” Sorokin’s praise of McDougall is by no means surprising—*Social Mobility* was in fact as much a study of the “biological” aspects of social stratification as an analysis of its dynamics.

Sorokin argued that the ultimate causes of occupational stratification are to be found, first, in the importance of an occupation for the survival of the group as a whole, and second, in the degree of “vitality” and intelligence required in it. Our attention here is limited to his discussion of the second aspect. Drawing upon both American and European sources, mostly from the eugenic literature of the period, Sorokin (1927, 268) held that “[t]he upper classes are taller, have a greater weight, greater cranial capacity, greater handsomeness and less serious and less numerous anomalies and defects than the lower classes.” This led him to affirm that “[s]ocial stratification . . . is correlated and considerably coincides with biological stratification of the same population from the standpoint of the physical superiority” (268). The same can be said in regard to mental superiority. In his view (311), “the higher social classes, on the whole, are more intelligent than the lower ones,” and “as a general rule, the social and mental distribution of individuals within a given society are positively correlated.” Sorokin (322) was willing to concede that, “a great many differences among different social classes are due heterogeneity of environmental factors among which they are born, grow, live, and work.” In spite of these premises, however, he made a great effort to criticize the views of those extreme environmentalists who “like to emphasize on all occasions the difference in social environment of different classes” (328). Against this view, he pointed out that men of genius sometimes emerge out of modest backgrounds. This did not happen

nothing to do with the superiority of one group over the other, he is convinced that the hereditary factor plays an altogether preponderating part.”

¹¹ For a full account of Sorokin’s life and career, see Johnston 1995.

frequently, but the very fact that it occurred at all contradicts the idea that education and a favorable environment always produce individuals of eminence.¹² These arguments were instrumental to Sorokin's contention that the "hereditary factor" is necessary to explain many phenomena of social stratification and social distribution of individuals that cannot be accounted for satisfactorily by the environmental hypothesis. "For this reason," he concluded (330), "it is certain that a part, at least, of these differences among the upper and lower social strata, as well as social stratification itself, are the result not only of environment but of heredity, not only of adaptation, but of selection as well."¹³

Sorokin joined Harvard in 1930 at the age of forty, to become head of the newly formed Department of Sociology. His personal contacts with Harvard, however, began as early as 1925, when he started an intense correspondence with Taussig (Nichols 1996). Sorokin discussed his work with Taussig and regularly sent him complimentary copies of his publications. Sorokin also kept in touch with Carver, who had taught the main sociology courses at Harvard since 1900 (Nichols 1992). Carver was instrumental in arranging an invitation for Sorokin to deliver guest lectures sponsored by the Department of Economics in early 1929 and played a major role in the department's recommendation that Harvard offer Sorokin its first full professorship in sociology (Carver 1949, 212). Taussig came in support to Carver's efforts to secure Sorokin a position at Harvard. As he wrote to Sorokin on October 24, 1929: "[y]ou are quite right in supposing that I had joined in the Department's recommendation, and I did so because of my admiration for the work which you have done." (Taussig 1928)

Sorokin enters our narrative in 1926, when Taussig commissioned Carl S. Joslyn a review article of *Social Mobility* for the *Quarterly Journal of Economics*. Joslyn, then a graduate student and a sociology instructor at Harvard, was a "Carver's disciple" (Nichols 1992, 208) who had already reached some academic notoriety as the recipient of the second Karelson Prize by the American Economic Association for his essay "What Can a Man Afford?" (Joslyn 1921). Joslyn's review was phrased in quite critical terms. In the main, he found Sorokin's methodology inadequate and his main conclusions incautiously drawn. As to the alleged physical preeminence of the upper classes, for instance, Joslyn (1927, 137-138) pointed out that it "may be accounted for by...[their] superior nutrition and better physical environment." Taken by themselves, he explained "the author's findings do not warrant an exclusive interpretation either as the cause or as the result of a superior social status." Similarly, Joslyn insisted, once a proper distinction between innate and acquired intelligence is introduced, Sorokin's whole discussion over the possible correlation between social achievement and mental superiority reduces to the harmless and rather obvious fact that the "developed intelligence of the higher social classes is superior to that of the lower." Even less satisfactory, was Sorokin's defense of biological heredity as a factor contributing to the establishment of social hierarchies:

¹² As Sorokin (1927, 502) wrote in his unequivocal style: "[n]o education can make out of an idiot a bright man; out of a man of average heredity a genius."

¹³ From his hereditarianism, Sorokin did not hesitate to draw explicitly eugenic conclusions. For instance, writing with the assistance of Carle C. Zimmerman (Sorokin and Zimmerman 1928, 36) on the composition of farmer leaders in the United States, he noted with great concern that "female leaders appear to 'buy' their leadership at the cost of marriage," and that the "role of leader means sterility for them." As a consequence, he warned, "leadership by women contributes a full share to the extinction of that which seems to be a valuable stock and to the so-called impoverishment of the best hereditary fund of the race."

In support of this view the author emphasizes the fact, too often forgotten by environmentalist advocates, that identity of environment frequently results, not in identical achievement, but in differential achievement. If there is any one truth that needs to be hammered into the heads of the Simon-pure environmentalists and egalitarians, it is this. Doing so, however, does not provide us with a quantitative solution to what is, in its essence, a quantitative problem. Of the observed differences in achievement, how much is due to the conditions of nature and how much to those of nurture? (Joslyn 1927, 138)

In Joslyn's view, "[i]t seems fair to say that Professor Sorokin has left this central problem in social stratification practically untouched" (138).

Joslyn's dissatisfaction about Sorokin's book, however, should not be misinterpreted. His criticism was mostly methodological, and it was not directed towards Sorokin's hereditarianism. As Joslyn himself put it in a letter he sent to Sorokin on May 11, 1928, the published version of the review "does not represent, of course, my own opinion of your work." Joslyn explained:

I had many things in mind of a favorable nature which I should have liked to have included in the review—but space forbade! As it is customary to say all the horrible things we can think of about a book on the occasion of its review—thus showing how superior we are to the author!—I adopted this practice, and failed, thru lack of space, to say all the favorable things that might have been said about it. So far as my opinion of your "Social Mobility" is concerned, you may be interested to learn that Professor Carver and I are using it in the course in Sociology in this department. (Joslyn 1928)

But Joslyn's was not just a mere apology letter. Joslyn had in fact contacted Sorokin to inform him about an "investigation which Professor Taussig and I have under way"—an investigation, he continued, "inspired by your book" and "in which you will be intensely interested, since it has for its subject the social and economic origins of American business leaders."¹⁴ The aim of the project, as stated in the enclosed Explanatory Memorandum cosigned by Taussig and Joslyn, was to "find out, as far as it may be possible, from what social classes business leaders are recruited, and to what extent their success in business is due, on the one hand, to favoring conditions of the environment, and on the other hand, to superior inborn abilities." The necessary information would be gathered through a questionnaire sent to a selected sample of corporate executives (see below). "We do expect," Taussig and Joslyn affirmed in the Memorandum,

that the data provided by the questionnaire will give us a fairly clear indication of the relative importance of certain outstanding factors in determining success in business. It is sometimes asserted, for example, that advancement in business is largely conditioned by family influence, social position, inherited wealth, or educational advantages. The only way of settling these questions is to find out just how large a part of the factors

¹⁴ For their research project Taussig and Joslyn had received financial support from the William F. Milton Fund at Harvard University.

referred to have played in the careers of men who have attained to a high position in the business world. (Joslyn 1928)

Joslyn, who was the main responsible for collecting the replies to the questionnaires and assembling the data, presented the first results of the investigation in his 1930 dissertation on "The Social Origins of American Business Leaders." The empirical apparatus of Joslyn's thesis was then absorbed, without substantial modifications, into Taussig and Joslyn's 1932 volume *American Business Leaders: A Study in Social Origins and Social Stratification*. Although, in the preface, Taussig (1932, vi-vii) acknowledged that it was Joslyn who had taken "the first steps throughout in analyzing and interpreting the data," he pointed out that "[t]he book as it stands is a joint product, for which both are equally responsible."

Taussig and Joslyn's American Business Leaders

Scope, Method, and Content

"The object of this study"—Taussig and Joslyn (1932, 3) stated in the opening sentence of their book—is to "ascertain from what social classes American business leaders are recruited, to determine whether the proportionate contribution of each social class to the supply of business leaders is less than, equal to, or greater than the proportion of that class to the population; and to throw light on the hereditary and environmental factors in the lives of these leaders." The whole approach to the problem was strictly empirical. A business leader was defined as "a person occupying a position as major executive, partner, or sole owner in a business of such size as to be of more than local importance in its field" (1932, 6). The data were obtained by means of a questionnaire circulated to about fifteen thousand individuals, selected from *Standard and Poor's Register of Directors* (1928). Replies were received from nearly nine thousand persons, or roughly 58 percent. The questions were designed to elicit "objective" information about the respondents' present status, the size of the business, the principal occupations of their fathers and paternal grandfathers. The environmental factors considered were the extent of formal education and business training, financial aid in the early stages, and influential connections.¹⁵ The data thus obtained were tabulated on the basis of the size of the business, of which five grades were distinguished, ranging from a gross income of \$500,000 to \$5,000,000. Age and time factors were taken into account. Interestingly, Taussig and Joslyn considered the grades of business as an indication of the differences in business ability—the larger the size of business, the higher the ability necessary to run it.

As to class provenience, the data showed that the then typical corporation executive was the son of a businessman, 56.7 percent having businessmen as fathers. Professional men contributed 13.4 percent and farmers 12.4. The percentage of "farm boys" reaching positions of business leadership was decreasing while the percentage of sons of businessmen was increasing—a tendency that was found consistent with the changing occupational distribution of the United States. By the middle of the century, Taussig and Joslyn predicted, two-thirds of the business leaders would come from the businessmen class. Laborers

¹⁵ In regard to influential connection and financial aid, the two environmental factors more difficult to assess, the questionnaire contained the following questions: (1) Were any of your relatives or friends interested, as owners or executives, (a) in the business which you first entered, (b) in your present organization when you entered it; and (2) Did you, during the early stages of your business career, receive substantial aid (not less than \$10,000) through the provision of capital from either of the following sources (a) inheritance, (b) relatives or friends?

(unskilled, semi-skilled, skilled) supplied only 10.8 percent of the leaders. Not nearly all the sons of businessmen, however, were sons of business “leaders,” since only 30.8 percent were sons of major executives and owners of large businesses. Of this group, 45 percent were in the same business as their fathers, but less than 70 percent of these were in positions of real leadership—hence apical positions were “inherited” by only 10 percent of the group. From this the authors (1932, 271–272) concluded that a tendency toward “caste” or rigid stratification in the business community could not be demonstrated.

These data were then compared with the existing stratification in society at large. Despite the fact that laborers constituted 45 percent of the total gainfully employed population in 1880, their representation among business leaders was only 10 percent; and though the business and professional classes constituted only 10 percent of this population, their contribution was 70 percent. As Taussig and Joslyn (1932, 241) put it: “[h]ere is the outstanding disparity: 10 percent of the American population produces 70 percent of its business leaders.” These results were found consistent with Sorokin’s (and others’) contention that the upper classes in society and, to a less extent, the middle class, are far more productive of men of distinguished achievement than the lower. Taussig and Joslyn explained:

Practically all the studies in the field, whether European or American, agree in the finding that the middle and upper social classes . . . contribute by far the largest share of persons distinguished for their achievement in the arts and sciences, in letters, in the professions, and in other vocations. Moreover, this share has been found to be much greater than the proportion of these classes in the population at large. The lower social classes, on the other hand, composed of the most part of manual workers, . . . contribute a share rarely exceeding 10 per cent, notwithstanding that they constitute everywhere the most considerable element in the population. Such are the results obtained by practically all studies of the social origins of leaders in various fields; in this respect they are in complete agreement with the results of the present inquiry. (Taussig and Joslyn 1932, 241–242)¹⁶

Now, and this was the crucial part of the problem, is this higher productivity of business leaders shown by the upper classes the result of their more favorable environment (the “privilege” view) or their superior inherent ability (the “hereditary” view)? Taussig and Joslyn maintained that environmental factors played only a minor part in determining the level to which the respondents eventually climbed. To support their claim, they adduced several arguments that need to be briefly reviewed.

First, the proportion of wage earners’ sons was not markedly larger, as it would be expected by the “privilege” view, in the higher ranks of business, where conditions of entry are in America not “obviously unequal,” than in the professions where differences in educational opportunity do represent a serious handicap for the sons of workers (Taussig and Joslyn 1932, 245–246).¹⁷ Second, the replies showed that 12 percent admitted receiving

¹⁶ To support their view, Taussig and Joslyn (242n6) referred in a footnote to the “comprehensive survey of the more important studies of men of genius” in Sorokin’s *Social Mobility*.

¹⁷ Taussig and Joslyn regarded business as an “open vocation,” with no insurmountable barriers to entry. In their opinion: “[w]hatever may have been the conditions determining the ultimate degree of success which he could achieve . . . the son of the wage-earner found himself at no substantial disadvantage, as compared with the business

substantial financial aid (over \$10,000) early in their careers from relatives or friends, while 36 percent reported relatives or friends in early or present business connections. This would indicate that 48 percent had a “pull.” However, 8.4 percent received both financial aid and the assistance of friends, so only 40 percent admitted that they were helped by “influence” or capital. This provided Taussig and Joslyn sufficient ground to argue that “help from relatives or friends, in whatever form given, does not appear to have been sufficiently common to make it characteristic of the present generation of American business leaders” (248). Third, the proportions of laborers’ sons in each of the grades of business distinguished were not markedly different from the proportions found among the sons of business executives and professionals, and this was considered as an indication that there was no close relation between the environmental factors under consideration and distribution according to grade of business.¹⁸ Fourth, business leaders of lower-class origin do not appear to have taken a longer time to reach their positions in the various grades than those who came from more favored classes (259–262). Fifth, Taussig and Joslyn pointed out a clear correlation between degree of schooling and business achievement. The report showed in fact that only 1 percent of the respondents had no formal schooling, 25.7 percent had a grammar-school education, 28 percent a high-school education, 13.4 percent had some college education, and 31.9 percent were college graduates.¹⁹ Rather than interpreting it as a corroboration of the environmentalist view, however, they argued that success in business and superior educational attainments are the common results of higher innate ability. College graduates, they explained (1932, 188), “do well in business for the same reason they did well in school because they have industry and intelligence beyond the average.”

All these arguments led Taussig and Joslyn to conclude that the “results of the inquiry fail to accord with those to be expected under the hypothesis of privilege” (1932, 263). The two authors were willing to concede that their quantitative investigation could not take into account the many “imponderables” in the problem—among which the most relevant was certainly the influence of the social environment in which the son of a business executive or professional man grows up. Such things as early association with people who are “ambitious to get on in the world,” and learning early the art of “handling men and affairs,” do undoubtedly represent advantages enjoyed by the sons of the privileged which are denied those of the less fortunate classes (265). But even these imponderable factors do not, in the opinion of Taussig and Joslyn, play a decisive role. “The social environment of the wage-earning classes in the United States is by no means devoid of influences stimulating the youth to a life of achievement,” they observed. Moreover, “the way to success in business is made relatively easy for the American boy born of poor parents” (266). And after a few remarks of similar tenor, they plainly stated the main conclusions of their investigation:

The results of the present inquiry, taken as a whole, make it appear unlikely that conditions of environment are primarily responsible for the

man’s son, in entering business and bidding for the favorable consideration of his superiors. Conditions of entry into this particular calling may be said to have been much the same for men of diverse social origins” (1932, 245).

¹⁸ According to Taussig and Joslyn (1932, 255) “[t]his fact makes it appear improbable that there is any considerable suppression of talent among the laborers’ sons engaged in business, since it is on the lower grades of ability that we should expect the repressive influence of the environment to tell most heavily.” This in turn was based on their belief that individuals of the highest order of native ability, as they assumed to be those associated with companies of higher grades, “do not find the absence of favoring conditions a serious hindrance to progress” (266).

¹⁹ On the other hand, data revealed no relation between formal business training and degree of success in business, except that such training does seem to have some influence on the time taken to reach a given position.

unequal productivity of the several of the several occupational classes in business leaders. They cast doubt on the view that the failure of the lower social classes to contribute their full quota of business leaders is to be ascribed chiefly to lack of opportunity; or that the ability of the business and professional classes to produce several times their proportion is based primarily upon the superior advantages and privileges they enjoy. Our results strongly suggest, even if they do not prove, that inequality of earnings between the several occupational classes has its origins in a fundamental inequality of native endowments, rather than in an inequality of opportunities. (1932, 268)²⁰

In their hereditarianism, Taussig and Joslyn drew heavily on Sorokin's spirit. "In this respect," they wrote (242), "[Sorokin's conclusions] are in complete agreement with the results of the present inquiry." More significantly, however, the two authors called attention to "an interesting parallel" between their conclusions and those reached by Francis Galton, the father of modern eugenics. In his *Hereditary Genius* (1869), a study of the careers of nearly 1,000 men in various fields of endeavor, Galton had argued empirically that the ascent of a person with a high level of natural intellectual potential would not be deterred by social obstacles. In this connection, Taussig and Joslyn (1932, 256) wondered: "[i]f Galton was led to this conclusion by data based on the careers of men who achieved distinction as judges, statesmen, men of letters, men of science, artists, military commanders, and religious leaders—most of which are vocations closed to the men without higher education—is it not likely that a similar conclusion applies to a group of men who have achieved distinction in a field of endeavor much more open to the man without special training?" In spite of this explicit reference to Galton, however, Taussig and Joslyn did not draw any eugenic conclusion from their analysis, nor did they discuss issues related to differences in birth rates of the different social classes they had examined. Yet, it is noteworthy that Taussig maintained unaltered, until the very last edition of his *Principles* in 1939, the relevant sections on eugenics we have seen above.

Appraisals

American Business Leaders elicited several responses—and this was certainly due to its controversial nature.²¹ Virtually all reviews in the leading journals of the period reveal a quite distinct negative tenor. In general terms Taussig and Joslyn's explicit hereditarianism was not well-received by the academic community. All reviewers directed their criticisms at the authors' attempt to exclude the decisive influence of environmental factors in favor of the

²⁰ Joslyn, it should be noted, had reached the same conclusions in his dissertation (1930, 427-438) from which we cannot forbear to quote at length: "It seems to us that the data yielded by this inquiry, when taken as a whole, are more easily and reasonably explained under the "nature" hypothesis than under the "nurture" hypothesis. Almost none of the expectations which have been advanced under the latter hypothesis have found confirmation in our data. In the absence of such confirmation, it does not seem unreasonable to turn to the alternative hypothesis as affording a more likely explanation of the observed restriction on freedom of movement out of the lower and middle occupational classes into the class of successful business men. That is to say, it appears probable that the level of innate ability representative of the lower and middle classes in society is inferior to that representative of the higher classes. It is for this reason, more than for any other, that the productivity of the lower occupational classes in business leaders is so markedly inferior to that of the higher classes."

²¹ Taussig and Joslyn's volume also caught the attention of the national press. The *New York Times*, for instance, announced its publication in a full column headline "Social origins studied" (1932), with the telling subtitle, "Lack of native ability rather than lack of opportunity blamed for failure to rise." A more extensive review of the book appeared the following year ("Business Leaders" 1933).

native ability hypothesis. According to William F. Ogburn (1934, 405), the leading sociologist from Chicago, Taussig and Joslyn have “such a small fraction of the environment measured that they, in the nature of the case, cannot do much toward a solution of the problem.” In light of the meager evidence gathered, Columbia’s sociologist Robert M. MacIver reiterated (1933, 105), the authors’ support of the hereditarian view “is one of the baldest non sequiturs which the reviewer has come across for a long time in any work purporting to be a scientific investigation.” The conclusion reached, MacIver continued, “is in no logical sense a result of their study, but a mere guess, no better than any other in respect of this most intricate and most fascinating problem.”

The most problematic aspect, critics converged, was Taussig and Joslyn’s treatment of the “imponderable” environmental factors—what would be defined as “social capital” in modern jargon. The questions included in the questionnaire, MacIver (105–106) lamented, were put on the grounds that the environmental factors regarded as most essential in contributing towards success are two: capital and connections. But financial help from business connections often assumes other forms than merely a transfer of money—MacIver also observed in passing that “the minimum amount of such aid to be considered significant was set at \$10,000!” As importantly, he continued, if the term “friends” includes business acquaintances, “probably most businessmen, appointed to a position of high responsibility, have friends among the owners or executives of the business in question.” In a similar vein, Morris Ginsberg (1933, 505) from the London School of Economics wrote: “[t]he authors were rightly anxious to avoid subjective and unverifiable factors, but the ‘imponderables,’ as they call them, do not lose their importance merely because no methods are at present available for dealing with them.” Ginsberg, who spoke for all reviewers (see also for similar remarks: Converse 1933; Garver 1933; and Kincaid 1933), ably elaborated:

Our authors make no attempt to study the mental qualities necessary for success in business, or to estimate the relative importance of ability, whether general or specific, and traits of temperament and character. Such qualities as energy, assertiveness, persistence, singleness of purpose, ambition, the desire for power and the like are probably at least as important as ability. But we possess very little knowledge of the degree to which these characteristics are determined by heredity, or of the extent to which they are moulded by variations in the environment, particularly in early childhood. The technique required for disentangling genetic from environmental factors is only in its initial stages, and has so far proved too crude for any but the most superficial analysis. (Ginsberg 1933, 505)

In the end, Ginsberg sentenced,

a study such as that made in the work before us, compelled as it is to confine itself to gross differences in the environment, and completely ignoring psychological and genetic analysis, cannot [. . .] hope to establish any reliable conclusions in a matter so intricate and complex as the share of genetic differences in social stratification. (Ginsberg 1933, 505)

Tipton R. Snavely from the University of Virginia, an able statistician who later came under the influence of Frank Knight, joined the chorus of critics noting that “It is impossible to measure the importance of the social atmosphere surrounding the growing boy. The son of the business or professional man makes contacts from which he absorbs ambition and the

‘psychology of success.’ From early youth he is ‘encouraged and stimulated to a life of achievement.’” (Snively 1933, 288) Snively then rhetorically asked: “who can say what the result would be if the environment of the sons of unskilled laborers and of the sons of successful business leaders were reversed?” Significantly, even a eugenically inclined figure such as Joseph J. Spengler was not fully satisfied with Taussig and Joslyn’s results. “While the reviewer accepts the author’s conclusions,”—Spengler (1933, 592) wrote—“he would add that the authors do not assert that the ratio of demonstrated ability to potential ability is the same in all classes. This ratio is probably higher in the upper socio-economic classes and will continue to be so as long as the existing distribution of income persists.”²²

Positive reactions were definitely fewer and, significantly, all (directly or indirectly) connected to Harvard. Writing in the *Journal of Heredity*, Weld A. Rollins (1934, 315)—a Harvard law school graduate and an expert in legal aspects of sterilization—emphasized the positive effects on the average quality of population of Taussig and Joslyn’s contention that “the representation of the well-to-do classes [among business leaders] is increasing at a rapid rate and is likely to become preponderant.” As to the statistical evidence presented in the volume, however, Rollins (316) felt that “one may perhaps find it a little difficult or unwelcome to draw too convincing conclusions from the figures representing the compiled results of answers of business leaders to brief questionnaires.” Far more positive was Norman E. Himes, a then leading birth-control advocate and the most devote among Carver’s disciples, who reviewed *American Business Leaders* for the *Eugenics Review*. Taussig and Joslyn, Himes affirmed (1934, 64), “have contributed notably to our understanding of a basic problem of eugenical theory: the differential productivity of various social classes in producing leaders of a specific type.” The book, to Himes’ eyes (65), had the great merit of “verifying [. . .] the conclusions of all other investigators in showing that the ‘proletariat’ or unskilled and semi-skilled workers, though a substantial proportion of the population, contribute few leaders.”

But Himes’ eugenic enthusiasm could not match that of his mentor. Carver did not write a review of *American Business Leaders* but heavily drew upon it in *The Essential Factors of Social Evolution* (1935). Carver’s intellectual debt toward Taussig and Joslyn surfaces in connection to his discussion of the effects of an over-supply of unskilled workers on the labor market. Rather than facing the problem quantitatively, he explicitly pointed to its direct consequences on the quality of population by use of a simple illustration:

A community which has more ditch diggers than it can use in combination with its limited supply of competent engineers will always be in a bad way. Any process of multiplication which will increase the proportion of engineers to ditch diggers would be an eugenic program. Any process which would increase the proportion of ditch diggers would have to be called dysgenic. (Carver 1935, 431)

For Carver (1935, 432), the way in which demographic growth may affect the relative proportion between those who are economically superfluous (diggers) and those who are scarce (engineers) in a community depends upon the “percentage of economic success among the children of the two classes” and this, in turn, depends upon the extent to which “the qualities which made the parents high or low producers” are transmitted to their children. In Carver’s hands, the whole problem could thus be reduced to a simple question: “are we

²² On Spengler’s eugenic views, see Hoff (2012).

likely to get as large a proportion of competent engineers from the progeny of ditch diggers as from the progeny of engineers?" The results brought by Taussig and Joslyn's "most thorough-going investigation up to date of this problem" (Carver 1935, 432) made him confident enough to answer in the negative. He was disposed to recognize that "the combination of traits which go to make up what we have called productivity is an exceedingly complex one" (Carver 1935, 433) nonetheless, he firmly believed that statistical prediction of the heritability of certain inborn traits was "within wide limits" possible. Referring again with approval to Taussig and Joslyn, Carver held that, within wide limits, it could be possible to determine "the percentages of those born to parents who are high producers who will themselves be high producers" and "the percentage of children born to low producers who will, in spite of their unpromising parentage, prove to be high producers." Carver, however, differently from Taussig and Joslyn, went well beyond the assertion that the ability that carried a man at the top of the economic ladder was inheritable. To his eyes, the crucial issue became one of differential birth rates. He was not hesitant to argue that combination of low fertility among the wealthy and more gifted classes and high fertility among the poor and unskilled posed a serious threat to racial fitness. Educational opportunities open to all who are qualified, may partially offset the dysgenic effect of fertility differentials, he admitted (435-436), but if the average quality of those to be educated is declining, then "no matter how rapidly the schools may be improved, eventually they will reach a very definite limit beyond which they cannot train successive generations."

Conclusions

For biologically deterministic arguments in the social sciences, the late 1920s and the early 1930s were years of transition. In the United States, contributions contesting the scientific credentials of eugenics had begun to appear more frequently after the end of World War I and intensified during the following decade (see Eggen 1926 for a survey). In economics and sociology, it was especially the advent of behaviorism which contributed decisively to the abandonment of strictly hereditarian and hierarchical notions of human nature. In 1930, the *Encyclopaedia of the Social Sciences* (Kallen 1930, 498) could assert that "[a]t birth human infants, regardless of their heredity, are as equal as Fords." For the behaviorist, it continued, "[e]ach [infant] consists of an organization of units of unlearned behavior, each ready to respond to its appropriate stimulus. After birth the environment acts upon these units of unlearned behavior in an endless variety of ways." Yet, in spite of such a rampant faith in human plasticity, eugenics and hereditarian ideas survived well into the third decade of the last century. In this connection, we have shown, Taussig and Joslyn's *American Business Leaders* was an important reassertion of the primacy of heredity over environment ("privilege" in the authors' jargon) in explaining for patterns of difference in business success among individuals. The book was certainly "pioneer work"—as Schumpeter remarked—in terms of the methodology adopted. For the first time an investigation of this kind based its evidence on responses obtained through questionnaires sent to a sample of around fifteen thousand business leaders. Specifically, the questions covered three environmental factors: financial aid, influential connections, and formal education. The evidence obtained did not unequivocally point to innate superiority and in its interpretation the authors revealed a quite distinct hereditarian bias. Data showed, for instance, that academic credentials significantly influenced the degree of business success achieved by the respondents. Yet, Taussig and Joslyn (1932, 248) felt confident enough to affirm that "the data on the extent

of schooling entail no modification of this conclusion—indeed would not, even if the proportion of college graduates were much larger—since, so far as we can judge, the degree of schooling completed by an individual is fully as much an index of his ability as it is a determinant.”

Another interesting aspect emerging from our reconstruction, is that the book was to a large extent a Harvard product—and this provide further indication on Harvard’s pivotal role in the establishment and development of an American eugenics. Taussig, like many of his contemporaries, did support eugenics during his Progressive Era days and he found in his Harvard colleague, Carver, an influential ally in postulating a close nexus between an individual’s economic position and his biological fitness. Outside the department of economics, the leading Harvard psychologist, McDougall, was reasoning in similar (if not harsher) terms. Taussig and Carver, then, joined forces in bringing to Harvard the Russian-born sociologist, Sorokin, whose biologically inspired *Social Mobility* had provided the initial stimulus for the investigation which eventually resulted in the publication of *American Business Leaders*. This article has also documented that Taussig and Joslyn’s book was not well received in academic circles. This is relevant since it signals an important change in attitude with respect to the previous decades, when hereditarian accounts of superiority and inferiority were received without much resistance. In contesting the book’s conclusions, among other things, virtually all reviewers lamented that the questionnaire on which the investigation was based could not capture the pervasive influence of those unquantifiable environmental factors that today would fall into the heading of “social capital.” Positive reactions came only from Harvard—and, again, this should not come as a surprise. In the hands of Carver, to cite the most striking case, Taussig and Joslyn’s empirically warranted hereditarianism was turned into a rigid form of biological determinism and became a powerful argument for the (then popular) contention that the higher fertility rates of the poor implied the dysgenic deterioration of the labor force and population at large.

References

- Arlitt, Ada H. 1921. “On the Need for Caution in Establishing Race Norms.” *Journal of Applied Psychology* 5 (2): 179–183.
- Asso, Pier Francesco, and Luca Fiorito. 2004. “Human Nature and Economic Institutions: Instinct Psychology, Behaviorism, and the Evolution of American Institutionalism.” *Journal of the History of Economic Thought* 26 (4): 445–477.
- Burt, Cyril. 1909. “Experimental Tests of General Intelligence.” *British Journal of Psychology* 3 (December): 94–177.
- “Business Leaders.” 1933. “Review of *American Business Leaders. A Study in Social Origins and Social Stratifications*.” *New York Times*, January 29, 1909: Sec BR: 15.
- Carver, Thomas N. 1915. *Essays in Social Justice*. Cambridge, MA: Harvard University Press.
- Carver, Thomas N. 1935. *The Essential Factors of Social Evolution*. Cambridge, MA: Harvard University Press.
- Carver, Thomas N. 1949. *Recollections of an Unplanned Life*. Los Angeles: The Ward Ritchie Press.
- Cohen, Adam S. 2016. “Harvard’s Eugenics Era. When Academics Embraced Scientific Racism, Immigration Restrictions, and the Suppression of ‘the Unfit.’” *Harvard Magazine*, March/April 2016. Available at <https://harvardmagazine.com/2016/03/harvards-eugenics-era>.
- Converse, Paul D. 1933. “Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn.” *Journal of Business of the University of Chicago* 6 (3): 270–273.
- “Eugenics and Eugenics.” 1917. *Journal of Heredity* 8 (3): 120. doi: 10.1093/oxfordjournals.jhered.a111729
- Engen, J. B. 1926. “The Fallacy of Eugenics.” *Social Forces* 5 (1): 104–109.
- Ellis, Howard S. 1941. “Frank William Taussig, 1859–1940.” *American Economic Review* 31 (1): 209–211.
- English, Horace B. (1917). “Mental Capacity of School Children Correlated with Social Status.” *Psychological Monographs* 23 (3): 266–331.
- Fiorito, Luca, and Cosma Orsi. 2017. “Survival Value and a Robust, Practical, Joyless Individualism: Thomas Nixon Carver, Social Justice, and Eugenics.” *History of Political Economy* 49 (3): 469–495.
- Galton, Francis. 1869. *Hereditary Genius: An Inquiry into its Laws and Consequences*. London: Macmillan.

- Garver, Frederick B. 1933. "Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn." *American Economic Review* 23 (2): 278-280.
- Ginsberg, Morris. 1933. "Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn." *Economic Journal* 43 (171): 502-505.
- Higham, John. 1963. *Strangers in the Land; Patterns of American Nativism, 1860-1925*. New York: Atheneum.
- Himes, Norman E. 1934. "Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn." *Eugenics Review* 26 (1): 64-65.
- Hoff, Derek S. 2012. *The State and the Stork: The Population Debate and Policy Making in U.S. History*. Chicago: University of Chicago Press.
- James, William. 1890. *The Principles of Psychology*, 2 vols. New York: Henry Holt and Company.
- Johnston, Barry V. 1995. *Pitirim A. Sorokin: An Intellectual Biography*. Lawrence, Kan.: University Press of Kansas.
- Joslyn, Carl S. 1921. What Can a Man Afford? *American Economic Review* 1 (4): 99-118.
- Joslyn, Carl S. 1927. "Sorokin on Social Mobility." *Quarterly Journal of Economics* 42 (1) 130-139.
- Joslyn, Carl S. 1928. Letter to Pitirim A. Sorokin. Cambridge, MA: May 11, 1928. Pitirim A. Sorokin Papers, University of Saskatchewan Archives.
- Joslyn, Carl S. 1930. "The Social Origins of American Business Leaders." Ph.D. Dissertation, Harvard University.
- Kallen, Horace M. 1930. "Behaviorism." In Edwin R. A. Seligman, and Alvin S. Johnson (eds.), *Encyclopaedia of the Social Sciences*, Vol 2, 495-498.
- Kincaid, Elbert A. 1933. "Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn." *Accounting Review* 8(2): 171-172.
- Kornhauser, Arthur W. 1918. "The Economic Standing of Parents and the Intelligence of Their Children. *Journal of Educational Psychology* 9 (3): 159-164.
- Laski, Harold J. 1952. *The Dilemma of Our Times, an Historical Essay*. London: Allen & Unwin.
- Leonard, Thomas C. 2016. *Illiberal Reformers: Race, Eugenics, and American Economics in the Progressive Era*. Princeton: Princeton University Press.
- McDougall, William. 1908. *An Introduction to Social Psychology*. London: Methuen & Co.
- McDougall, William. 1923. "The Correlation between Native Ability and Social Status." In Charles B. Davenport (ed.) *Eugenics in Race and State. Scientific Papers of the Second International Congress of Eugenics held at American Museum of Natural History, New York, 22-28 September 1921*. Vol. 2. Baltimore: Williams and Wilkins, 373-376.
- Miller, William. 1949. "American Historians and the Business Elite." *Journal of Economic History* 9 (2): 184-208.
- Miller, William. 1950. "The Recruitment of the American Business Elite. *Quarterly Journal of Economics* 64 (2): 242-253.
- Mitchell, Wesley C. 1910. "The Rationality of Economic Activity." *Journal of Political Economy* 18(3): 197-216.
- Nichols, Lawrence T. 1992. "The Establishment of Sociology at Harvard. A Case of Organizational Ambivalence and Scientific Vulnerability." In Charles A. Elliott, and Margaret W. Rossiter (eds.) *Science at Harvard University: Historical Perspectives*. Bethlehem: Lehigh University Press.
- Nichols, Lawrence T. 1996. "Sorokin and American Sociology: The Dynamics of a Moral Career in Science." In Joseph B. Ford, Michael P. Richard, and Palmer C. Talbutt (eds.) *Sorokin and Civilization: A Centennial Assessment*. New Brunswick, NJ: Transaction Publishers.
- MacIver, Robert M. 1933. "Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn." *Journal of the American Statistical Association* 28 (181): 104-106.
- Ogburn, William F. 1934. "Review of *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn." *Journal of Political Economy* 42(3): 404-406.
- Pressey, Sidney L., and Ruth Ralston. 1919. "The Relation of the General Intelligence of School Children to the Occupation of their Fathers. *Journal of Applied Psychology* 3 (4): 366-373.
- Rollins, Weld A. 1934. "Whence business leaders?" *Journal of Heredity* 25 (8): 313-316.
- Schumpeter, Joseph A. 1952. *Ten great economists, from Marx to Keynes*. London: Allen & Unwin.
- Schumpeter, Joseph A., Arthur H. Cole, and Edward S. Mason. 1941. "Frank William Taussig." *Quarterly Journal of Economics* 55 (3): 337-363.
- Snively, Tipton R. 1933. "The Caste of Business." *Virginia Quarterly Review* 9 (1): 286-288.
- "Social Origins Studied: Lack of Native Ability rather than Lack of Opportunity Blamed for Failure to Rise." 1932. *New York Times*, Sep 26.
- Sorokin, Pitirim A. 1927. *Social mobility*. New York, NY: Harper and Brothers.
- Sorokin, Pitirim A. 1928. *Contemporary sociological theories*. New York, NY: Harper & Brothers.
- Sorokin, Pitirim A., and Carle C. Zimmerman. 1928. "Farmer Leaders in the United States." *Social Forces* 7 (1): 33-45.
- Spengler, Joseph J. 1933. "Review: *American Business Leaders* by Frank W. Taussig and Carl S. Joslyn; *Must We Starve?* by Scott Nearing; *The World's Economic Crisis* by Arthur Salter." *Social Forces*, 11 (4): 591-593.
- Standard and Poor's Corporation. 1928. *Standard & Poor's Register of Corporations, Directors and Executives*. New York: Standard & Poor's Corporation.
- Taussig, Frank W. 1888. *The Tariff History of the United States: A Series of Essays*. New York: G. P. Putnam's Sons.

- Taussig, Frank W. 1911. *Principles of Economics*, 2 vols. New York: Macmillan.
- Taussig, Frank W. 1915. *Investors and Money-makers. Lectures on Some Relations between Economics and Psychology delivered at Brown University in Connection with the Celebration of the 150th Anniversary of the Foundation of the University*. New York: Macmillan.
- Taussig, Frank W. 1920. *Free Trade, the Tariff and Reciprocity*. New York: Macmillan.
- Taussig, Frank W. 1927. *International Trade*. New York: Macmillan.
- Taussig, Frank W. 1928. Letter to Pitirim A. Sorokin. Cambridge, MA: May 11, 1928. Pitirim A. Sorokin Papers, University of Saskatchewan Archives.
- Taussig, Frank. 1939. *Principles of Economics*, 4th ed. New York: Macmillan.
- Taussig, Frank W., and Carl S. Joslyn. 1932. *American Business Leaders: A Study in Social Origins and Social Stratification*. New York: Macmillan.
- Terman, Lewis M. 1916. *The Measurement of Intelligence*. New York: Houghton Mifflin Company.
- Tobin, James. 1985. "Neoclassical Theory in America: J. B. Clark and Fisher." *American Economic Review* 75 (6): 28–38.