

2. The Influence of Nietzsche on the History of Economic Thought

Peter R. Senn

1121 Hinman Avenue
Evanston, Illinois 60202, USA

Abstract

This is a study of Nietzsche's influence on the history of economic thought. It examines references to him in the histories of economic thought, the periodical literature and elsewhere, primarily in English, for any evidence of influence. Nietzsche did not influence the development of economics despite the fact that he did influence the development of several other social sciences. Any influence he had on the development of economic thought was very indirect. Reasons for this are discussed.

Keywords:

Economic systems, Ethics, Nietzsche, History of economic thought, Social selection

JEL classification: B000, B100, B250, B310, P000, O329

1. INTRODUCTION

Friedrich Wilhelm Nietzsche (1844-1900) is an important figure in intellectual history. His works are known to every student of philosophy. According to the online *Encyclopedia Britannica*, he was a "German classical scholar, philosopher, and critic of culture, who became one of the most influential of all modern thinkers." (<http://www.britannica.com/bcom/eb/article/0/0,5716,115660+1+108765,00.html?query=nietzsche>).

According to the entry by Robert Wicks in the online *Stanford Encyclopedia of Philosophy*, "Nietzsche has inspired leading figures in all walks of cultural life, including dancers, poets, novelists, painters, psychologists, philosophers, sociologists and social revolutionaries." (http://search.britannica.com/frm_redir.jsp?query=nietzsche&redir=http://plato.stanford.edu/entries/nietzsche/).

Since long before the middle of the last century it has been recognized that the "influence of his [Nietzsche's] doctrines has been tremendous and has been felt in the most diverse branches and levels of cultural life." (Andler, 375) Nietzsche was influential in the development of political science and sociol-

ogy. He has a place in the histories of anthropology and psychology. Some people think he had or ought to have had an influence on economic thought.

Was Nietzsche influential in the development of economics? Does he have a place in the history of economic thought? These are the questions that this paper answers. A century after his death what economists and historians of economic thought have said about his contributions are an interesting part of the history of economic thought.

Today the *lingua franca* of the economics world is English. It is the most widely spoken and read language, although this was not always the case. Now most economic books and journals are published in it. English has also become the language of the Internet. Nietzsche cannot be said to have a place in the development of economics unless substantial evidence exists in English. For these reasons the search for material about Nietzsche's possible influence in the history of economic thought was focused on English. The search was not limited to English language resources however.

What signs might show that Nietzsche influenced the history of economic thought? Two certain indications would be references to him in the histories of economic thought and in the journals of economics. Absence from both sources would not necessarily indicate that he had no influence but certainly would raise questions about any influence he might have had.

Is it possible that important contributions by Nietzsche have gone unnoticed? There are a few cases in the history of economics where important contributions went unnoticed for years. For example, Antoine Augustin Cournot (1801-1877) sold not a single copy of his 1838 book *Recherches Sur Les Principes Mathématiques De La Théorie Des Richesses* [Researches in the Mathematical Principles of the Theory of Wealth], which is now recognized as a classic.

There is no case in the history of economic thought where important contributions have gone unnoticed for a century. As Mark Blaug (b 1927) put it, "Discovering 'new' (and perhaps forgotten) ideas is less frequently mentioned if only, because there are not many examples in history of economic thought of the phenomenon in question." (148)

The first place to search for influence is in the histories of economic thought. If significant references to Nietzsche exist, it is reasonable to say that he was influential. It is important to recognize, however, that there is no certain measure of influence. Different authors have different viewpoints, approaches and emphases. Every study of influence must rely on the judgment of the author of the study because there are no generally agreed upon measures of influence. For example, simply counting index entries or the number of times an author is referred to, while often indicative, can never be conclusive.

Many of the same caveats apply to searches of the periodical literature. Journals have their own limitations. One of the most important of these limitations

is that journals vary greatly in quality. Another reason for caution is that journal editors represent special viewpoints and exclude material about persons or subjects that do not fit their approach.

It is possible that a person's ideas could be important in economic thought at the present time without any reference or other attribution to the person who developed them. Marginal analysis is but one of many possible examples. The "discussion" speculates on some possibilities in the case of Nietzsche.

For the purposes of this paper, "economics", "mainstream economics" and "conventional economics" is defined by what can be found in the sources examined below.

With these warnings in mind, it is still true that the best signs of the influence of a person on the development of economics are how he is referred to in the histories of economic thought and the periodical literature.

2. THE HISTORIES OF ECONOMIC THOUGHT

Nietzsche is not referred to in most of the major works in the history of economic thought. Twenty eight histories by the following authors were examined: Mark Blaug, Stanley L. Brue, Robert B. Ekelund Jr. and Robert F. Hébert, John M. Ferguson, Charles Gide (1847-1932) and Charles Rist (1874-1955), Allan G. Gruchy, Louis Henry Haney (1882-1969), Eduard Heinmann (1889-1967), E.K. Hunt, John Kells Ingram (1823-1907), William Ernest Kuhn (b 1922), Harry Landreth and David C. Colander, Philip Charles Newman, Jürg Niehans, Ludwig H. Mai, Wesley Clair Mitchell (1874-1948), Frank Amandus. Neff, Jacob Oser and William C. Blanchfield, Karl Pribram (1877-1973), Eric Roll (Sir, b 1907), Ingrid Hahne Rima, Lionel Robbins (Baron 1898-1984), Joseph Alois Schumpeter (1883-1950), Othmar Spann (1878-1950), Henry William Spiegel (b 1911), Overton H. Taylor, Edmund Whittaker and Ferdinand Zweig (b 1896).

Nietzsche is discussed in only five of the twenty eight histories, Whittaker, Gide and Rist, Neff, Pribram, and Spann.

2.1. What the Histories Say

By far the most extensive discussion of Nietzsche occurs in Whittaker's 1940 history of economic ideas. All the references are in the chapter "Social Evolution And Social Thought", and the section on social leadership. Whittaker says, "The idea that men are unequal and that society is (or should be) controlled by the individuals or groups who possess the position or quality of leadership has been developed by certain writers. The doctrine of class government, formulated by Marx, is an example. In modern society, according to Marx, the capitalist class was in the controlling position." (52)

Nietzsche is then one in a list of four philosophers who “adopted a different approach.” “Not economic conditions, as Marx had argued, but human qualities, were in their opinion the important factors in social control.” (52) In the next paragraph Whittaker describes the romantic outlook of Ernst Renan (1823-1892), the French philosopher and historian of religion. He says that Nietzsche was influenced by Renan’s ideas.

Nietzsche’s views are then given for almost a full page. His evolutionary theory of ethics when “carried to its logical conclusion involved the rejection of absolute systems of morals, like Christianity, substituting the principal that right is whatever induces to social survival. It was the Darwinian law of survival of the fittest applied to ethics.” (52)

Whittaker includes two long quotations from Nietzsche’s collected works. He concludes his discussion, “Nietzsche appears to have had in mind not merely the dominance of the Teuton race but that of a ruling class of Teutons. However, his general idea was of wider significance and it is possible that more than one of the modern dictatorial regimes have looked upon themselves as fulfilling his prophecy.” (53)

Later in the same chapter and still on the subject of social leadership, Whittaker says,

Even dictators have to keep their subjects in good humor, or at all events prevent their getting into very bad humor. To some extent these subjects can be molded at the will of their ruler, so that the latter is enabled, in the words of Nietzsche, to work as an artist upon man himself. To what degree men’s minds can be altered by propaganda and coercion remains to be seen. It must be remembered that the latter may go to considerable lengths, making it difficult for objectors to earn a livelihood, or even to live at all. But it has yet to be demonstrated that governments can change their subjects indefinitely. Leadership is not the same as unlimited control. (55)

Nietzsche is discussed several times in Gide and Rist’s history. All the references occur in “Book V: Reconstruction of Doctrines at the End of the Nineteenth Century and Birth of Social Doctrines.” The first mention is in Chapter II: “Doctrines That Owe Their Inspiration To Christianity, Part IV, The Mystics.” Among the mystics on the borderline of Social Christianity is Thomas Carlyle (1795-1881). Gide writes, “But we could hardly put him among the Christian Socialists because of his extreme individualism, and if he were to be given a place at all it would be with such writers as Ibsen and Nietzsche.” (541)

The next discussion of Nietzsche occurs in Chapter V: “The Anarchists, Part I: Stirner’s Philosophical Anarchism and The Cult Of The Individual.”

Alongside of the political and social anarchism which form the principal subject of this chapter there is also the philosophical and literary anarchism, whose predominant characteristic is an almost insane exaltation of the individual. The best

known representative of the school, which hails from Germany, is Max Stirner, whose book entitled *Der Einzige und sein Eigentum* appeared in 1844. The work was forgotten for a long time, although it enjoyed a striking success when it first appeared, and was bitterly criticized by Marx. Later when Nietzsche was beginning to win that literary renown which is so unmistakably his today, it was seen that in Stirner he had a precursor, although Stirner's works probably remained quite unknown to Nietzsche himself, with the result that Stirner has since enjoyed a posthumous fame as the earliest *immoraliste*. A few words only are necessary to show the difference between his doctrines and those of Proudhon, Bakunin, and Kropotkin.¹ (611-612)

The footnote reads as follows. "Some may perhaps wonder why Nietzsche is not included, especially as he was a successor of Stirner's. But Nietzsche's interests were always exclusively philosophical and ethical. Stirner's work, on the other hand, is mainly social and political. We have already pointed out that even Stirner's book has only a rather remote connection with economics, and a detailed study of it would be more in keeping with a history of political ideas. Nietzsche's work would lead us still further afield, and would force us to examine every individualistic doctrine as it cropped up." (612)

Neff is like many histories of economic thought. The work is not well indexed. Although his name is not in the index, Nietzsche is discussed in a section on the origins of Nazi philosophy. "Nietzsche and Hegel presented other elements which fit the National Socialist philosophy, the former by his advocacy and glorification of force, and the latter by his conception of the state as a great creation. In their conception, privileged classes giving direction to a state autocratic in form provide for individuals the most favorable setting for fullest development." (467)

Nietzsche is mentioned but once in Pribram's history. The reference occurs in Part VII "Organismic Economics," Chapter 25, "Totalitarian Economics". The reference is in connection with Walter Kurt Heinrich Eucken's (1891-1950) survey of the development of the historical methodology. "Eucken had connected the relativistic aspects of that methodology with the influence of the Marxian doctrine, with Wilhelm Dilthey's neo-Kantian philosophy and the speculations of Friedrich Nietzsche and O. Spengler and with the 'sociology of knowledge.' According to Eucken, economics, along with jurisprudence and psychology, thus had been deprived of any solid scientific foundation, and the search for general problems of economic theory had become meaningless. Eucken went on to attack this relativistic approach as applied to the social sciences..." (391)

Spann touches upon Nietzsche. "The student should also be on his guard against Schopenhauer and Nietzsche. They were both men of outstanding genius, but were morbid and eccentric, so that their works are not appropriate reading for one who still has his way to make in philosophy." (310)

Zweig writes about economic writers who “think only with their head” and includes “economists of the marginal and psychological schools whose analyses are often brilliant but make no distinctions in regard to economic programs or policy, being based entirely on hypothetical assumptions. In a way Nietzsche was right when he said: ‘I distrust all systematizers and avoid them. The will to a system shows lack of honesty.’ And what is more precious in a writer than honesty?” (181)

2.2. Comment on What the Histories Say

What do the discussions in the history of economic thought show about Nietzsche’s influence on the development of economics? Whittaker begins his history, “If economic thought is to be understood, it must be related to its environment.” (1) In general, he traces the evolution of economic ideas, trying as best he can to relate these ideas to their times and conditions. This is an almost impossible task. His tracing of ideas is much better than his attempts to relate them to their environment. Issues of social control are important in economics but Whittaker does not establish beyond any reasonable doubt that Nietzsche had any kind of a strong influence on economic thinking on that subject.

In his 1960 book, *Schools and Streams of Economic Thought*, both “a complement and a successor” (Preface, vii) to his 1940 history of economic ideas, Whittaker dropped all references to Nietzsche.

Gide also refers to Nietzsche in connection with social doctrines, which he distinguishes from economic theory. He holds that the growth of these doctrines, which occurred in the period between the Franco-German War and First World War, was closely related to the “almost uninterrupted peace in Europe.” (486) He explains that he does not discuss Nietzsche in any detail because “Nietzsche’s interests were always exclusively philosophical and ethical.” (Footnote 1, 612) It is clear that Gide and Rist do not give him any significant role in the development of economic thought.

Neff’s book was published in 1940 at a time when American intellectuals were deeply concerned with developments in Nazi Germany. Most could not understand what was happening. Neff makes a feeble attempt to relate Nietzsche to developments in Nazi Germany. His attempt is not very profound. It says nothing about an important role for Nietzsche in the development of economic thought.

Pribram records Walter Eucken’s view of Nietzsche’s influence on the relativistic aspects of the historical methodology that Eucken opposed. It is of interest that Eucken thought Nietzsche had an influence in the development of German economic thought.

Eucken's reference to Nietzsche was part of an intellectual struggle among German economists at that time, 1940. Eucken and some other German economists were attempting to break the hold the historical school had on German economics in favor of a more theoretical approach. As it turned out, Eucken won a partial victory. The historical school lost its influence. German economics is now part of the mainstream.

The reason that Eucken's victory was called partial is because the baby was thrown out with his bath water. It is only in recent years that the strengths of the historical school are being rediscovered. Pribram certainly did not give Nietzsche any significant part in the development of economic thought. Eucken thought his role in the development of German economic thought was negative. It is even possible that Eucken was indirectly attacking the infamous Nazi appropriation of Nietzsche to validate their ideology.

Spann held that if Nietzsche contributed anything to economics it was harmful and certainly not important in its development.

Zweig uses Nietzsche to support his view that "the noblest task of the economist" is to "present alternatives to the public, pointing out those which are most consistent with the 'good life' of a society as he sees it." (187-188)

In summary, Nietzsche is discussed in only five of the twenty-eight histories studied here. None of them give Nietzsche credit for any influence in the development of mainstream economics.

3. THE PERIODICAL LITERATURE

3.1. General

There are many ways to examine the periodical literature of economics. By far the best is usually the digitized versions of the full text of economic journals in the JSTORE collection of economic journals on line on the World Wide Web. At the time the search was made, this resource contained the complete text of the following economic journals in English:

American Economic Review, Vols. 1-84, 1911-1994

Econometrica, Vols. 1-62, 1933-1994

Economic Journal, Vols. 1-104, 1891-1994

Journal of Applied Econometrics, Vols. 1-9, 1986-1994

Journal of Economic History, Vols. 1-54, 1941-1994

Journal of Economic Literature, Vols. 1-32, 1963-1994
(continues *Journal of Economic Abstracts*)

Journal of Economic Abstracts

Journal of Economic Perspectives, Vols. 1-8, 1987-1994

Journal of Industrial Economics, Vols. 1-42, 1952-1994

Journal of Money, Credit and Banking, Vols. 1-26, 1969-1994

Journal of Political Economy, Vols. 1-102, 1892-1994
Quarterly Journal of Economics, Vols. 1-109, 1886-1994
Review of Economic Studies, Vols. 1-63, 1933-1996
Review of Economics and Statistics, Vols. 1-76, 1919-1994.

Although the journal coverage is not completely up to date, the sample covers enough time and is comprehensive enough so that one can have reasonable confidence in the results for the century that has passed since Nietzsche's death. Only if there were a vast shift in economists' views of Nietzsche in the last five years would the results from the search of the journals support incorrect conclusions.

To see if this kind of shift has occurred, another database was searched, the *Journal of Economic Literature* bibliographic database, *EconLit*. It is published by the American Economic Association. *EconLit* is a comprehensive index of journals, books, dissertations, citations to articles in collective volumes and the full text of the *Journal of Economic Literature* book reviews from 1969 to the present. It is updated monthly and contains over 440,000 records.

Using the search term "Nietzsche," only one reference was found, strong evidence that there was no shift in economists' views of Nietzsche in the last five years. The reference was to an article by Enrico Santarelli and Enzo Pesciarelli, "The Emergence of a Vision: The Development of Schumpeter's Theory of Entrepreneurship."

According to the abstract, a rereading of Schumpeter's "early writings is helpful in analysis of Schumpeter's approach to entrepreneurship, showing its links, among others, with the German philosophical tradition (Nietzsche)." (677)

3.2. Articles in Journals

Using the search term, "Nietzsche," *JSTOR* turned up seventeen references to Nietzsche in journal articles. Like all machine searches, each had to be carefully checked. Two of them were false leads, those in the articles by R. Preston McAfee and Charles Kennedy. McAfee gave credit to one Fred Nietzsche in a footnote and the Kennedy reference contained nothing about Nietzsche. In all of the journal articles there were but fifteen references to Nietzsche by eleven different authors.

More than twenty five percent of the references were in articles by Carlos C. Closson (1896a, 1896c, 1896d, 1899). The first reference (1896a), in a long article on social selection, is simply a footnote, two, referring to Alexander Tille's book, *Von Darwin bis Nietzsche*. (157) The second reference (1896c) is in a short comment on the recent progress of social anthropology in 1896. He mentions Nietzsche in a list of authors whose works "without using the

technical methods of social anthropology, apply to social, ethical and historical problems the conception of social selection in its relation to the permanent quality of population.” (412) No specific reference to Nietzsche is given. A footnote, four, refers to Tille’s book. (412) The third reference to Nietzsche (1896d) occurs in the context of a review of a book by a French author on social selection. Clossen refers to Tille’s book in footnote one, where Clossen says it “leaves much to be desired.” (451)

The last reference to Nietzsche [by Clossen (1899)] occurs in his 30-page review of and comments upon William Z. Ripley’s book, *The Races of Europe*. Clossen points out that there are some surprising omissions, one of which is that of Nietzsche. In his discussion of Ripley’s systematic scheme of shading, Clossen says, “If no mention is made of Friedrich Nietzsche it may be because our author does not take seriously his doctrine of the superiority of the ‘the noble blonde beast of prey.’ ” (62) No reference is given for the Nietzsche quotation. Clossen’s references to Nietzsche provide no evidence of any influence of Nietzsche on economic thought.

As is the case with social anthropology, Nietzsche has a larger place in the history of sociology than he has in the history of economics. Some evidence of this is given by Edward Alsworth Ross (1866-1951) in his discussion of recent trends in sociology in 1903. Nietzsche is mentioned three times.

Ross is discussing the application of Darwin’s ideas of natural selection to society. According to Ross, Nietzsche is an ultra-Darwinist. “A European reverberation has been awakened by Nietzsche’s furious assault on the reigning ideals. According to this ultra-Darwinist, Christianity, the apotheosis of pity, ‘the religion of the suffering,’ is a drug for paralyzing the arm of the strong.” (440-441) Nietzsche’s views, according to Ross, are summarized in the rest of the paragraph.

After that, Ross writes, “A regime of peace and law does, indeed, slow up elimination among men, just as perpetual June would check it among insects. But when Nietzsche, going further, imagines that order and equality before the law somehow hinders the finest men from marrying the finest women, and begetting the ‘beyond man’ as promptly as nature will let them, he parts company with the sane.” (441) It is interesting that Ross translates *Übermensch* as “beyond man.” The last reference, to Nietzsche’s book *Jenseits von Gut und Böse* [*Beyond Good and Evil*], is in the bibliography. (455)

Paul Anthony Samuelson (b 1915, Nobel Laureate 1970) in his Presidential Address to the 74th Annual Meeting of the American Economic Association in 1961 in his discussion of John Stuart Mill (1806-1873) says, “Also, Mill had what Nietzsche once referred to as an offensively clear style.” Samuelson goes on to say, “Yet so great was Mill as a thinker and reflector that he was able to overcome these handicaps.” (1962, 11) It is not often one finds wit in economic writings.

Samuelson liked the reference so much he used it again in his rejoinder to Charles Kennedy's comments on his (Samuelson's) views on induced innovation which begins, "Nietzsche once complained of the offensive clarity of Mill's style." (1966, 444) He never says where the Nietzsche reference came from. This reference to Nietzsche was not as a determiner of any aspect of economic thought although many economists do appear to share Nietzsche's aversion to clarity.

Only three of the eleven authors who refer to Nietzsche actually quote him. When they do, they are displaying their knowledge of philosophy rather than making any substantive points about economics. For example, Gottfried von Haberler (1900-1995), in his moving obituary of Schumpeter, quotes Nietzsche when Haberler is discussing Schumpeter's independence. "But he did not really relish being in a minority all the time. His independence was not a pose. One could truly say of him what Nietzsche said about Schopenhauer:

'Seht ihn nur an –
Niemandem war er untertan.'

[Just look at him – He was never subject to anyone] (344) One has the impression that Haberler is displaying his literary knowledge in an appropriate way.

Jacob H. Hollander (1871-1940) also quotes Nietzsche in his *Presidential Address* at the 34th Annual Meeting of the *American Economic Association* in 1921. He is discussing change in the economist's task and how "by the sheer virtue of his scholarship, will he prevail upon affairs." (20)

The Nietzsche quote occurs in his discussion of change. "In currency disorders, in price fluctuations, in industrial disputes, in agriculture unrest, in trade depression, in social reaction – this likeness appears: 'everything goes, everything returns, eternally does the wheel of being roll.' " (2) The citation is taken from a secondary source, not directly from *Thus Spoke Zarathustra*.

The last of the authors of articles in which Nietzsche is quoted is Robert M. Solow (b 1924, Nobel Laureate 1987). In defending his statement that "resource markets may be rather vulnerable to surprises," Solow concludes his thoughts on the subject, "It may be quite a while before the transvaluation of values – I never thought I could quote Nietzsche in an economics paper – settles down under the control of sober future prospects. In between it may be a cold winter." (7) Solow's attitude about quoting Nietzsche in an economics paper is probably typical of the vast majority of economists.

Three articles mentioning Nietzsche appeared shortly before and during the Second World War. Leo Rogin (1893-1947) published an article on Werner Sombart (1863-1941) and the uses of transcendentalism just before the Second World War. Rogin is discussing the role in which Sombart cast himself, a seigniorial one, in his book *Händler und Helden* [Traders and Heroes].

Sombart is said to use the term *seigniorial* as synonymous with heroic and aristocratic. “The polar concepts, hero and trader, occur with particular frequency in his *Quintessence of Capitalism*, published in 1913. His preference between the two types is clearly indicated in the following from that volume: ‘It has been asserted that the whole of modern civilization is marked by this self righteous jealousy, which. . . Nietzsche made responsible for the substitution of aristocratic values by that of the crowd morality. . . .’ ” (495)

Rogin believes that “Sombart did not so much surrender to National Socialism as espouse it.” (494) This is a subject about which there has been much controversy. See the Senn references.

German industry was highly cartelized even before Hitler. The National Industry Group was the Nazi organization set up to consolidate control over the cartels and other business associations. Robert A. Brady has an extensive and evenhanded history of the organization. He refers to Nietzsche only in a footnote. Brady is discussing “this idea they refer to as *Ständestaat*-literally, ‘a state of estates,’ or classes or social economic castes⁵⁶.” (1942, 89) Footnote fifty six refers us to Aurel Kolnai’s book (*The War Against the West*, New York, 1939), and Kolnai’s discussion of Nietzsche’s views on the subject. (1942, 89)

Abram Lincoln Harris (1899-1963), in his discussion of Sombart and German National Socialism states that Sombart thinks “Above all, German socialism is national in character. It is based upon the idea that ‘there can be no universally valid social order (*allgemeingültige Ordnung*) but only one that is suited to a particular nation (*Volk*).” Nietzsche is said to be included by Sombart as a past exponent of this type of socialism. (809)

Written during the Second World War, several of Harris’s interpretations of Sombart’s views about National Socialism are today controversial. Nietzsche was opposed to socialism.

Frank Hyneman Knight (1885-1972), in his classic article, “The Ethics of Competition,” has one of the most substantial discussions of one of Nietzsche’s ideas. After pointing out that “the system tends to mold men’s minds in the channels which will justify the system itself, and in this sense there is a partial truth in the ‘economic interpretation,’ which we have gone to such lengths to attack and repudiate. But the matter does not, cannot rest there. The whole question is, are we to accept an ‘ethics of power’ à la Nietzsche, or does such an acceptance involve a contradiction in terms and really mean the rejection of any true ‘ethics’ altogether?” (615)

The reference to Nietzsche occurs in the third part of the paper in which Knight is discussing the question “of the ethics of competition as such.” Knight rejects Nietzsche’s view of the ethics of power. His conclusion to this part of the paper is “Finally we have called in question from the standpoint of ideal ethics the predominance of the institution of sport, or action motivated

by rivalry, and in particular have contrasted it with the Pagan ethics of beauty or perfection and the Christian ideal of spirituality.” (624)

William J. Baumol (b 1922), in his discussion of different views about community indifference says, “I doubt whether it is necessary to cite examples from the philosophers² to further corroborate these views.” (48) Footnote two reads, “For example, see Nietzsche, *Beyond Good and Evil*, Chapter 7, Section 225.” (48) This is one of the very few examples of an actual citation in the economic literature.

Baumol is very skeptical about the possibility of developing propositions of universal applicability in the field of welfare economics. He concludes his article, “May it not sometimes be better, then, to begin by setting out our ‘political postulates’ boldly and preceding from there? If nothing else, this procedure would relieve us of the burden of (unattainable) proof and replace it in the lap of the positivist philosopher.” (48)

The *Journal of Political Economy* had five references to Nietzsche. The *American Economic Review* had four references to him as did the *Quarterly Journal of Economics*. The *Review Of Economic Statistics* had two references to him and the *Review of Economic Studies*, one.

A third (five) of the references to Nietzsche were in connection with social anthropology (Closson) and sociology (Ross). The majority of references (seven) by economists were either approving or neutral (Haberler, Hollander, Solow, Samuelson 1962, 1966, Baumol, Brady, 1942). Three of the references rejected Nietzsche’s ideas (Harris, Rogin, Knight).

None of the approving or neutral references point to any substantial role by Nietzsche in the development of economics. The references are mainly to support an argument. The attempts of Harris and Rogin to tie Nietzsche to the Nazis can be written off as wartime enthusiasm. Knight rejects a key idea of Nietzsche as a possible foundation for economic thought.

It is clear that Nietzsche has no significant place or role in the articles that have appeared in the main economic journals.

It may be objected that this kind of count and analysis does not adequately cover the issue of the quality of the references. The few that directly quote Nietzsche are primarily concerned with ethics. Even in the case of Knight, who mentions Nietzsche, it is to reject his views.

3.3. Obituaries, Book Reviews and Other Notices

Of the thirty journal references to Nietzsche that were not in articles, only one occurred in the context of an obituary. Writing, in the middle of the Second World War, the obituary of a famous German professor and onetime member of the Reichstag, E. Rosenbaum avoided the excess of partisanship to which so many other economists were prone.

Rosenbaum says of Gerhart von Schulze-Grävernitz (1864-1943) that “like Jacob Burckhardt and the younger Nietzsche, he looked with deep concern on the development of the new *German Reich*, its mixture of scientific materialism and boisterous nationalism, nor did he, trained in Kantian philosophy, approve of the Marxian brand of German socialism, which he regarded as utterly unrealistic.” (451)

By far the most references to Nietzsche, twenty six of thirty, were found in book reviews. Nineteen were signed: Closson (1986), Brady (1943a), Epstein, Foster, Cowen, Ferguson, Thomson, Suranyi-Unger, McKay, Bober, Brady (1943b), Cahnman, Palyi, Wallace, Hansen, Handman, Hooper, Wallas and Robertson.

3.4. Nietzsche and the First World War

Of the signed book reviews, almost half (seven) referred to Nietzsche in the context of the two World Wars. Two occurred during the First World War (Wallas, Hooper). In 1915 Graham Wallas (1858-1932) reviewed Thorstein Bunde Veblen’s (1857-1929) *Imperial Germany and the Industrial Revolution*. Wallas refers to Nietzsche in one of the few criticisms in what is generally a favorable review.

At this point I should like to suggest to Professor Veblen that a more extended analysis than he gives us of the psychological questions involved in his position is desirable. He is in effect arguing against the doctrine (which before the war almost became the official Prussian ethic) that the Will to Power is the one universal and dominant human instinct. Hobbes said, a couple of centuries ago, that the “general inclination of all mankind” is “a perpetual and restless desire of power after power, that ceaseth only in death.” Nietzsche declared, “Life itself is a Will to Power. It is this that every man in his inmost heart desires – to assert himself against the world without, to appropriate, injure, suppress, exploit.” (*Beyond Good and Evil*, p. 259) (182)

It is interesting that in all of the 47 places where Nietzsche is mentioned in the economic journals, this is the only place where he is quoted with a citation and a primary source reference. Hollander’s direct quotation is from a secondary source.

In 1916, Wynnard Hooper reviewed Maurice Millioud’s *The Ruling Caste and Frenzied Trade in Germany*. “Professor Millioud does not believe in the theory widely accepted in England and many other countries that Germany and Austria were debauched by studying Nietzsche, or Clausewitz, or by the Pan Germanic propaganda, or that they were driven by a ‘political necessity’ which, it is suggested by some friends of Germany, compelled her to free herself from being ‘strangled’ by alliances and *ententes*. His own opinion is that the chief consideration which made the rulers of Germany determined to fight in 1914 was an economic one.” (238)

Millioud thought that “big bankers and manufacturers actually advocated war.” Hooper thought that “It is more likely that they were reluctantly induced to accept it by assurances from the Imperial Government and the Great General Staff that victory, and an indemnity, were certain.” (239)

It is noteworthy that both discussions, occurring during the First World War, were less passionate than those that occurred during the Second World War.

3.5. Nietzsche and the Second World War

The next group of references in a war time context occurred during the period 1939-1949. In 1939, Benjamin B. Wallace reviewed *Italy's Foreign and Colonial Policy, 1914-1937* by Maxwell H.H. Macartney and Paul Cremona. In a discussion of Mussolini's desire to seize Abyssinia before Great Britain rearmed herself it is said that Mussolini, “believes in Nietzsche's Will to Power.” (904) It is not clear whether the reviewer, Mussolini or the authors of the book said this.

In December of 1941, in a review that must have been written just before America's entrance into the Second World War, Melchior Palyi (1892-1970) reviewed *Germany Rampant: A Study in Economic Militarism* by Ernest Hambloch. Palyi summarizes Hambloch's thesis, “Germany of today is a perfectly logical evolution of Germany's past as a whole.” (951) Palyi ends his short and highly critical review, “The candid reader cannot help but feel that the link connecting, say, Hegel and Nietzsche with the aski marks or Luther with the *Bagdad-Bahn* is just as artificial as the ‘logical sequence’ from Arminius to Hitler.” (952)

In 1943, Robert Alexander Brady (b 1901) reviewed *The Nazi State* by William Ebenstein. Much of the review, of an otherwise good book, is devoted to Brady's criticism that Ebenstein does not make the existence of Nazism intelligible in the stream of history. In this connection Brady says, “The occasional references to Bismarck, Nietzsche, and their contemporaries show only a few blood-stained steps from the past before this Frankenstein monster, appearing from nowhere, leaps with headless and pointless ferocity upon the good, the beautiful, and the true.” (551)

In another review published in 1943, Brady (1953a) reviewed *The Roots of National Socialism* by Rohan D'O. Butler. Brady summarizes his criticism of Butler as follows. “Now, of all the times, is not the time to repeat the mistakes made in the heat of battle in the last World War. Of all those mistakes, the worst one we could make – either in the councils of state or on the printed page – is the indictment of a whole people. That, in effect, is what Mr. Butler has done.” (392)

Brady supports his view with a long quotation from Butler, of which the following is part. “The exultation of the heroic leader goes back to Moeller

Vandenbruck, Spengler, Lamprecht, Chamberlain, Nietzsche, Lassalle, Rodbertus, and Hegel, back to Fichte's *Zwingerherr zur Deutschheit*." And further on, "The abasement of the individual before the state finds precedent with Hegel. The Nazis say that might is right; Spengler said it; Bernhardt said it; Nietzsche said it; Treitschke had said as much; so had Haller before him, so had Novalis." (Butler, 276-277, Brady, 390)

In 1949, M.M. Bober reviewed *European Ideologies* edited by Felix Gross. Nietzsche appears in a chapter written by Friedrich Stampfer, "Nazism: Its Spiritual Roots." Stampfer, a former member of the Reichstag, "concentrates on the ideas of Gobineau, Sorel, Le Bon, Carlyle, Chamberlain, Tille, Moeller, and Alfred Rosenberg. Denying any influence of Hegel or Fichte, he admits some possible influence of Nietzsche." (453) In short, this reference is another about the possible influence of Nietzsche on the origins of Nazism.

3.6. Nietzsche and Population

Three of the signed book reviews mentioned Nietzsche in the context of population policies or theories of social progress. Closson (1896b) reviewed *Von Darwin bis Nietzsche: Ein Buch über Entwicklungsethik* by Alexander Tille. He thought that Tille had "a disposition to overestimate both the originality and importance of Nietzsche's work" in the growth of selectionist ethics. (395)

Max Sylvius Handman reviewed *Social Adaptation: A Study in the Development of the Doctrine of Adaptation as a Theory of Social Progress* by Lucius Moody Bristol. Adaptation is one theory of social progress. One aspect of adaptation is "passive physical adaptation or the notion of biological evolution". "Under this head he [Bristol] discusses the work of ... the neo-Darwinian sociologists: Nietzsche, Kidd, Galton, Pearson, and Lapouge, as well as the environmental school: Marx, Buckle, Ratzel-Semple, and Ripley." (515)

J.M. Robertson reviewed *Pre-Malthusian Doctrines of Population: A Study in the History of Economic Theory* by Charles Emil Stangeland. Nietzsche is mentioned in part of the review that is critical. "For a loose sentence about the teaching of 'The Sacred Book of Zororaster, the Zendavesta' the sole authority offered is again the *Grande Dictionaire*, and for the next sentence, as to Persian philoprogenitiveness, the only references are to Madam Blavatsky and to Nietzsche's *Thus Spoke Zarathustra* – and without page at that." (404-405)

3.7. Nietzsche on a Variety of Topics

The other signed reviews covered a variety of topics.

Max Epstein reviewed *Das Philosophische-Ökonomische System des Marxismus* by Emil Hammacher. Epstein states that Hammacher "draws a

most interesting parallel between the views of Marx and Nietzsche! (Be it remembered that Nietzsche was one of the bitterest opponents of socialism.)” (69)

Tyler Cowen reviewed *Liberal Utilitarianism: Social Choice Theory and J. S. Mill’s Philosophy* by Jonathan Riley. Cowen states that “Riley’s use of Mill thus needs to be supplemented by a strong dose of Nietzsche, who draws our attention to the value of the unchosen fate, the surprise, the paradoxical, and the irrational.” (77)

John Foster reviewed *Monopoly in Money and Inflation* by H. Geoffrey Brennan and James M. Buchanan. Foster thinks, “In sum the paper is a piece of propaganda which will be impressive to the unenlightened. Irrespective of good intentions, it is another small step on the road to fascism.” (1105) The reference to Nietzsche occurs when Foster writes, “This is not Adam Smith who emphasized the underlying structure of moral values, but is more reminiscent of Nietzsche!” (1105)

C.E. Ferguson reviewed *On Political Economy and Econometrics: Essays in Honour of Oskar Lange*. He called it “doubtless the worst *festschrift* ever published.” One item in a long list of “naiveté and nonsense” was “März [statement] that Nietzsche was a dominating influence on Schumpeter.” (225)

David Thomson reviewed *Political Theory: Philosophy, Ideology, Science* by A. Hacker. Thomson complains that Nietzsche is omitted in this “large scale exposition and interpretation of the ideas of great political theorists.” (843)

Theo Suranyi-Unger (b 1898) reviewed *The Law of Freedom as the Remedy for War and Poverty* by Emil Korner. Unger states that “F. Nietzsche, A. Schopenhaur, J.W. Goethe, and F. Schiller are quoted scores of times. Yet, American and English students of economics will deplore the fact that the author entirely ignores the relevant standpoints of, for example, J.B. and J.M. Clark, T. Veblen, and F.H. Knight.” (914)

Donald C. McKay reviewed *War and Human Progress: An Essay on the Rise of Industrial Civilization* by John Ulric Nef (b 1899). He wrote that “Mr. Nef looks back nostalgically to a period that witnessed the growth of toleration, the cultivation of moderation, proportion, and reason, and the relative absence of the excesses that were to follow, first from the spread of modern nationalism and later from the rediscovery of ‘evil’ by Nietzsche, Freud and company, and its exploitation by the totalitarians.” (283-284)

Alvin H. Hansen (1887-1975) reviewed *World Social Economic Planning: The Necessity for Planned Adjustment of Productive Capacity and Standards of Living* by The International Industrial Relations Institute. This was a two volume compilation of addresses at the *World Social Economic Congress* at Amsterdam, in August of 1931.

In Hansen’s view, “economic organization is in a fundamental sense nothing more than economic planning.” (818) For him, “The problem of economic

organization is, in the final analysis, a problem of human organization. This modern economic problem is enormously complicated by the fact that the world's population is divided into many nations, each having reached a different stage in the development of economic techniques and social control. One delegate significantly quoted the words of Nietzsche: 'There approaches inevitably, hesitantly, terrible as fate itself, the great problem and question: How shall the world as a whole be administered?' " (818)

3.8. Unsigned Reviews and Notices

Seven of the references found in book reviews were unsigned (Editors – 1908a, 1908b, 1908c, 1912, 1913, 1914, 1971). None were of any consequence: A notice of a book in French that includes a discussion of Nietzsche (ed. 1908a, 316); A notice of the publication of a translation of Nietzsche's *Human, All Too Human* (ed. 1908b, 408); A notice of a publication of an article about Nietzsche in a socialist journal (ed. 1908c, 571); Vida D. Scudder's rejection of Nietzsche's impossible aristocratic solution to "the dilemma" which faces the modern world in favor of socialism (ed. 1912, 646); James Ramsay MacDonald's (1866-1937) attack on the philosophy of syndicalism. He claims that Georges Sorel (1847-1922), syndicalism's leading philosopher, was misled by Nietzsche (ed. 1913, 373); According to the reviewer of *The Larger Aspects of Socialism*, the author, socialist Willam English Walling, "brings a crowd of witnesses" to testify for socialism, "some of them strangers in the Socialist camp as we have commonly thought – [Stirner? PRS] and Nietzsche for example." (ed. 1914, 196); A notice in an annotated listing of new books which includes Ben D. Seligman's book *Molders of Modern Thought* that discusses Nietzsche (ed. 1971, 939).

All but one of the remainder, the obituary by Rosenbaum, were trivial book notices. There were two advertisements for books with Nietzsche's name in the title (Back Matter 1986, New Books, New Books. 1915) and a note in an advertisement that Nietzsche was one of their authors (Back Matter 1988).

4. OTHER EVIDENCE

Because it is so useful and fast, one of the first places to look for information is the World Wide Web. But, a word of caution – it is virtually worthless for general information about people or subjects that are beyond the chronological range of the major databases and research engines. The Web is also of little use for finding materials specific to a topic like this one.

Occasionally, one can be lucky. Usually, unless one has much experience, the Web is a great time waster. For example, hours of searching found an article

by Johannes M. Bauer, "Market Power, Innovation, and Efficiency in Telecommunications: Schumpeter Reconsidered." (IPU Working Paper #97-01, Published in *Journal of Economic Issues*, June 1997)

In footnote three Bauer writes, "It has been pointed out that Schumpeter's conception of the heroic entrepreneur is similar to Weber's charismatic leader as well as to Nietzsche's *Übermensch* (overman). The latter distinguished between 'overmen' and the so-called 'mass' or 'herd' that may have influenced Schumpeter's distinction between the energetic type and the adaptive type [Santarelli and Pesciarelli 1990, 689]." (<http://www.bus.msu.edu/ipu/market.htm>)

The internet search also turned up an article by Douglas Collins, "*L'Amour intellectuel de Dieu*: Lacan's Spinozism and Religious Revival in Recent French Thought." It has much about Schumpeter and Nietzsche but is written in a version of postmodern English I do not understand. (<http://www.anthropoetics.ucla.edu/Ap0301/collins.html>)

Other important sources for information about the role of economists in the history of social thought are the works by Edwin Robert Anderson Seligman (1861-1939) editor of *Encyclopaedia of the Social Sciences*, Harry Elmer Barnes (1889-1968) and Howard Paul Becker (1899-1960) *Social Thought From Lore to Science*, Berthold, (Bert) Frank Hoselitz (1913-1995) *A Reader's Guide to The Social Sciences* and David Lawrence Sills (b 1920) editor of the *International Encyclopedia of the Social Sciences*.

4.1. The Encyclopaedia of the Social Sciences

There are two discussions of Nietzsche in the *Encyclopaedia of the Social Sciences*. The first, by Robert Eisler (1882-1949), was in his article "Free-thinkers." The "great immoralist," Nietzsche, is given credit for reviving "the polemic arguments of antiquity against Judaeo-Christian democratic, humanitarian ethics." (Vol. 6, 470)

The most important entry is "Nietzsche, Friedrich Wilhelm" by the French expert, Charles Philippe Théodore Andler (1866-1933). Two pages long, in keeping with the high biographical standards of the *Encyclopaedia*, it is an excellent article. (Vol. 11, 373-375) There is nothing about economics in the article.

4.2. Social Thought From Lore to Science

The references to Nietzsche in the three volumes of Barnes and Becker are but six, all trivial for our purposes. The first reference is in Volume I, Chapter VII, "The Meeting of East and West and the Advance of Secularism." "One can understand, if not sympathize with, Nietzsche's raptures; men of mighty energy, astounding versatility and appalling wickedness appear on the scene,

men *released* [original italics] from the bonds of 'The Thirteenth, Greatest of Centuries.' Culture contact had done its work." (258)

In Volume II, in the section "Theories of the Total Process of Historical Change," Nietzsche's name is one in a list of those to be excluded from the field of historical sociology on the grounds that his writings show traces of the "relative but transcendent philosophy of history." (767)

There are four references in Volume III. Two are references to Ernst Troeltsch's (1865-1923) labeling of Max Scheler (1874-1928) as a "Catholic Nietzsche." (908 and 912) The next reference is to August Strindberg (1849-1912) who was an "uncompromising opponent of the emancipation of women" and took Nietzsche's injunction seriously. "When thou hast to do with women, do not forget thy whip." (945-946) The final reference is to a work by a Roumanian tracing conceptions of culture from Rousseau to Nietzsche. (1094)

4.3. A Reader's Guide to The Social Sciences

Hoselitz does not mention Nietzsche.

4.4. The International Encyclopedia of the Social Sciences

There are four discussions of Nietzsche in the *International Encyclopedia of the Social Sciences*. The first, "Literature: Political Fiction," is by James C. Davies. He has a long section on "Nitzschean and anti-Nitzschean Themes." (Vol. 9, 436-438) Although Davies also has a section, "The Economic Class Struggle," his article is devoted to fiction about it as it relates to politics. He points out that Jack London, in *Martin Eden* (1908) has Eden reflecting "Perhaps Nietzsche had been right. Perhaps there was no truth in anything, no truth in truth – no such thing as truth." (Vol. 9, 433)

The second discussion of Nietzsche occurs in the article "Spengler, Oswald" by Klemens von Klemper. Spengler is said to have acknowledged the influence of Goethe and Nietzsche from whom he acquired the 'questioning facility.' Klemper asserts that Spengler's "ponderousness and lack of humor in fact took him far afield from both Goethe and Nietzsche." (Vol. 15, 128)

The third reference is in Edward A. Tiryakian's article "Typologies." "Jung's treatment of personality types owes some of its inspiration to Nietzsche." Later, he adds, "Nietzsche's influence has loomed particularly large in the attempt to characterize types of sociocultural systems which has been one focus of attention in cultural anthropology." (Vol. 16, 184)

The last reference is in "Utopianism: Utopias and Utopianism," the concluding section, "The Antiutopian Reaction," by George Kateb. "The roots of antiutopianism are to be found in the writings of Dostoevski and Nietzsche Scattered throughout Nietzsche's writing are found ideas that mock utopia

(explicitly or implicitly) by praising heroism, excess, and grandeur of soul.” (Vol. 16, 270)

The Social Science Citation Index covers hundreds of economic journals. See <http://www.bids.ac.uk/journalists/jcat/soc.html>. It aims at completeness, includes many languages and in general, is not useful for this kind of search. A search on a topic like this will turn up an enormous number of citations, most of which will not be relevant. The time required to track down all the journals and analyze the citations is usually not worth the effort.

None of the sources examined challenge the conclusion that Nietzsche did not influence economics even though he did influence the development of several other social sciences.

5. DISCUSSION

“Nietzsche did not directly influence the development of economics” is an example of a negative existential proposition. For centuries philosophers have disputed the question of whether such negative propositions can be proved. One argument for the idea that negative existential propositions can be proved to be false is that it may be possible to demonstrate the opposite proposition, “Nietzsche did influence economics.” If Nietzsche did influence economics, the negative proposition could be considered disproved or falsified.

If it is not possible to prove the positive proposition, “Nietzsche did influence economics” it does not necessarily mean that the negative proposition holds, only that it is a possibility. One method philosophers use to determine the non-existence of something is to carefully search for it. If the thing sought for cannot be found, some philosophers accept that as proof that the thing does not exist. Most other philosophers accept that not finding something provides, at the least, strong evidence that the thing does not exist.

One cannot logically prove that Nietzsche did not influence economics. The best that can be done is to search for evidence that he did. None was found. No one has yet presented any clear proof that Nietzsche had any important influence on the development of economic thought. It remains to explore possible reasons for the situation.

There are several reasons why Nietzsche did not directly influence the development of economics. The most obvious and important reason is that he wrote practically nothing about economics as the subject is understood by most economists. Gide and Rist explicitly exclude him as shown in the earlier quotation. (612)

What can be construed as references to economic subjects are to be found in his writings. Most of those that I have found are in *Human, All Too Human*, e.g. aphorisms 48, 209, 283, 447, 472. An examination of one of them will suffice

to indicate the problems of associating Nietzsche's thoughts with mainstream economics.

48

Economy of kindness. Kindness and love, the most curative herbs and agents in human intercourse, are such precious finds that one would hope these balsamlike remedies would be used as economically as possible; but this is impossible. Only the boldest Utopians would dream of the economy of kindness. (48)

The original German is:

48

Oekonomie der Güte. – Die Güte und Liebe als die heilsamsten Kräuter und Kräfte im Verkehre der Menschen sind so kostbare Funde, dass man wohl wünschen möchte, es werde in der Verwendung dieser balsamischen Mittel so ökonomisch wie möglich verfahren: doch ist dies unmöglich. Die Oekonomie der Güte ist der Traum der verwegenen Utopisten.

(Full online text at <http://german.about.com/homework/german/gi/dynamic/offsite.htm?site=http://gutenberg.aol.de/autoren/nietzsch.htm>)

Although questions about the translation are possible, the crucial issue concerns Nietzsche's approach to economics. It is far removed from that of conventional economists.

Some conference participants felt that, because Nietzsche made comments about several subjects that are included in economics, he may be considered to have contributed to the development of economics. For most economists, fragments about economic subjects are not enough to signify a contribution. No one important in the history of economic thought gained recognition by way of scattered comments about some of the subjects of economics.

The few remarks that Nietzsche made about economists themselves were almost universally derogatory. The most notorious is his comment on Mill. "*John Stuart Mill: oder die beleidigende Klarheit.*" [or the insulting clarity]. (Streifzüge eines Unzeitgemässen, 1 [Excursions of an Old-fashioned One] in *Götzen-Dämmerung* [Twilight of the Idols]). Full text online in German at <http://www.gutenberg.aol.de/nietzsch/goetzend/goetze10.htm>

Nietzsche poses difficult problems of translation. One must understand what he is saying in German before even thinking about doing the English. The translation of Nietzsche from German to English is always an issue. Nietzsche carefully chose his words so that his sentences could be understood in several ways. Often the German terms have several meanings. Some of his remarks are difficult even for German scholars. An example is his comment about Carlyle. "Carlyle: oder Pessimismus als zurückgetretenes Mittagessen." (1, *Meine Unmöglichkeiten*, *Götzendämmerung*)

There are many other reasons that Nietzsche is not in the mainstream of economic thought. Important among these reasons are his rejection of reason and the contradictions to be found in his work. Nietzsche's views about logic and

mathematics are also in sharp contrast with those of mainstream economists both now and during his time.

As is always the case in studies of influence, the time covered is of importance. From about the middle of the nineteenth century to about the time of the First World War, German was one of the important languages of economics. In his comments at the conference, Drechsler pointed out that the main stream English language journals may not fully reflect Nietzsche's influence during the first half of the twentieth century.

It may well be that Nietzsche was more influential in the German economic literature of the time than he was in the English language literature. Even if this was the case, German economics of the time was importantly influenced, if not dominated, by the views of the German Historical School which was losing its importance on the world scene.

If Nietzsche affected the development of some individual, German, economic thought, any influence on mainstream economics by this path would have to be very indirect. To be important, the influence would have to manifest itself in ideas accepted in mainstream economics. It would also seem reasonable to add the condition that ideas of the person having the influence must also be clearly evident in the ideas of the person influenced. The most famous German economists for whom this might have been possible are Schumpeter and Sombart.

The case has been made that some of Schumpeter's ideas about entrepreneurship were inspired or influenced by Nietzsche. See, for an example, Santarelli and Pesciarelli.¹ Many of Schumpeter's ideas about entrepreneurship are now part of mainstream economics. One condition for influence is met – an important idea or conception generally accepted.

The other condition – that the idea must be clearly identifiable in Nietzsche – is not clearly met. It is possible that Nietzsche may have influenced Schumpeter's thinking. If Nietzsche influenced Schumpeter's thinking, then other interesting issues arise. Some of Nietzsche's ideas that Schumpeter is supposed to have been influenced by are the "will to power," the need for and roles of leaders and change in society and individuals, which Schumpeter might have related to his ideas about creative destruction. Nietzsche's ideas about these things are subject to a wide variety of different interpretations, as the above survey shows.

It is not obvious that any of Nietzsche's relevant ideas were stated unequivocally in a way that an impartial judge could say Schumpeter took them directly from Nietzsche.

Nietzsche wrote on many subjects. Why would Schumpeter have selected such elements from Nietzsche's thinking as the "will to power" or the need for and roles of leaders or ideas about change and focus them on either his

conceptions of entrepreneurship or on creative destruction? He could have selected many others, which would have led him to arrive at very different outcomes. Groups from mystics to Nazis have taken some of Nietzsche's thought and used it for their own purposes.

Both Nietzsche and Schumpeter were Darwinians of a sort in their belief that competition will weed out the weak. But this kind of evidence is not enough to force the conclusion that it was Nietzsche whose ideas influenced Schumpeter. Almost every intellectual of the time thought Darwin had found a good explanation for evolutionary change. Ideas that are generally accepted can hardly be considered of great importance in determining the influence of one person on another when they are part of the intellectual milieu.

If it is accepted that Nietzsche did influence Schumpeter's ideas about entrepreneurship or creative destruction, the most that can be said is that Nietzsche's influence on economics was indirect. This raises questions about what might be meant by an indirect influence.

Most often, questions of indirect influences arise when someone tries to make a case that difficult-to-define factors, such as gender, climate, social environment, ideology, philosophy or race, are important causes of some event.

In tracing what influenced the development of an author's ideas, there are many persons, things and events that inevitably operate. Students of the history of science have generally accepted the premise that complicated concepts, such as entrepreneurship or creative destruction, involve ideas from many sources. What makes a genius put these concepts into a system or generalization that is useful has never been exactly determined.

It is for this reason that conclusions about indirect influences must always remain speculative, even when they are useful and interesting. An example of an interesting speculation about indirect influences is Schumpeter discussing the possibilities of Sigmund Freud's (1856-1939) approach. (798)

Another approach to Nietzsche's possible influence is that one must metaphorically read both Nietzsche and those economists he has allegedly influenced. For example, it has been suggested that Nietzsche influenced the importance that Sombart gives to monopolies in his work. The idea seems to be that Sombart gives to the role of monopoly much of the importance Zarathustra gave to the mountain on which he spent ten years. Mainstream economics has never had a place for metaphorical thinking of this kind.

Backhaus, in his comments on the paper, thought that the basic research question and results were "perfectly correct" from the point of view of mainstream economics. However, "From the point of view of hermeneutics it makes no sense." (Personal Correspondence) He is certainly right about that.

Two points need to be made about the use of hermeneutics in understanding the development of economic thought. The most important relates to the possibility that this kind of approach will yield a more profound intellectual

grasp of the subject. In order to decide that, the first question must be: "Whose version of hermeneutics will be used?"

The modern use of hermeneutics began in theology. It remains a theological term used to explain the science of Bible interpretation. It is now used in philosophy to refer to the science and methodology of interpretation. Friedrich Ernst Daniel Schleiermacher (1768-1834) extended the theory beyond scriptural interpretation. Later, Wilhelm Dilthey, (1833-1911) developed it into a general methodology for all the social sciences and humanities. In the twentieth century, Martin Heidegger (1889-1976) and his student Hans-Georg Gadamer (b 1900) rejected the basis of the earlier formulations. Gadamer, the most important of the living exponent of hermeneutics, bases the philosophy on the study of linguistic phenomena.

An important reason that hermeneutics has no significant role in understanding the history of economic thought is that economists generally do not understand hermeneutics. Whether economics would be richer if it had a place for hermeneutics or metaphorical thinking is beyond the scope of this paper.

For some people, another question is whether being part of mainstream economics is any kind of compliment at all. We must leave to other scholars the discovery of productive ways to measure the contribution of Nietzsche to the history of economic thought from that point of view.

6. CONCLUSION

Nietzsche did not influence mainstream economics, despite the fact that he did influence the development of several other social sciences. Any influence he had on the development of economic thought was very indirect.

NOTE

1. I have not been able to determine if the März referred to in the Ferguson review is the same Eduard März who wrote the biography cited in the references.

REFERENCES

- Andler, Charles (1934). "Nietzsche, Friedrich Wilhelm", in Seligman, Edwin R.A. (ed.) (1934). *Encyclopaedia of the Social Sciences*. Associate editor, Alvin Johnson. The Macmillan Company, New York. I worked from the November 1937 reprint which combined two volumes of the original edition into one. The copyright of the original edition was 1934 but all the volumes were not published until 1935.
- Back Matter (1986). Advertisement for Nancy S. Love. *Marx, Nietzsche and Modernity. The Journal of Political Economy*, Vol. 94, No. 6 (Dec.), unpaginated.
- Back Matter (1988). *The American Economic Review*, Vol. 78, No. 2, Papers and Proceedings of the One-Hundredth Annual Meeting of the American Economic Association. (May): vi.

- Barnes, Harry Elmer and Becker, Howard (eds.) (1961), *Social Thought From Lore to Science*, reprint, 3 vols., third edition, Dover Publications, Inc., New York. This is an expanded and revised version of the second (1952) edition of the work first published by D. C. Heath and Company in 1938.
- Baumol, William J. (1946-1947). "Community Indifference." *The Review of Economic Studies*, Vol. 14, No. 1, pp. 44-48.
- Blaug, Mark (1997). *Economic Theory In Retrospect*, 5th ed. Cambridge University Press, Cambridge/New York.
- Blaug, Mark (2001). "No History of Ideas, Please, We're Economists." *The Journal of Economic Perspectives*, Vol. 15, No. 1 (Winter): 145-164.
- Bober, M.M. (1949). Review of *European Ideologies* by Felix Gross. (Edited by Felix Groves. With an introduction by Robert M. MacIver. Philosophical Library, New York, 1948). *The Journal of Political Economy*, Vol. 57, No. 5 (Oct.): 453.
- Brady, Robert A. (1942). "Modernized Cameralism in the Third Reich: The Case of the National Industry Group." *The Journal of Political Economy*, Vol. 50, No. 1 (Feb.): 65-97.
- Brady, Robert A. (1943a). Review of *The Roots of National Socialism* by Rohan D'O. Butler, (Dutton, New York, 1942). *The American Economic Review*, Vol. 33, No. 2 (Jun.) 389-392.
- Brady, Robert A. (1943b). Review of *The Nazi State* by William Ebenstein (Farrar & Rinehart, Inc., New York, 1943). *The Journal of Political Economy*, Vol. 51, No. 6 (Dec.): 551-552.
- Brue, Stanley L. (1994). *The Evolution of Economic Thought*, fifth edition, The Dryden Press, Fort Worth. The first edition was in 1963. There was a sixth edition in 1999 which I have not seen.
- Cahnman, Werner J. (1943). Review of *German Strategy of World Conquest* by Derwent Whitteley, Charles C. Colby and Richard Hartshorne (Farrar & Rinehart, Inc., New York, 1942). *The Journal of Political Economy*, Vol. 51, No. 3 (Jun.): 270.
- Closson, Carlos C. (1896a). "Dissociation by Displacement: A Phase of Social Selection." *Quarterly Journal of Economics*, Vol. 10, No. 2 (Jan.): 156-186.
- Closson, Carlos C. (1896b). Review of *Von Darwin bis Nietzsche: Ein Buch Entwicklungsethik* by Alexander Tille (C.C. Naumann, Leipzig, 1895). *The Journal of Political Economy*, Vol. 4, No. 3 (Jun.): 395-397.
- Closson, Carlos C. (1896c). "Recent Progress of Social-Anthropology (in Notes)." *The Journal of Political Economy*, Vol. 4, No. 3 (Jun.): 410-412.
- Closson, Carlos C. (1896d). "Social Selection." *The Journal of Political Economy*, Vol. 4, No. 4 (Sept.): 449-466.
- Closson, Carlos C. (1899). "The Races of Europe." *The Journal of Political Economy*, Vol. 8, No. 1 (Dec.): 58-88.
- Cournot, A. A. (1838). *Recherches Sur Les Principes Mathématiques De La Théorie Des Richesses*. L. Hachette, Paris.
- Cowen, Tyler (1990). Review of *Liberal Utilitarianism: Social Choice Theory and J. S. Mill's Philosophy* by Jonathan Riley (Cambridge University Press, Cambridge, New York and Sidney, 1988). *Journal of Economic Literature*, Vol. 28, No. 1 (Mar.): 76-77.
- Davies, James C. (1968). "Literature: Political Fiction", in Sills, David L. (ed.) (1968), *International Encyclopedia of the Social Sciences*, 17 vols. The Macmillan Company & The Free Press, New York.
- Davies, James C. (ed.) (1908a). In Recent Publications Upon Economics, notice of Schatz (Albert) L'individualism économique et sociale. Ses origines, son évolution, ses formes contemporain. Paris Colin. 1907). *Quarterly Journal of Economics*, Vol. 22, No. 2 (Feb.): 316.
- Davies, James C. (1908b). In New Publications, notice of *Nietzsche, Friedrich Wilhelm. Human, All Too Human: Book for Free Spirits*, translated by Alex. Harvey (Kerr, Chicago, 1908 Lib.

- of Science for the Workers). *The Journal of Political Economy*, Vol. 16, No. 6 (Jun.): 392-416.
- Davies, James C. (1908c). In New Publications, notice of LaMonte, R.R. "Nietzsche: Iconoclast and Prophet." *International Socialist Review*, Vol. 9: 10-19. (571) *The Journal of Political Economy*, Vol. 16, No. 8 (Oct.): 544-584.
- Davies, James C. (1912). In Book Reviews and Notices. *Socialism and Character* by Vida D. Scudder (Houghton Mifflin Co., Boston and New York, 1912). *The Journal of Political Economy*, Vol. 20, No. 6 (Jun., 1912): 646.
- Davies, James C. (1913). In Book Reviews and Notices. *Syndicalism: A Critical Examination* by J. Ramsay Macdonald (Open Court Publishing Co., Chicago, 1912). *The Journal of Political Economy*, Vol. 21, No. 4 (Apr.): 373-374.
- Davies, James C. (1914). Review of *The Larger Aspects of Socialism* by William English Walling (Macmillan Co., New York, 1913). *The Journal of Political Economy*, Vol. 22, No. 2 (Feb.): 196.
- Davies, James C. (1971). In New Books: An Annotated Listing: Related Disciplines. Seligman, Ben B. (ed.) (1970), *Molders of Modern Thought*, A New York Times book. Quadrangle books, Chicago. *Journal of Economic Literature*, Vol. 9, No. 3 (Sep.): 939.
- Eisler, Robert (1934). "Freethinkers", in Seligman, Edwin R.A. (ed.) (1934), *Encyclopaedia of the Social Sciences*, associate editor Alvin Johnson. The Macmillan Company, New York, Vol. 6: 470.
- Ekelund, Robert B. Jr. and Hébert, Robert F. (1983). *A History of Economic Theory and Method*, second edition. McGraw-Hill Book Company, Inc., New York. The first edition was in 1975.
- Epstein, M. (1910). Review of *Das Philosophische-Ökonomische System des Marxismus*, by Emil Hammacher (Duncker and Humblot, Leipzig, 1909). *The Economic Journal*, Vol. 20, No. 77 (Mar.): 67-69.
- Ferguson, C.E. (1967). Review of *On Political Economy and Econometrics: Essays in Honour of Oskar Lange* (No Editor listed. Polish Scientific Publishers, Warsaw, Poland, 1965). *The American Economic Review*, Vol. 57, No. 1 (Mar.): 225-226.
- Ferguson, John M. (1950). *Landmarks of Economic Thought*, 2nd ed. Longmans Green and Co., New York. The first edition was in 1938.
- Foster, John (1981). Book Note. *Monopoly in Money and Inflation*. By H. Groffrey Brennan and James M. Buchanan (The Institute of Economic Affairs, London). *The Economic Journal*, Vol. 91, No. 364 (Dec.): 1105.
- Gide, Charles and Rist, Charles (1948). *A History of Economic Doctrines From the Time of the Physiocrats to the Present Day*, authorized translation by R. Richards. Second English edition, with additional matter from the latest French editions translated by Ernest F. Row. George G. Harrap & Company Ltd., London. The first French edition was published in 1909. The first English edition, which was a translation of the second French edition, was published in June of 1915. The 1948 edition was a translation of the seventh French edition. The copy I worked from said it was completely reset in the second English edition of 1948 which was a translation of the seventh French edition of 1947.
- Gray, Alexander (1931). *The Development of Economic Doctrine: An Introductory Survey*. Longmans, Green and Co., London. I worked from the 1948 impression.
- Gruchy, Allan G. (1947). *Modern Economic Thought: The American Contribution*. Prentice Hall, Inc., New York.
- Haberler, Gottfried (1950). "Joseph Alois Schumpeter 1883-1950." *Quarterly Journal of Economics*, Vol. 64, No. 3 (Aug.): 333-372.
- Handman, Max Sylvius (1917). Review of *Social Adaptation: A Study in the Development of the Doctrine of Adaptation as a Theory of Social Progress* by Lucius Moody Bristol (Har-

- vard Economic Studies, XIV. Harvard University Press, Cambridge, 1915). *The Journal of Political Economy*, Vol. 25, No. 5 (May, 1917): 515-517.
- Haney, Lewis H. (1949). *History of Economic Thought: A Critical Account of the Origin and Development of the Economic Theories of the Leading Thinkers in the Leading Nations*, fourth and enlarged edition. The Macmillan Company, New York. The first edition was in 1911.
- Hansen, Alvin H. (1934). Review of *World Social Economic Planning: The Necessity for Planned Adjustment of Productive Capacity and Standards of Living* by The International Industrial Relations Institute (The International Industrial Relations Institute: The Hague, 1932). *The Journal of Political Economy*, Vol. 42, No. 6 (Dec. 1934): 817-819.
- Harris, Abram L. (1942). "Sombart and German (National) Socialism." *The Journal of Political Economy*, Vol. 50, No. 6 (Dec.): 805-835.
- Heimann, Eduard (1945). *History of Economic Doctrines: An Introduction to Economic Theory*. Oxford University Press, New York.
- Hollander, Jacob H. (1922). "The Economist's Spiral." *The American Economic Review*, Vol. 12, No. 1 (Mar.): 1-20.
- Hooper, Wynnard (1916). Review of *The Ruling Caste and Frenzied Trade in Germany*, by Maurice Millioud, Professor of Sociology in the University of Lausanne. With an Introduction (pp. 13) by the Rt. Hon. Sir Frederick Pollock, Bart (Constable and Co., 1916). *The Economic Journal*, Vol. 26, No. 102 (Jun., 1916): 237-239.
- Hoselitz, Bert F. (ed.) (1959). *A Reader's Guide to The Social Sciences*. The Free Press, Glencoe, Illinois.
- Hunt, E.K. (1992). *History of Economic Thought: A Critical Perspective*, 2nd ed. HarperCollins Publishers Inc., New York.
- Kateb, George (1968). "Utopianism: Utopias and Utopianism", in Sills, David L. (ed.) (1968), *International Encyclopedia of the Social Sciences*, 17 vols. The Macmillan Company & The Free Press, New York.
- Kennedy, Charles (1966). "Samuelson on Induced Innovation (in Notes)." *The Review of Economics and Statistics*, Vol. 48, No. 4 (Nov.): 442-444.
- Klemper, Klemens von (1968). "Spengler, Oswald", in Sills, David L. (ed.) (1968), *International Encyclopedia of the Social Sciences*, 17 vols. The Macmillan Company & The Free Press, New York.
- Knight, Frank H. (1923). "The Ethics of Competition." *Quarterly Journal of Economics*, Vol. 37, No. 4 (Aug.): 579-624.
- Kuhn, William Ernest (1963). *The Evolution of Economic Thought*. South Western Publishing Company, Cincinnati.
- Landreth, Harry and Colander, David C. (1994). *History of Economic Thought*, 3rd ed. Houghton Mifflin Company, Boston.
- Mai, Ludwig H. (1975). *Men and Ideas in Economics: A Dictionary of World Economists Past and Present*. Littlefield, Adams & Co., Totowa, New Jersey.
- März, Eduard (1983). *Joseph Alois Schumpeter – Forscher, Lehrer & Politiker*. Verlag für Geschichte und Politik, Wien.
- McAfee, R. Preston (1983). "American Economic Growth and the Voyage of Columbus." *The American Economic Review*, Vol. 73, No. 4 (Sep.): 735-740.
- McKay, Donald C. (1951). Review of *War and Human Progress: An Essay on the Rise of Industrial Civilization*, by John U. Nef (Harvard University Press, Cambridge, 1950). *Journal of Economic History*, Vol. 11, No. 3. Part 1 (Summer): 283-285.
- Mitchell, Wesley C. (1969). *Types of Economic Theory: From Mercantilism to Institutionalism*, 2 vols., edited with an introduction by Joseph Dorfman, Vol. I, 1967. Augustus M. Kelley Publishers, New York.

- Neff, Frank Amandus (1950). *Economic Doctrines*, 2nd ed. McGraw-Hill Book Company, Inc., New York.
- Nietzsche, Friedrich (1996). *Human, All Too Human: A Book For Free Spirits*, translated by Marion Faber, with Stephen Lehmann. Introduction and notes by Marion Faber. With a New Introduction by Arthur C. Danto. University of Nebraska Press, Lincoln. Originally published in 1878 as *Menschliches, Allzumenschliches*.
- New Books (1915). In *Reviews and New Books; General Works, Theory and Its History*. Wolf, A., *The Philosophy of Nietzsche. Studies in Economics and Political Science*, No. 45 (Constable, London, 1915). *The American Economic Review*, Vol. 5, No. 4 (Dec.): 832-834.
- Newman, Philip Charles (1952). *The Development of Economic Thought*. Prentice Hall, Inc., New York.
- Niehans, Jürg (1990). *A History Of Economic Theory: Classic Contributions, 1720-1980*. Johns Hopkins University Press, Baltimore.
- Oser, Jacob and Blanchfield, William C. (1975). *The Evolution of Economic Thought*, 3rd edition. Harcourt Brace Jovanovich, Inc., New York. The first edition was in 1963.
- Palyi, Melchior (1941). Review of *Germany Rampant: A Study in Economic Militarism* by Ernest Hambloch (Carrick & Evans, Inc., New York, 1939). *The Journal of Political Economy*, Vol. 49, No. 6 (Dec.): 951-952.
- Pribram, Karl (1983). *A History of Economic Reasoning*. The Johns Hopkins University Press, Baltimore & London.
- Rima, Ingrid Hahne (1978). *Development Of Economic Analysis*. Richard D. Irwin, Inc., Homewood, Illinois.
- Robbins, Lionel (1998). *A History Of Economic Thought: The LSE Lectures*, edited by Steven G. Medema and Warren J. Samuels. Princeton University Press, Princeton, N.J.
- Robertson, J.M. (1906). Review of *Pre-Malthusian Doctrines of Population: A Study in the History of Economic Theory* by Charles Emil Stangeland (The Columbia University Press, New York/P.S. King & Son, London. [Vol. xxi., No. 3, of *Studies in History, Economics and Public Law*, edited by the Faculty of Political Science of Columbia University.] *The Economic Journal*, Vol. 16, No. 63 (Sep.): 405.
- Rogin, Leo (1941). "Werner Sombart and the Uses of Transcendentalism." *The American Economic Review*, Vol. 31, No. 3 (Sep.): 493-511.
- Roll, Eric (1942). *A History of Economic Thought*, second revised and enlarged edition, Prentice-Hall, New York. The first edition appeared in 1937. The fourth revised and enlarged edition appeared in 1973. There may be even later editions. I worked from the fifth printing of the revised and enlarged edition of 1949.
- Rosenbaum, E. (1943). "Obituary: Gerhart von Schulze-Gaevernitz." *The Economic Journal*, Vol. 53, No. 212 (Dec. 1943): 450-453.
- Ross, Edward Alsworth (1903). "Recent Tendencies in Sociology III." *Quarterly Journal of Economics*, Vol. 17, No. 3 (May): 438-455.
- Samuelson, Paul A. (1962). "Economists and the History of Ideas." *The American Economic Review*, Vol. 52, No. 1 (Mar.): 1-18.
- Samuelson, Paul A. (1966). "Samuelson on Induced Innovation: Rejoinder: Agreements, Disagreements, Doubts, and the Case of Induced Harrod-Neutral Technical Change (in Notes)." *The Review of Economics and Statistics*, Vol. 48, No. 4 (Nov.): 444-448.
- Santarelli, Enrico and Pesciarelli, Enzo (1990). "The Emergence of a Vision: The Development of Schumpeter's Theory of Entrepreneurship." *History of Political Economy*, Vol. 4, No. 4 (Winter): 677-696.
- Schumpeter, Joseph Alois (1954). *History of Economic Analysis*, edited from manuscript by Elizabeth Booddy Schumpeter. Oxford University Press, New York.

- Senn, Peter R. (1996). "Sombart's Reception in the English Speaking World," in Vol. 3, "Then and Now," *Werner Sombart (1863-1941) Social Scientist*, edited by Jürgen Backhaus. Metropolis Verlag, Marburg, pp. 147-286.
- Senn, Peter R. (1996). "Judgment in History: The Case of Werner Sombart," in Vol. 3, "Then and Now," *Werner Sombart (1863-1941) Social Scientist*, edited by Jürgen Backhaus. Metropolis Verlag, Marburg, pp. 297-320.
- Senn, Peter R. (1996). "A Bibliography of Works by and About Werner Sombart in English," in Vol. 3, "Then and Now," *Werner Sombart (1863-1941) Social Scientist*, edited by Jürgen Backhaus. Metropolis Verlag, Marburg, pp. 327-358.
- Solow, Robert M. (1974). "The Economics of Resources or the Resources of Economics" (Richard T. Ely Lecture). *The American Economic Review*, Vol. 64, No. 2, Papers and Proceedings of the Eighty-sixth Annual Meeting of the American Economic Association. (May): 1-14.
- Spann, Othmar (1930). *Types of Economic Theory*, translated by Eden and Cedar Paul from the Nineteenth German Edition, George Allen & Unwin Ltd., London. The first edition of the German original, *Die Haupttheorien der Volkswirtschaftslehre*, Quelle & Meyer, Leipzig, was published in 1912. The nineteenth revised German edition was published in 1929.
- Spiegel, Henry William (1983). *The Growth of Economic Thought, Revised and Expanded Edition*, second edition. Duke University Press, Durham, North Carolina.
- Suranyi-Unger, Theo (1952). Review of *The Law of Freedom as the Remedy for War and Poverty* by Emil Korner. Introduction by Alfred Amonn. Translated from the German by H. Leigh Farwell. (London: Williams and Norgate, Ltd. 1951) 2 vols. *The American Economic Review*, Vol. 42, No. 5 (Dec.): 912-914.
- Taylor, Overton H. (1960). *A History of Economic Thought: Social Ideals and Economic Theories from Quesnay to Keynes*. McGraw-Hill Book Company, Inc., New York.
- Thomson, David (1961). Review of *Political Theory: Philosophy, Ideology, Science* by A. Hacker (Macmillan Company, New York and London, 1961). *The Economic Journal*, Vol. 71, No. 284 (Dec.): 843-844.
- Tiryakian, Edward A. (1968). "Typologies", in Sills, David L. (ed.) (1968), *International Encyclopedia of the Social Sciences*, 17 vols. The Macmillan Company & The Free Press, New York.
- Wallace, Benjamin B. (1939). Review of *Italy's Foreign and Colonial Policy, 1914-1937* by Maxwell H.H. Macartney and Paul Cremona (Oxford University Press, New York, 1938). *The Journal of Political Economy*, Vol. 47, No. 6 (Dec.): 904.
- Wallas, Graham (1915). Review of *Imperial Germany and the Industrial Revolution* by Thorstein Veblen (Macmillan Co., New York, 1915). *Quarterly Journal of Economics*, Vol. 30, No. 1 (Nov.): 179-187.
- Whittaker, Edmund (1940). *A History of Economic Ideas*. Longmans, Green and Co., New York.
- Whittaker, Edmund (1960). *Schools and Streams of Economic Thought*. Rand McNally & Company, Chicago.
- Zweig, Ferdinand (1950). *Economic Ideas: A Study of Historical Perspectives*. Prentice-Hall, Inc., New York.



<http://www.springer.com/978-0-387-32979-6>

Friedrich Nietzsche (1844-1900)
Economy and Society
Backhaus, J.G.; Drechsler, W. (Eds.)
2006, XII, 246 p., Hardcover
ISBN: 978-0-387-32979-6