

**Heterogenesis of Ends:
Herbert Spencer and the Italian economists**

Claudia Sunna and Manuela Mosca
claudia.sunna@unisalento.it; manuela.mosca@unisalento.it

University of Salento (Lecce, Italy)

PROVISIONAL VERSION – PLEASE DO NOT CITE OR QUOTE

Abstract. The profound and extensive influence of Spencer’s thought is now generating a good deal of analysis, as is his contribution to evolutionist philosophy, to pedagogy, ethics, and anthropology. The aim of this paper is to highlight the importance of Spencer’s theoretical work on economic thought. It also analyses the way in which this work was discussed and interpreted by the Italian economists at the turn of the 19th Century. In particular, it investigates the influence of Spencer’s theory of evolution for the thought of Maffeo Pantaleoni (1857-1924) and Francesco Saverio Nitti (1868-1953). These two very representative Italian scholars, both belonging to the liberal-radical political area, were nevertheless on opposite sides for their economic methodology and the issue of government intervention in the economy. However, they both found their divergent inspiration in Spencer. Extending the study of the reception of his work to the Italian sociologists, it explains how, from those same theories, two diametrically opposed visions and perspectives on social development could arise.

Key words: development, economic sociology, economic policy, evolutionism, F.S. Nitti, M. Pantaleoni, population theory

JEL Classification: B13, B15, B31, B41

Acknowledgements: A previous version of this paper was presented at the 18th Annual ESHET Conference (Lausanne, 29-31 May 2014). We would like to thank Annie Cot, Federico D’Onofrio, Susumu Egashira, Elena Kalmychkova, Atsushi Komine, Monica Poettinger, Gianfranco Tuset, Richard van den Berg, and the other participants in the session. We also would like to thank Cosimo Perrotta for his useful suggestions. The usual disclaimer applies.

1. Introduction

By the 1930s the contribution of Herbert Spencer (1820-1903) to sociological thought was considered quite out of date. In 1937, Talcott Parsons felt confident enough to state baldly: "Spencer is dead" ([1937] 1949: 3). And yet there has been a revival of interest in his work. The influence of Spencer's thought is now generating a good deal of analysis; and his contribution to evolutionist philosophy, to pedagogy, ethics, and anthropology, is also being studied¹. However, the impact of Spencer's theoretical work on economic thought has been surprisingly neglected.

The aim of this paper is to contribute to the historiography on Spencer's influence on economics as a discipline, and on his reception in Italy. We believe it is important to provide a new study for these areas of research for at least two good reasons, both referable to the general theme of the relevance of the intellectual context in the elaboration of economic theory. In this case we are referring in particular to the fact that Spencer's ideas strongly characterized the cultural environment in which the ideas of the economists of two generations were developed.

The first reason for this study concerns the *vision*, i.e. the ideological bias, which conditioned the directions taken by the research of these two generations of economists: as we shall be explaining below, it was based on an evolutionist philosophical outlook. Evolution was of course a pivotal concept in the age of positivism², and we recall that according to Schumpeter ([1954] 1966: 415), it was actually Spencer's theory of social evolution, in addition to Comte's sociology, which in that era provided a body of thought both anti-metaphysical ("positivist" in Schumpeter's own words), and universal³. We shall also be pointing out that this same evolutionist vision was shared by the late classical economists and the marginalists, despite their much better known conflicting differences; it will be the neoclassical economics which came afterwards that turned out to be incompatible, at least until more recent times, with this idea of evolution.

The second reason why we believe it is important to provide this analysis lies in the fact that the case of Spencer is a perfect example of those theoretical innovations in economics which start from developments in related disciplines (Schumpeter's "neighboring fields")⁴. His name is in fact present in the path-breaking contributions of the economists of the time who were exploring new directions in research, imitating methods and acquiring categories not just from sociology, but

¹ One example among others is Turner (1985). Parsons' sentence, quoted in the text, is echoed by Zafirovsky's title (2000): "Spencer is dead, long live Spencer".

² The positivism we refer to is not the one dealt with by Caldwell (2012). The period from the last decades of the nineteenth century up until the First World War is often called the age of positivism. However, this definition is less widespread in the Anglo-Saxon world, see Caponigri (1971, IV: 191). R.B. Ekelund, Jr. and E.S. Olsen (1973) examine the influence of Comte's positivism on Mill and Cairnes, but without citing Spencer.

³ On the relation between evolutionism and religion in this era see Leonard (2011).

⁴ As is well known, the evolutionist idea opened up new paths for research in many other disciplines.

also biology⁵. Spencer therefore occupies a place of honor in the intellectual context of that age, having provided the economists with two of the essential premises for the inquiry into new paths of research: a new vision, and a new methodological model⁶.

We mention here very briefly that Spencer's theory of evolution was set out in his *Social Statics* (1851), in *A Theory of Population* (1852), in *Psychology* (1855), and in its complete form in "Progress: Its Law and Cause" (1857); he therefore preceded Darwin, whose *Origin of Species* came out in 1859, and who extended his theory to society in 1871 in *The Descent of Man*. Despite their well known differences⁷, Darwin and Spencer were full of praise for each other on various occasions, citing each other on many grounds. Today the new directions in economic research which employ biological categories trace their roots back to Darwin⁸, not to Spencer, whose name in the area of economics is by now "largely ignored"⁹. Therefore, an approach "in retrospect"¹⁰ would suggest studying Darwin's influence on the economists, not Spencer's; nevertheless, in the age under examination here, it was Spencer the economists cited, not Darwin¹¹.

After a historiographical section (§2), we briefly set out Spencer's theory of evolution (§ 3). Then, we summarize the Italian historical and theoretical context in those years (§ 4), and we analyze the ideas which derive the most from Spencer's theory, first in Pantaleoni (§ 5), and then in Nitti (§ 6). Finally (§ 7) we explain how, from that same theory, two diametrically opposed visions and perspectives on social development arose.

2. Spencer and economic thought

As mentioned above, one of the aims of this paper is to contribute to the historiography on Spencer's influence on the economists. Is there a good reason for analyzing the place Spencer occupies in economic thought? To answer this question, we first check out whether there is anything on economic subjects in Spencer's own work, since as is well known he was not an economist.

⁵ Bannister (1979: 34) points out that "In 1875 the economist John Elliott Cairnes charged that Spencer 'transferred laws of physiology (including the 'survival of the fittest') to the domain of social science'". Levy and Peart (2009: 35) also show that "biology entered into economics by way of Herbert Spencer", with *The Economist* used as the "network through which social Darwinism flowed into economics" (31).

⁶ According to Levy and Peart (2009: 35) he had also provided "a new foundation for economic ethics".

⁷ There is a wealth of literature on the advisability of attributing to Spencer the label of social darwinist, and on what the differences are between his theory and Darwin's (Bannister 1979; Hawkins 1997; Hodgson 2004; Peart and Levy 2004 and 2005). For an excellent review of the literature see Weikart (2009).

⁸ Darwin is evoked both within mainstream economics (Frank 2011), and from a critical perspective (Rosenberg 2014).

⁹ We quote here from the entry of the *New Palgrave* on Spencer, written by Donnelly (1987: 437), striking for its extreme brevity.

¹⁰ By this expression we mean its original sense of the study of the history inspired by contemporary economics (Blaug 1962).

¹¹ Hodgson (1993: 407) demonstrates this, referring also to other literature. In addition, this emerges from Morgan (1993: 579).

As sub-editor of *The Economist* for five years, one might expect to find some specifically economic writings of his, but apparently in that position he “wrote neither editorials nor reviews” (Francis 1978: 320). Moreover, we have to consider that “the word ‘economics’ ... does not appear in the title of any of his published works” (Laurent 2004: 61). And yet already in 1891, when Spencer was still active, William C. Owen published *The Economics of Herbert Spencer*, a book which was the first of a series of interpretations of his works from an economic perspective. What were the subjects attributed to him in this area? For Owen, an evolutionist socialist, Spencer’s economics took in: land policy, free market orientation, ethics, the theory of egoism, and his opposition to socialism¹². In addition to Owen's book (1891), Spencer's economic thought is also set out in the old *Palgrave*: the author of the entry on him (Tedder [1894-99] 1925-26: 776-778) recalls Spencer’s early reading of Adam Smith and the “many points of contact” of his ethics with that of the father of political economy, such as sympathy, moral sense, liberalism, free market, free trade, etc.; he focuses also on Spencer’s conviction about the “coincidence of the moral law and the teaching of political economy”¹³. In that same *Palgrave* the entry *Darwinism*, which refers much more to Spencer than to Darwin, contains a confutation of the analogy, attributed to the former, between competition and “the struggle for existence among the lower animals” (Cannan [1894-99] 1925-26: 481-482). Later literature also examined economic subjects in Spencer's thought, such as his theory of hedonism¹⁴, and of land policy (Laurent 2004), but above all his free market orientation¹⁵. The latter provoked a rather controversial debate, which we concentrate on here because of its importance in the context of our enquiry.

On the one hand, Spencer has been considered the first to recognize a “parallelism between economic laissez-faire and Darwinianism” (Keynes [1926] 1972: 284). Incidentally, according to Schumpeter ([1954] 1966: 773) it is precisely the combination of evolutionism with a “naïve” version of laissez-faire which would explain its great success. The evolutionary grounds on which Spencer’s free market orientation is founded are thus highlighted (Leonard 2011: 441), at least starting from the 1880s¹⁶. The hope for a function exclusively negative of the state, strengthened by the imperatives of biology, was attributed to him from the beginning (Hofstadter 1944: 40), sometimes as a consequence of the opposition between the “principle of individualism as against Statism” (Nock 1939: vii). On the other hand, focusing on the years before the 1880s, Francis (1978)

¹² We shall be coming back to these subjects, below.

¹³ This correspondence between Smith's ideas and those of Spencer was recently questioned by Werhane (2000).

¹⁴ On this, Miller (1972) examines the following points: 1. Individual utility (hedonism), 2. Social utility and social welfare, 3. Social optimum.

¹⁵ Zafirovsky (1999: 604), in a not very convincing article on the history of Economic Sociology, attributes to Spencer the interest in the following economic subjects: 1. Markets, exchange, and money, 2. Dual economy (rural-urban), 3. The division of labor (differentiation), 4. Economic development (dynamics).

¹⁶ In particular Norman (1982: 30) notes that in Spencer’s early works, laissez-faire is deduced from a doctrine of natural rights, while in the 1880s “the idea of the spontaneous evolution of rules and institutions came to dominate his social thought”.

finds that Spencer was against laissez-faire, and that he became an advocate of this idea only in 1884, as a reaction to socialism¹⁷. Similarly Collard (2009: 240), although concluding that Spencer was “more favorable to laissez-faire than to socialism”, brings out his initial position against the private ownership of land. From a different perspective, also Hiskes (1983: 595) criticizes the perception of Spencer as the symbol of “the harsh excesses of the liberal state”, arguing that despite his economic liberalism, he did not neglect altruism, and that he also supported the value of political community. The detailed studies of Levy and Peart (2004, 2005 and 2009) should be linked to this interpretation, on the primacy of Spencer in the discussion of sympathy in evolution, and on his egalitarian utilitarianism. So there has always been interest in the economic features of Spencer's thought. As can be seen, the contributions attributed to him are to be found mainly in two areas: one related to his hypotheses on the motivations behind human behavior in the economic sphere, the other to subjects of economic policy. Neither of the two areas lies exactly within the confines of economic theory; so what leads us to make this contribution to the historiography about Spencer's role in economic thought?

The reason lies in the enormous impact some of his ideas have had on the discipline of economics. Even Schumpeter ([1954] 1966: 445), who very definitely cannot be numbered among Spencer's admirers¹⁸, recognizes that his writings, together with those of Darwin, had a great influence on social scientists, especially on the generation of economists who constructed neoclassical orthodoxy¹⁹. Historiography has never systematically examined this strong interest in Spencer's thought: Miller (1972: 207) already complained about Spencer's “almost total neglect” in the history of economic thought. Obviously, research on individual economists does not omit to derive from the father of social evolutionism certain features of their theories. For example, the scholars of late classical economists have examined the philosophical discussions between Spencer and his oldest friend, J.S. Mill²⁰, as well as the articles on him by his contemporary Cairnes in 1875 (Boylan and Foley 2004: 16), or his arguments with the younger Sidgwick (Schneewind 1977). A great follower of Spencer was Sumner (Bannister 1973), whose theory of competition follows exactly in the footsteps of the idea of struggle for existence (Morgan 1993: 580). As for Spencer's influence on the early neoclassical economists, the best known one is on Marshall, whose relation to Spencer has been the object of more than one study (Hodgson 1993; Laurent 2000; Moss 2010).

¹⁷ Francis (1979: 318) shares a similar opinion about Spencer with Lionel Robbins.

¹⁸ He classifies in just a couple of lines Spencer's theoretical construct as substantially irrelevant: “Spencer was a man of representative eminence who, to an amazing degree, was at the same time profound, clever, and silly” (Schumpeter [1954] 1966: 773).

¹⁹ Also the influence that economists had on Spencer would deserve study, as has been the case with Darwin in the very remarkable historical reconstruction by Schweber (1980). In a study of this kind his youthful friendship with Hodgskin would be relevant (Francis 1978: 320).

²⁰ J.S. Mill (1865) contrasts Comte's positivism with Spencer's (Skorupsky 2014).

But many others also felt they had to reckon with the ideas of the British evolutionist: one was the utilitarian Edgeworth (Peart and Levy 2005), another was J.B. Clark, for whom “in the long run, the survival of the stronger was desirable” (Morgan 1993: 586)²¹; Spencer made a great impact on von Wieser, according to the evidence of Hayek²², as well as on Fisher, pupil of the social darwinist Sumner (Friedman 2013: 55-56), and his importance was reiterated by Knight (1939: 408)²³. Spencer even affected those who distanced themselves from him, like Ely (Morgan 1993: 583)²⁴, and above all, Veblen²⁵; finally, we recall that Commons declared he had been “brought up” on Spencerism²⁶. Very many other economists of the age measured themselves against his ideas, since they were so fashionable, even without citing him explicitly: traces of Spencerian thought have been found for example in Jevons (Miller 1972: 223), in H.C. Adams (Bannister 1979: 126), and still others. The more recent economists owing something to Spencer are Hayek²⁷ and Buchanan²⁸. Apart from these specific studies, we were unable to find a systematic inquiry into Spencer’s sway over the economists which, in the late nineteenth and early twentieth centuries, was both profound and extensive.

Spencer's books were best sellers in the years 1870-90, but his influence actually lasted from the 1850s to the 1920s. The reasons for his decline are mainly attributed to three causes: the anachronism of his optimistic idea of evolutionary progress with respect to the dramatic, tragic nature of what later happened (to start with, the shock of the First World War); the growing professionalization and specialization of the disciplines belonging to the area of the social sciences; and the identification of social darwinism with racism and imperialism (Mingardi 2011: 3-4). To these reasons may be added others specifically concerning the discipline of economics, such as the inadequacy of “the looseness of Spencer’s framework” (Miller 1972: 227) compared to the requirement of formalistic rigor of the neoclassical economists, and the gradual abandonment of biological analogies by mainstream economics, in favor of the return to those drawn from physics and mechanics (Hodgson 1993: 413). Today biology has completely reconquered the interest of

²¹ Spencer's influence on J.B. Clark is also mentioned by Laurent (2004: 61).

²² “Herbert Spencer’s *The Study of Sociology* ... had such a strong impact on him ... that he definitely ... became intensely involved with social phenomena” (Hayek 1992: 110).

²³ Cited in Levy and Peart (2009: 35).

²⁴ Commons recalls that in 1888 he had heard “Professor Ely denounce Herbert Spencer who had misled economists” (quoted in Hofstadter (1944: 34)), while Bannister (1979: 132) mentions that for Ely Darwinian natural science neglects the ethical element.

²⁵ Spencer's importance for Veblen is stated by Dorfman (1934), who goes so far as to argue that Veblen’s *Theory of the Leisure Class* should be read as a response to Spencer’s ideas. Veblen, also a pupil of Sumner at Yale, is typically taken as an example to denounce the stereotyped interpretation of the link between Spencer's ideas and conservative economists (Bannister 1979: xxx; Leonard 2011: 447).

²⁶ The passage appears in Commons' autobiography, and is cited by Hofstadter (1944: 34) and others.

²⁷ Norman (1982: 30) argues that Hayek paid “little attention to Spencer’s social science and philosophy”. Levy and Peart (2009: 30) admit that “Hayek wrote little on Spencer [but he] regarded Spencer as following an approach similar to his own”.

²⁸ Wagner (2014: 20) writes: “Buchanan’s implicit sociology fits within the exchange tradition, as would the sociology of Herbert Spencer around Pareto’s time”.

economists, and evolutionary economics is developing again on new foundations (Hodgson 2002).

We now move on to the second goal we set ourselves, that of contributing to the historiography on Spencer's reception in Italy, also not very extensive. However, on this subject it was possible to find some references, beginning with the years immediately after his death (Ranzoli 1904), and also beyond (Orano 1918), up until our own day (Beck 2004). We deal with this literature later on in this article.

The intersection set of these two literatures (the one on Spencer's influence on the economists, and the one on his reception in Italy) is empty. In this case, too, the name of the evolutionist sociologist is rapidly cited in the biographies of the Italian positivists²⁹, but derivation from Spencer of some of the ideas of the most influential of the Italian economists of this era has never been properly focused on. In this paper we investigate in particular the great importance of Spencer's theory of evolution and progress for the thought of two Italian economists who were very representative of the Italian economic thought in these years: Maffeo Pantaleoni (1857-1924) and Francesco Saverio Nitti (1868-1953). Pantaleoni is credited with being the first to apply marginalist analysis to public finance³⁰; he was also the author of a famous textbook, the first to systematize marginalist thought (Pantaleoni 1889)³¹. Internationally well known, he wrote very many entries for the first edition of the *Palgrave* dictionary (1894-99), and his paper on economic dynamics (1909) was discussed in a session of the American Economic Association's annual conference³². Nitti, in turn, conditioned Italian economic culture like few others, founding important reviews and associations, adopting as a Prime Minister economic and social policies, and putting together a remarkably extensive consensus. These two important Italian scholars, whose impact on the discipline in Italy was enormous, were on opposite sides with regard to economic methodology, as well as on the issue of government intervention in the economy. However, they both found their divergent inspiration in Spencer. Derivation from Spencer of the ideas of both the two Italian economists is an exemplary case for confronting an important historiographical question in the general study of his reception: indeed, right from the start his writings gave rise to interpretations not merely varied, but in opposition to each other. Already Owen (1891: 238) complains that Spencer "is quoted as an authority by both sides"; this occurred in many countries³³ and, as we shall be showing here, it happened quite sensationally in Italy. It is this phenomenon that led us to use the expression "heterogenesis of ends".

²⁹ Boccardo (1881a, 1881b), Cognetti de Martiis (1881), Messedaglia (1891).

³⁰ Pantaleoni's (1883) work was translated into English and published in Musgrave and Peacock (1967).

³¹ Translated into English as *Pure Economics* (Pantaleoni 1898).

³² The discussants were Clark, Patten, and Fetter (1910).

³³ At the already mentioned 2014 ESHET Conference, those taking part in the session in which this paper was presented noted a similar ambivalent reception for Spencer in the U.S. and Japan.

3. Spencer's theory of evolution

As we have seen, there are many features of Spencer's theory which attracted the economists; we shall be examining below the influence of his theory of population (§ 6). Here we analyze the unifying principles of his theory of evolution³⁴.

The point of departure is his utilitarianism: Spencer believed that hedonism lay at the root of the motivations of human behavior, that ethical principles must be based on scientific laws, and that the final aim is the greatest happiness. According to Spencer, societies are destined to reach this objective thanks to the general law of evolution, a law of universal significance which for him was valid for both the biological and social world. In *The Study of Sociology* he argued: "That there is a real analogy between an individual organism and a social organism, becomes undeniable on observing that certain necessities determining structure are common to both" (Spencer 1873: 326).

To explain both social and biological changes, he developed the idea of a progression from the homogeneous to the heterogeneous. According to Spencer, biological evolution proceeds from individual cells to complex organisms. The latter modify their characteristics to survive the environmental conditions which change with time. In this process the weaker or unfit element is fated to disappear. Thanks to the "law of the survival of the fittest" (Spencer 1872, I: 379), Spencer saw evolution as progressive. In fact, unlike Darwin, Spencer based his theory of evolution on Lamarck's idea of the inheritance of acquired characteristics: adaptation stimulates the search for conscious strategies to improve one's own physical and intellectual faculties, and these improvements are passed on to the generations which follow. This mechanism explains Spencer's evolutionary optimism, and his faith in the inevitability of progress. As we shall see, he believed the attainment of the final state of evolution was certain to happen.

The biological analogy enabled him to explain the entire history of humanity from the simple organization of prehistoric society up until the complexity of industrial society. He contrasted two models of society, coming one after the other, and whose values are very different: to begin with there is the "militant" society, violent and coercive, which then evolves into "industrial" society, peaceful and individualist. In this view, war is an instrument that militant societies used before the affirmation of complex societies; with the evolving of the process of civilization, industrialization and democratization, war is replaced by industrial competition (Spencer 1873: 346).

Spencer saw this process of evolution in the forms of social relations as spontaneous: it does not get interrupted, unless obstacles appear to hinder its freedom to function. As this scheme of general evolution has in the individual its basic unit of analysis, society was analyzed as an aggregate made up of individuals, in which every "external" intervention leads to the interruption

³⁴ Among the various analyses of Spencer's thought see P. Werhane (2000), J. Offer (2010), and A. Mingardi (2011).

of the processes of evolution. As we mentioned earlier, according to Spencer the best organization for societies was a *laissez-faire* economy, with almost no form of government. In his most controversial work, *The Man Versus the State* (1884), Spencer specified that all the state's measures of intervention, from education to public utilities, from the railways to vaccination campaigns, from legislation in defense of the workers to public libraries, are obstacles to the functioning of the principle of evolution, as they involve some form of charity by the state and are realized through taxation.

Because of the differentiation and specialization of the components of society and of biological organisms, individual species become dependent on each other according to a law of the "division of physiological labour". Actually, for Spencer, complexity involves greater interdependency of the components of society. He stated that in addition to egoism, individuals are endowed with human sympathy, which lies at the basis of the sentiment of justice, of altruism, and of voluntary assistance. According to Spencer, in the advanced phases of evolution conflicts are destined to fade away, and the struggle for existence to produce not only competition, but also spontaneous cooperation. The final limit of evolution is hence a static society where individuals live happily and in peace.

Another very important aspect of Spencer's theory for our analysis, introduced in the first edition of *Social Statics* (1851), concerns the question of landed property. Spencer considered the law of equal freedom of every human being as a fundamental principle, to be applied to every situation in which collective and individual decisions should not interfere with the right of all individuals to see their own sphere of action respected. In the case of land, the principle of equality, according to Spencer, leads to the outcome that there should be no private property in land, but a form of co-heirship of all men to the soil, and this principle was for him consistent with the level of highest civilization (Spencer 1851: ch. IX). Spencer will eliminate the chapter on land only with the edition of *Social Statics* of 1892 (Spencer 1892), yet this hypothesis of the nationalization of the land should be borne in mind in the interpretation of a socialist kind of the theory of evolution, which as we shall be seeing, he will reject.

4. The Italian context

The historical context of our reconstruction coincides on the whole with the twilight of the Liberal Age³⁵. In Italy this was a period of industrialization, strikes and lock-outs, of the extension of the electorate, but also of the rise of colonialism and nationalism, of the strengthening of socialism (reformist and maximalist), and of far-reaching policies of government intervention in

³⁵ The Liberal Age in Italy is the period between Italian unification (1861) and the rise of fascism (1922).

the economy. Then, in the transition phase between the end of World War I and the fascist era, the grave economic and social difficulties provoked two years of popular demonstrations which were violently stifled by the fascist para-military squads, until in 1922 Mussolini received a mandate from the king to form a government. From the point of view of the history of ideas, in this period we see historicist culture challenged by the glorious Italian marginalist school³⁶, then a phase of contamination of paradigms and disciplines (historicism and statistics, economic sociology and biology, Marxism and marginalism), until corporatism was imposed by the fascist regime. From the 1890s to the 1910s the two main approaches to political economy which opposed each other in Italy were both represented by a prestigious journal: on the one hand the free trade oriented *Giornale degli economisti*, re-born in 1890, which was strongly theoretical and also militantly committed; on the other its adversary *La riforma sociale*, founded in 1894, which defended a positivist and interventionist orientation, less theoretical and more eclectic. We have to remember that in Italy economic methodology has always been linked to ideology. The interesting point for us is that Pantaleoni was one of the owners of the former journal, whereas the founder of the latter was Nitti, and this made the two scholars so representative of Italian economic thought in the decline of the Liberal Age³⁷. Between the two economists, although they both belonged to the liberal-radical area³⁸, there was hence an open rivalry due to the great differences in method and vision, as well as personal ill-feeling at various levels³⁹. Pantaleoni was a pure theoretician, very much free market oriented, while Nitti was a positivist believing in an active role for the state.

To fully grasp this historical period, however, we are certain one has to bear in mind the Spencerian theory of evolution. Put briefly, we shall be seeing how Italian economists in favor of a competitive market economy, like Pantaleoni, Francesco Ferrara and Tullio Martello, made use of the analogy with the theory of evolution understood as a spontaneous and natural process⁴⁰. On the opposite side, historicist economists, like Gerolamo Boccardo and Angelo Messedaglia, also accepted the principle of evolution, this time to provide legitimacy for the positivist approach to the study of economic phenomena⁴¹. For example, Salvatore Cognetti De Martiis (1889), to demonstrate the contingency of socialism within the evolutionary process, studied the forms of “primitive socialism” of antiquity from which, through the effect of progress, we reached the

³⁶ When speaking of this age of Italian economic thought it is of course essential to quote Schumpeter: “the most malevolent observer could not have denied that [Italian economics] was second to none by 1914” ([1954] 1976: 855).

³⁷ On this era of the history of Italian economic thought see Magnani (2003), while on economic thought in Italy between 1870 and 1890 see Macchioro (1996).

³⁸ Pantaleoni belonged to the free trader faction of the Radical Party, in opposition to the social radicalism of Nitti (Orsina 2002).

³⁹ In 1895 the two of them competed for a post made available by the University of Naples, with Pantaleoni the winner.

⁴⁰ Utilizing the theory of evolution, Ferrara and Martello in the *Giornale degli Economisti* harshly criticized the positivist orientation of the economists who adhered to the historical school. Martello’s articles, published anonymously in 1891, were later collected in Martello (1912). Pantaleoni will be analysed in the next section.

⁴¹ Boccardo (1881a) and (1881b), Messedaglia (1891), see also Macchioro (1970).

organization of capitalism. In the same way, supporters of socialism like Napoleone Colajanni and Enrico Ferri, as we shall be seeing below, interpreted the principle of evolution in terms of a process of transformation of society which led towards the affirmation of the rights of all the workers⁴². This brief survey of the positions of just a few of the Italian economists around the end of the nineteenth century gives an idea of how far the orientation of Pantaleoni and Nitti with regard to Spencer's theoretical framework was actually representative of the entire Italian context.

5. Pantaleoni

Pantaleoni cites Spencer from his first work (1882)⁴³, until his last (1924). He was 37 years younger, and for two decades, until Spencer's death in 1903, their publications overlap⁴⁴. Pantaleoni (1925-26a: 825) includes himself among the many followers of the British philosopher: he wrote that not only the Italian positivists were "under the sway of Spencer's evolutionism", but also the theoretical economists⁴⁵. Pantaleoni calls himself a "Darwinist"⁴⁶, and attributes to Pareto an admiration of Spencer equal only to that "of another person very well known to myself" ([1924] 1938: 350), in other words equal to his own. The secondary literature on Pantaleoni often mentions this influence, but in passing, without exploring it in any great detail⁴⁷. Here we cite just one very precious testimony, that of his lifelong friend De Viti de Marco, who in his obituary recalls Pantaleoni's adherence to Spencerian philosophy in these terms: "The law of evolution, which for the philosopher is the *fatal* succession of the various stages of the evolutionary process⁴⁸, becomes the norm of his [Pantaleoni's] everyday political actions, because he believes one *could* halt or hurry up the cycle" (De Viti de Marco 1925: 174).

Pantaleoni never wrote an essay specifically on Spencer⁴⁹, but he made ample use of his theory. His universal selectionism in actual fact represents the element of continuity in his intellectual development, one otherwise characterized by radical shifts. We begin by examining the occasions where Pantaleoni explicitly cites the English sociologist, dividing his career into

⁴² Colajanni (1884), Ferri (1894). For Owen (1891: 176), too, scientific socialism is compatible with Spencer's theory because it is "essentially evolutionary, and regards the advance toward civilization as the steady unfolding of an organism".

⁴³ In his first work Pantaleoni (1882: xciii) cites Spencer's "ultimate ideas".

⁴⁴ Spencer's most important publications of these years were: *The Man versus the State* (1884a), *The Principles of Ethics* (1892-93), and the posthumous *An Autobiography* (1904).

⁴⁵ Groenewegen (1998: 49) points out this difference between the positivists and the pure theorists, and briefly illustrates some reasons why Pantaleoni cannot be considered a positivist.

⁴⁶ Letter to Loria of 17 March 1892, in Fiorot (1976: 487).

⁴⁷ Michelini (2011, ch. 15) derives extensively from Spencer Pantaleoni's positions in the final phase of the latter's life. Other studies associate to Spencer Pantaleoni's selectionism (Del Vecchio 1925: 218; Michelini 1998: 70; Bini 2012), and hedonism (Fisher 1898; Groenewegen 1998: 48; Bellanca and Giocoli 1998: 49; Michelini 1998: 70).

⁴⁸ This interpretation of Spencer's theory by De Viti coincides with that of Hodgson (1993: 410), who brings out "the supreme law of progress".

⁴⁹ After Spencer's death, in a letter (of 18 December 1905) to Benedetto Croce, Pantaleoni asks him (in vain) to write an article for the *Giornale degli economisti* on Spencer (Michelini 1998: 28). This article was probably written by Emilio Cossa (1906).

three principal phases: the first (1882-1897), in which he is a pure economist who utilizes marginalist theory in innovative ways; the second (1898-1914), in which he goes well beyond the limits of economic theory and experiments with methodological and disciplinary contaminations, in particular between economics, biology and sociology; and the third (1915-1924), more markedly political, in which he becomes a nationalist, and then adheres to fascism.

In his first phase Pantaleoni ([1887] 1904: 165-166) uses biology to corroborate the hedonist premise of marginalism: “the sensations of pleasure – he writes, citing Spencer (1879) – are such only insofar as they are appropriate to the preservation of life”⁵⁰. This concept is reiterated in his well known *Pure Economics* ([1889] 1898: 15), through the words of Spencer himself: “pleasure-giving acts are life-sustaining acts”⁵¹. He also attributes to the British philosopher the “relativity of sensations of pleasure and pain” which, he writes, “is an economic fact of the greatest importance, [as] a long series of economic theorems is based upon it” ([1889] 1898: 17). It will be remembered that in Spencer's philosophy the prevalence of the psychological aspect in the explanation of human behavior was one of the factors that decreed its abandonment (Skorupsky 2014). Nevertheless, we note here that it is precisely this aspect that contributed to its success among the economists, since it provided a scientific basis to the foundations of microeconomics in its initial stages. As for the case of conflicts between self-preservation and the welfare of the species, Pantaleoni thinks that natural selection eliminates those kinds of egoists whose acts are not conducive to the survival of their species. However, he leans on Spencer when stating that also the kind of egoist who identifies “his own maximum happiness with that of his species” has to preserve himself first ([1889] 1898: 20-22)⁵²: in this way he validates the hypothesis of *homo oeconomicus*. Pantaleoni is again echoing Spencer when he explains another psychological law: with evolution there is an indefinite progression of wants (and relative pleasures), not only addressed to “direct means of satisfaction”, but also to the instruments to realize them (Pantaleoni [1889] 1898: 55)⁵³. Then he finally draws on Spencer (1851) to argue how, in a system of paper money, one may do without the state (Pantaleoni [1889] 1898: 232)⁵⁴. As well as *Pure Economics*, it is important to mention in this phase two other occasions when Spencer's name is linked to Pantaleoni's. In these years they are both strongly free market oriented⁵⁵, and in 1891 Pantaleoni writes that one of the Italian “followers of the extremest individualism” is “as much opposed to

⁵⁰ In this paper the translations are ours, where they are not already available.

⁵¹ This citation, like almost all the others from Spencer in Pantaleoni's *Pure Economics*, comes from *The Data of Ethics* (Spencer 1879). It's interesting to notice that here Pantaleoni assimilates this concept to the theory of Pietro Verri, the famous philosopher of the Italian enlightenment.

⁵² This subject will be taken up again and explored in detail in Pantaleoni (1892). Miller's comment (1972: 211) on Spencer highlights the close similarity to Pantaleoni: “Spencer distinguished between the welfare of society as an entity and the aggregate of happiness of the individuals composing it” (211).

⁵³ Spencer's theory of instrumental vs direct commodities is also recalled in Pantaleoni ([1889] 1898: 84).

⁵⁴ This is the only time, in *Pure Economics*, where Pantaleoni quotes from *Social Statics* (Spencer 1851).

⁵⁵ We spoke of the attribution to Spencer of a free market orientation in section 2.

nearly every function of the State as anything Herbert Spencer has written on the subject” (Pantaleoni 1891: 767). We also think this is the place to mention a letter (Dec. 25, 1891) Pareto wrote to Pantaleoni. The former praises the Belgian economist Gustave de Molinari because in his opinion he transferred Spencer's ideas into Political Economy, and adds: “I feel that in that area a *very great deal* may be done” (Pareto [1891] 1960: 130-131). Pareto thus makes explicit a program of research which both will pursue, if along very different lines (Dardi 2014). Pantaleoni's universal selectionism emerges in this phase also in private letters, without even citing explicitly the source that inspired him, when he writes: “Insofar as being ‘best fitted to benefit the environment’⁵⁶, neither history, nor ethics, nor any other discipline gives us the criterion to decide about it, our own historical and moral criteria themselves being an outcome of the selection”⁵⁷.

From the beginning of his second phase, in 1898, Pantaleoni abandons static analysis, and takes to exploring beyond the confines of economics as a discipline: on the one hand he incorporates categories and methods from sociology and biology⁵⁸ in his analysis of economic phenomena, and on the other he applies economic logic to social, historical and political realities. In this phase many more features of Spencer’s theories enter into the development of his arguments. For example, in a conference on the “strong” and the “weak” in economics (Pantaleoni 1898a), delivered before the British Economic Association, he makes much use of biological metaphors⁵⁹. In another one, he explicitly draws upon Spencer’s ideas on voluntary cooperation (Spencer 1876-1896), using it to express his opposition to the socialist, and very different, idea of cooperatives. In particular, he recalls with what elegance Spencer has known how to break down “every activity of a nation into military cooperation and industrial cooperation” (Pantaleoni [1898b] 1925: 132)⁶⁰. He then cites him to a considerable extent on the propitiating character of gifts in an historical study of the origins of barter (1899). But above all, he derives the psychological motivations of exchange as a voluntary act from Spencer (1855); it is in this context that he faithfully follows Spencer’s conception of justice with reference to “every act whose effects are appropriate to the preservation of the species” (Pantaleoni [1913] 1925: 126)⁶¹.

⁵⁶ In English in the original.

⁵⁷ Letter to Loria of 17 March 1892, in Fiorot (1976: 487). The subject Pantaleoni deals with in this letter is anti-Semitism, on which see Michelini (2011).

⁵⁸ Del Vecchio (1925: 218) even goes so far as to say that for Pantaleoni economics itself is a biological science.

⁵⁹ On this essay, Becattini (1987: 794) notes Pantaleoni’s “acceptance of many of the concepts typical of evolutionist sociology (e.g. his distinction between predatory, parasitical and mutualistic settlements)”.

⁶⁰ In a letter (April 16, 1897) to the Italian socialist, positivist and evolutionist Napoleone Colajanni, Pantaleoni explains that his work on cooperatives originated in an argument with the French economist Charles Gide (Ganci 1959: 331). It was followed by an article where Gide defends cooperation, citing Spencer’s forecast of its glorious future (Gide 1898: 490). The correct interpretation of Spencer seems to us to be that of Pantaleoni; as Nock (1939: vii) notes, for Spencer: “society should be organized on the basis of voluntary cooperation, not on the basis of compulsory cooperation”. See also Hiskes (1983).

⁶¹ Hiskes’ belief (1983: 496) that “Spencer’s case for liberty is made entirely on the grounds that evolutionary progress requires it” is thus valid also for Pantaleoni. Leonard (2011: 446) writes: “proponents of laissez-faire argued the best way

In his third phase, with the Great War, and then with the Soviet revolution, Pantaleoni's optimistic evolutionism, itself deriving from Spencer, suffers a serious blow; despite this, he still believes that the laws of nature where social phenomena are concerned will prevail⁶². We find references to Spencer on a social organism of the industrial type moving backwards to one of the military type: Pantaleoni firmly believes that a backward step of this kind, caused by the war, is only part of the story and will be temporary (Pantaleoni [1916] 1917: 8-11). Writing on the presumed age of the various nations, he reasons at length on the hereditary nature of acquired characteristics which Spencer (1864-67) had taken from Lamarck, as also on the ramifications of the evolving features of economic institutions (Pantaleoni [1917] 1918: 101-103). The alarm he expresses on the political developments after the war is connected again to a subject discussed by Spencer (1868) with "great persistence and anxiety", that is to say: what "will happen to *individual liberties* and *paternalism*, or to *coercion*" (Pantaleoni 1918: 120). Finally, he (Pantaleoni 1919: 62) acknowledges Spencer for having forecast and deeply analyzed the consequences of the war many years beforehand in his *The coming of slavery* (1884b). During this phase, Pantaleoni's social darwinism is associated with nationalism, according to the most frequent use of the expression during these years of war (Hodgson 2004: 449), although not according to Spencer himself.

Besides the occasions when Spencer is cited or directly suggested in Pantaleoni's writings, we feel we can affirm that his borrowing - through Spencer - from the natural sciences served to give scientific foundations to his vision, always understood in Schumpeter's sense, which the Italian economist maintains throughout his life. In his works, all of them written with the political aim of combating socialism, many of Spencer's ideas form the theoretical basis of a construct we can sum up as follows. Egoism is a universal sentiment: the result of pursuing pleasure is self preservation. With selection, the best win out, and this is right and necessary for social evolution. Inequality, the premise and effect of the struggle for existence, cannot be eliminated⁶³. As in nature, where selection saves the species, in society collective interests have to prevail over individual interests⁶⁴. The only class capable of recognizing and pursuing the general interest is the small, western, educated *élite*, industrious, innovative, and civilized, which history has selected. It is the only one interested in reproducing the conditions for selection, and it has to do this having recourse to coercion. Progress depends on the ability of this *élite* to defend the social dynamic and

to improve the race was by Spencerian bootstrapping, for individuals to purposefully improve their mind and bodies - natural selection".

⁶² Michelini (2011: 110) traces in this phase, too, of Pantaleoni's thought, the "Spencerian *metaphysics*".

⁶³ Similarly, Hodgson (1993: 410) remarks that for Spencer, unlike Darwin, "diversity was more significant as the teleological result of the evolutionary process, rather than its essential starting point".

⁶⁴ There is a clear analogy with Spencer's arguments. For example, Miller (1972: 209) says of him: "In the early stages of man's development the utility of society often conflicted with social utility, and it was the role of certain coercive institutions to subserve the interests of the welfare of society".

transmit its characteristics to succeeding generations so that selection may continue⁶⁵. In addition, in the Anglo-Saxon countries, which are further ahead on the path of progress, “public spirit is more generous, ... more noble than elsewhere the employment of great fortunes, ... more courtly and honorable a man's conduct towards a woman, ... more sensitive the use humanity makes of animals” (Pantaleoni [1900] 1925: 267)⁶⁶. As one can see, Pantaleoni is perfectly in line with the “analytical hierarchicalism” (Peart and Levy 2008: 240) of his age, and with the then widespread conviction of the Anglo-Saxons’ racial superiority (Peart and Levy 2008: 340). Moreover, for him, social mobility is possible for those who accept competition using their own abilities, but not for the losers who ask to be assisted by the state. Society must not violate natural selection by protecting the incapable. If persuasion is insufficient, force will have to be used. The strong normative connotation of Pantaleoni’s system, soon noticed by Fisher (1898), has an important political consequence: that the government has to be very small and very strong⁶⁷. It is well known that in this phase he adhered to fascism⁶⁸, and supported the pro free market economic policy of its first government. In spite of the dramatic political events of this period, Pantaleoni will always continue to affirm this vision – as is shown by the fact that he extensively reiterates its validity in his obituary of Pareto, written a short while before his own death (Pantaleoni 1924)⁶⁹ – even if accompanied by a continuous very private brooding over it⁷⁰.

As can be seen, Pantaleoni's interpretation of Spencer's philosophy was not so very different from Hofstadter's (1944: 40-41): for the latter “Social Darwinism was a reactionary creed, largely associated with the promotion of racism, nationalism and competitive strife” (Hodgson 2004: 446). To tell the truth, Pantaleoni often makes judgments that would be condemned as racist today, in both a broad and strict sense⁷¹; he belongs very much to that school, quite typical of his age, which made a “systematic use of a biological, deterministic discourse to explain and remedy, often using racial categories, the root causes of economic problems” (Leonard 2008: 359)⁷². At the start of our study we referred to the fact that it was precisely this kind of approach to Spencer's

⁶⁵ This statement also coincides exactly with Miller’s interpretation of Spencer: “Spencer thought that Western countries, when not at war, tend to produce people who by deed and example help channel evolution in the best direction and who by nature would be fit citizens of the future industrial state” (1972: 210).

⁶⁶ As we have already mentioned, for Spencer, too, progress will lead to a peaceful, happy final phase, with “a proper balance between altruism and egoism” (Miller 1972: 209).

⁶⁷ This vision of government of Pantaleoni's was very quickly highlighted by Sraffa (1924: 650).

⁶⁸ Mussolini’s first government (1922-1924) was a coalition of liberals, Catholics and members of the Fascist Party. Pantaleoni died in 1924, a year before the establishment of Mussolini’s Fascist dictatorship. However, the violent and anti-liberal character of fascism was already evident.

⁶⁹ In this period he also writes two further entries for the *Palgrave* dictionary, referring once again with conviction to Darwinism and Spencer (Pantaleoni 1925-26).

⁷⁰ See Pantaleoni's intense letter to Benedetto Croce of 12 September 1917, in Michelini (1998: 34-35).

⁷¹ Leonard (2005: 208) recalls that in those years the concept of race was used in imprecise and incoherent ways.

⁷² Maccabelli (2008) deals with the wide resonance of anthropo-sociology in economic literature at the end of the nineteenth century.

theory which was one of the reasons for his decline⁷³. As is well known, and as we shall be showing soon, there have been profoundly different interpretations of his thought.

6. Nitti

The youthful Francesco Saverio Nitti (1868-1953), during the 1890s, tried to emerge as a professional scholar within the Italian academia. In 1891 he published his first successful work, *Il socialismo cattolico*, and in 1894 *La popolazione e il sistema sociale*⁷⁴. This latter volume is the one where the influence of Spencer on the formation of Nitti's economic interpretation of the processes of population growth is extremely clear.

La popolazione is a historical study of economic doctrines centered on population theories. Every theory Nitti analyses is seen in relation to the social environment and the historical period in which it was disseminated. He dedicated the study to Achille Loria, explaining that this depended both on the argument of the essay, and on the general conception and methodology he was inspired by⁷⁵. In his dedication to Loria, Nitti set out the plan of his work: "In the first part of this book I demonstrated the way almost all the most important demographic doctrines originated directly in the environment which produced them: in the second part I tried, with the experience of biology, statistics and economics, to reformulate what I believe to be the true law of population" (Nitti [1894] 1971: 488). In the first part of the essay, drawing upon the approach of the German economist Von Miakowski, Nitti interprets the history of doctrines on population, and in general conceives of economic doctrines, as the outcome of the influence of the "philosophy of poverty" and the "philosophy of wealth". He writes: "On one side an entire array of economists only argues for hypotheses which imply fatality, necessity, and inalterability; on the other an array of writers fawning upon popular passions, turning themselves into promoters of doctrines implying immediate changes and profound turmoil" (ibid.: 486). In this way every economic doctrine can be traced back to the environment which promoted it and supported it in defense of its own interests. The two opposing philosophies, of wealth and poverty, express themselves, as far as the doctrines of population are concerned, in the direction of pessimism or optimism. According to the pessimistic tendency, the control of population growth is necessary in view of the scarcity of resources required for sustenance. For the optimists, no control of the population is necessary in that it regulates its size according to the availability of the resources.

⁷³ In Hodgson (2004: 428)'s words: "Social Darwinism has been blamed for providing ideological and pseudo-scientific motivations for a number of twentieth-century horrors. These include eugenics, two world wars, Nazism and the Holocaust".

⁷⁴ F. Barbagallo (1987), p. XV, XLI-XLII. Between 1894 and 1897 *La Popolazione e il sistema sociale* was translated into English, Spanish and French.

⁷⁵ According to Dal Pane (1971: XIV) Loria, in his own personal interpretation of Marx "had postulated the need to trace the historical causes of economic doctrines, which meant *making the economic theory of the writers of economics*".

The review of the economic theories of population starts from the pre-Malthusian and arrives at contemporary English, French, Russian, and Italian theories. But all the reviewing is firmly oriented towards the confutation of Malthusian theory. In the conclusions to the first part of the work Nitti reiterates that “Malthus’ doctrine was no less than an occasional political doctrine, a protest of conservative individualism, directed against a faith in human perfectibility of economic radicalism; (...) countries that have a high birth rate still follow Malthusianism, those with low ones reject it” (ibid.: 589). But research on theories of population should turn to a careful examination of all the factors which influenced the demographic dynamic.

In the second part of his work, Nitti sets out his own ideas on population, placing Spencer’s theories at the centre of his analysis. Spencer’s biological approach to population (1852) was a great influence on this work of Nitti’s, insofar as it explained that the process of civilization was closely connected to a decrease in human fertility. In short, according to Spencer human fertility diminishes with the process of evolution. This biological approach had behind it a tradition consolidated in the nineteenth century, attempting to confute the Malthusian theory which held that population growth was unalterable in every country and in every age, proceeding in its famous geometrical progression. In Spencer’s analysis, on the contrary, “the forces preservative of race are two (...): power to maintain individual life, and power to propagate the species (...). We have seen that for the continuance of any race of organisms it is needful that the power of self-preservation and the power of reproduction should vary inversely” (ibid. pp. 9-12). This simple principle, deriving once again from a biological analogy, for Spencer explains the reasons why the human species, by progressively concentrating on preservative processes, has in part compromised its capacity to reproduce. In Nitti’s reconstruction this implies that “a great fertility is always accompanied by great mortality. Each higher degree of organic evolution is accompanied by a lower degree of fertility” (Nitti [1894] 1971: 557). In conclusion, for Nitti the “essential truth of Spencer’s doctrine” is that of prefiguring, through the process of evolution, the achievement of a population “perfectly well-balanced” (ibid.: 559). Spencer’s analysis, for Nitti, nevertheless requires integration with the consideration of other factors, not strictly biological, which influence the demographic dynamic. These factors concern the cultural and economic evolution of every people. On this, Nitti introduces a classification in three categories of the causes influencing the increase or standstill in the population: 1. *moral and psychological causes*: religion, morality and aesthetics; 2. *social causes*: the political organization, social divisions; 3. *economic causes*: wealth distribution (ibid.: 622).

For Nitti, as far as Italy went, the persistence of class inequality and the continuing difficulties over social mobility led the poorer classes to high birth rates. At this point, in support of his argument, Nitti sets out the situation of the Italian peasantry. The equilibrium in the birth

rate maintained for centuries in the Italian countryside deteriorates after the changes wrought by new systems of cultivation, new methods of taxation, and by the presence of banking capital. These phenomena reduce the small proprietors to wage laborers. The Italian regions suffering the most from these processes are in the south (Sicily, Apulia and Basilicata), characterized by the predominance of economic activity in the primary sector and by a great number of wage laborers in the countryside. In these regions the birth rates are the highest in Italy (ibid.: 659). In conclusion, Nitti arrives at his formulation of the “true” law of population:

“in every society where individuality is strongly developed and where the progress of socialization does not extinguish individual activity; in every society where wealth is largely subdivided and where the social causes of inequality are eliminated by an advanced form of cooperation, the natality will tend to balance itself with the food, and, the period of unregulated and unthinking propagation having come to an end, we shall enter on a period of regulated and deliberate propagation, where the rhythmical variations of demographic evolution will excite no such fears or alarms as we have suffered in the past” (ibid.: 702).

With the exception of a positive review by Henderson in the *American Journal of Sociology* in 1897 (Henderson 1897: 875-879), Nitti’s work did not arouse a great deal of enthusiasm. James Bonar (1894) in *The Economic Journal* argued that Nitti’s “new law” of population in its first part would probably have been accepted by Malthus himself, given that he was simply affirming that “when men are at once more civilized and more alive to their best individual interests as intelligent human beings, they will see to it that families do not grow beyond their food” (ibid.: 507). The second part is for Bonar only an “enthusiastic prophecy” which requires explanation given that it prefigures a not properly specified “rhythmical variations of demographic evolution”. As we saw earlier, the demographic evolution to which Nitti refers is directly borrowed from Spencer’s analysis⁷⁶.

Nitti’s enthusiasm for Spencer disappears immediately after the publication of *Population and the Social System*. Without openly admitting it, he distances himself from Spencer’s socio-biological approach in the years immediately following. In *La Scienza delle Finanze* ([1903-36] 1972), which for many years was the manual Nitti used for his teaching, he rejected from the very beginning the study of sociology, and questioned the scientific basis of the discipline. According to

⁷⁶ Other negative criticisms are in A. Hadley (1895); A. Llano (1900: 502-03); T. Isenburg (1977: 61); while G. Fiamingo (1895: 247) argues that “Nitti, in spite of himself, is simply a follower of Spencer”.

Nitti, empirical verification in sociology is extremely problematic, and in any case subject to “errors and deviations” (ibid. 31). What he rejects in sociology is, first, its claim to construct an overall theoretical system to explain the general functioning of society. In his opinion, for this sociology “is destined to remain sterile” (ibid. 33). Secondly, Nitti rejects the biological analogy which is basic to the Spencerian theory that influenced his analysis of population. In Nitti’s words: “to say that the state and societies are governed by the same laws which regulate organisms can only be an *analogy*. In actual fact all those theories which by basing themselves on the apparent similarities between society and living organisms, and then deriving from them laws and relations regarding the development and future of society, not only have no foundation, but it may be said have often contributed to increase the chaos and confusion” (ibid: 55).

7. Heterogenesis of ends

To understand in greater depth what we have called the “heterogenesis of ends” of Spencer’s thought in Italy, we believe that we now need to extend our horizons to include the debates generated by the reception and analyses of Spencer’s work by Italian sociologists. The first translation of Spencer into Italian was *The Study of Sociology* (Spencer 1873) in 1881, and this was followed by *The Principles of Sociology* (1876-1896). It is significant that out of his massive scientific production, only the volumes of sociology were first translated into Italian, and then in two different translations (Spencer 1881, 1881-1889, 1904, 1922)⁷⁷.

The reception accorded to Spencer’s sociological principles was enthusiastic. For Ranzoli (1904: 227) “Spencer’s doctrines found in Italy an intellectual atmosphere already prepared for their reception. As soon as they became known they were quickly and widely diffused”. Many other scholars of sociology, that at the time had not yet been officially recognized by the Italian Ministry of Education as a separate discipline, wrote on Spencer at length (Fiamingo 1895: 352). Works published in the period on Darwin and Spencer include those by Giuseppe Vadalà-Papale (1883), Giovanni Cesca (1883), Icilio Vanni (1886 and 1893), and Filippo Virgili (1892a and 1892b).

Towards the turn of the century there was another very influential figure who, starting from economic analysis, tried to found a modern sociological approach. This was Achille Loria, who between 1886 and 1893, in two connected publications, *Teoria della costituzione sociale* (1883) and *Les bases économiques de la constitution sociale* (1893), attempted to demonstrate the primacy of economic analysis over sociological analysis. As we have seen, Loria’s analysis was very important for the definition of the theoretical system Nitti used in *The Population and the Social System* (1894).

⁷⁷ See Beck (2005: 305).

In 1895, the sociologist Giuseppe Fiamingo, in an article in *The American Journal of Sociology* explained why in Italy the sociological approach had not developed at the same pace as that of other European countries (especially France, Germany and England). According to him there were two reasons for the “delay” in Italy of the development of sociological theory. The first was due to the “hegemony” Francesco Ferrara’s political economy exercised over sociological studies, and the second related to the “confusion” between sociology and socialism, in the work of Napoleone Colajanni and Enrico Ferri. For the first reason, according to Fiamingo, Ferrara and the Italian economists who adhered to his perspective incorporated a sociological approach into the discipline of political economy, impeding the development of an alternative to economic reasoning for the analysis of the evolution of social systems. In the words of Fiamingo: “political economy (...) was understood as a comprehensive and general social science, upon which all the other special social sciences should be based. This economic science, however, lacked many of the requisites essential for transforming it into a true sociology” (Fiamingo 1895: 343).

For the second, in 1884 Colajanni included in his book *Il Socialismo* a chapter entitled “The ideal of Spencer is socialistic”, in order to confute the utilization for anti-socialist purposes of social Darwinism deriving from Spencer. In the second edition of 1898 he explained that he had mistakenly interpreted Spencer’s theory because of the fact that, at the time of the first edition, he had not read many of his works (Isenburg 1977: 57). The most sensational case was that of Enrico Ferri, a jurist of the sociological school, who joined the Partito Socialista Italiano in 1893, and in 1894 published *Socialismo e Scienza Positiva: Darwin-Spencer-Marx* (Ferri 1894)⁷⁸. Ferri’s aim was:

to demonstrate that Marxian socialism (...) is the only practical and fruitful complement in social life of that modern scientific revolution, which, inaugurated several centuries back by the revival of the experimental method in all branches of human knowledge, has triumphed in our days, thanks to the labours of Charles Darwin and Herbert Spencer. It is true that Darwin, and especially Spencer, stopped short half-way from the final conclusions of religious, political and social order, which necessarily follow from their indisputable premises. But that is only an individual episode, which cannot stop the inevitable march of science or delay the fulfillment of its practical consequences, which accord admirably with the saddest necessities of contemporary life. This is but one more obligation to us to render justice to the scientific and political life of Karl Marx, who completes the renovation of modern scientific thought.

⁷⁸ See Beck (2005).

As recalled by Beck: “Ferri’s theory was that socialism is the natural continuation of Darwinism and Spencerian Evolutionism. He maintained that the struggle for existence was the basic law in both nature and society (...). While in the first stages of social evolution the law of the struggle for existence takes precedence over the law of solidarity, as the division of labor grows (...) the law of cooperation becomes predominant” (Beck 2005: 311-12). The interpretations of Spencer’s theory in Italy thus turn out to be in conflict with the ideas of Spencer himself. There is conclusive proof of this in a letter Spencer wrote to *La Riforma* in 1895 to confute Ferri’s argument on his presumed socialist orientation (Beck 2005: 319, Isenburg 1977: 57)⁷⁹.

With regard to this quite considerably complex reception of sociological theories in Italy, Vilfredo Pareto, in his *Cour d’économie politique*, on the one hand significantly argued that the theses of Francesco Ferrara were consistent with the general principles of social organization, and on the other criticized the idea of the state that socialist thinking derived from the principle of evolution (1896-7, II: 56-58).

8. Conclusion

This study set out to explore the subject of the influence of Herbert Spencer’s work on Italian economic thought of the nineteenth and early twentieth centuries. We took as our examples of this influence two writers who were emblematic of the economic thought of this period: Maffeo Pantaleoni and Francesco Saverio Nitti. Both used Spencer’s analysis of the evolution of the “social organism” to the full, but drew opposite conclusions for their theory and policy recommendations. Whereas Pantaleoni unconditionally accepted Spencer’s theory of evolution and progress, and carried to extreme consequences the social implications deriving from that theory, other theoreticians like Nitti (and Colajanni) adhered to Spencer’s perspectives thinking that they had found in that theory a reformist approach to the development of society. Just a few years later, however, the latter rejected Spencer’s approach and questioned its scientific foundation.

The social, political and economic events of this intense and dramatic period of Italian history, as also the behavior of the Italian government in response to them, provoked divergent commentary from the two economists who, from opposite sides, shared the conviction that it was

⁷⁹ Ferri replied to the editor of the journal by arguing that “the personal opinion of H. Spencer is a different matter from the logical consequence of the scientific theories on universal evolution which he has developed farther and better than any other man, but of which he has not the official monopoly nor the power to prohibit their free expansion by the labor of other thinkers”, in Beck (2005: 319).

urgent to provide indications and critical positions on possible reforms⁸⁰. But as we have seen, though they both leaned heavily on Spencer's theories, they took conflicting positions on which economic subject should take responsibility for promoting the process of evolution. For Pantaleoni individuals belonging to the *élites* should govern the progress of society, whereas it is clear that for Nitti, only the centralized planning of the state could provide the initial impulse to this process.

In conclusion, this reconstruction of the Italian context has allowed us to uncover the heterogenesis of ends in the following three areas: (i) the debates between sociologists and economists on the autonomy of sociology as a discipline; (ii) the debates between economists and political thinkers on the relationship between Spencer's sociology, and Socialism (Colajanni) and Marxism (Ferri); (iii) the debates among economists (liberal and historical) on the methodological consequences arising from the use of the Spencerian theoretical approach. Therefore, our explanation of the heterogenesis of ends lies not only in the process of dissemination of the ideas that we have illustrated here, but also in the basic characteristics of Spencer's theories themselves which were evolutionary, scientific and secular, as well as with the theoretical requirements contingent on the Italian context.

⁸⁰ This is a characteristic feature of the Italian approach to economic theory: 'The history of economics in Italy reflects an interaction between scientific-educational institutions and political power, which led economists to combine a theoretical approach and political commitment' (Augello and Guidi 2008: 595).

References

- Augello M.M. and Guidi M.E.L. 2008, "Italy, Economics in", in S.N. Durlauf and L.E. Blume (eds.), *The New Palgrave Dictionary of Economics*, London, MacMillan, second edition: 595-601.
- Barbagallo F. 1987, "Introduzione", in F.S. Nitti, *Il Mezzogiorno in una democrazia industriale*, Bari, Laterza: V-XXXVIII.
- Bannister R.C. 1979 *Social Darwinism*, Philadelphia, Temple University Press.
- Becattini G. 1987, "Pantaleoni Maffeo", in Eatwell J., M. Milgate e P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, London, Macmillan: 794.
- Beck N. 2003, Enrico Ferri's Scientific Socialism: A Marxist Interpretation of Herbert Spencer's Organic Analogy, *Journal of the History of Biology*, 38: 301-325.
- Beck N. 2004, "The diffusion of Spencerianism and its political interpretations in France and Italy" in G. Jones and R.A. Peel (eds.), *Herbert Spencer: The Intellectual Legacy*, London, Galton Institute: 33-70.
- Bellanca N. and Giocoli N. 1998, *Maffeo Pantaleoni, il principe degli economisti italiani*, Firenze, Polistampa.
- Bini P. 2012, "Pantaleoni Maffeo", in V. Negri Zamagni and P.L. Porta (eds.), *Il Contributo italiano alla storia del pensiero - Economia*. Roma, Istituto della Enciclopedia Italiana fondata da Giovanni Treccani, 680-686.
- Blaug, M. 1962. *Economic theory in retrospect*. Homewood, Irwin.
- Boccardo G. 1881a, "L'animale e l'uomo. Fondamenti dottrinali e metodici della moderna sociologia nelle sue relazioni con le scienze biologiche, economiche e statistiche", in *Biblioteca dell'Economista*, vol. VII, Torino, Unione Tipografica Editrice.
- Boccardo G. 1881b, "La sociologia nella storia, nella scienza, nella religione e nel cosmo", in *Biblioteca dell'Economista*, vol. VIII, Torino, Unione Tipografica Editrice.
- Bonar J. 1894, Some recent writings on population, *The Economic Journal*, 4 (15): 505-507.
- Boylan T.A. and Foley T.P. 2004, "Introduction", in J.E. Cairnes, *Collected Works*, vol. I. London, Routledge.
- Caldwell B. 2012, Of Positivism and the History of Economic Thought, *CHOPE Working Paper No.* 2012-09.
- Cannan E. [1894-99] 1925-26, "Darwinism" in H. Higgs (ed.) *Palgrave's Dictionary of Political Economy*, London, Macmillan: 481-482.
- Caponigri A. R. 1971, *A History of Western Philosophy*, Notre Dame, Notre Dame Press, 5 vols.
- Cesca G. 1883, *L'evoluzionismo di Erberto Spencer*, Verona-Padova, Druker and Tedeschi.

- Clark J.B., Patten S.N. and Fetter F.A. 1910, The Phenomena of Economic Dynamics. Papers and discussions of the XXII annual meeting, NY, December 27-31, 1909, *American Economic Association Quarterly*, III, 11 (1): 123-135.
- Cognetti De Martiis S. 1881, *Le forme primitive nella evoluzione economica*, Torino, Loescher.
- Cognetti De Martiis S. 1889, *Socialismo antico. Indagini*, Torino, Fratelli Bocca.
- Colajanni N. 1884, *Il Socialismo*, Catania, Filippo Tropea Editore.
- Collard D. 2009, Alfred Russel Wallace and the Political Economists, *History of Political Economy*, 41(4): 605-644.
- Cossa E. 1906, La dottrina dell'egoismo di H. Spencer come interpretazione dell'economia politica e delle forme storiche degli istituti industriali, *Giornale degli economisti*, 33 (17): 133-158.
- Dal Pane L. 1971, "Prefazione", in F. S. Nitti, *Scritti di economia e finanza*, vol. I, Bari, Laterza: I-XX.
- Dardi M. 2014, Neither Lausanne nor Cambridge: Pantaleoni and the missing boundary between economics and sociology, *The European Journal of the History of Economic Thought*, 21 (3): 485-519.
- Darwin C. 1859, *On the Origin of Species*, London, Murray.
- Darwin C. 1871, *The Descent of Man, and Selection in Relation to Sex*, London, Murray.
- Del Vecchio G. 1925, I sistemi di economia teorica e l'originalità scientifica di Maffeo Pantaleoni, *Giornale degli Economisti e Rivista di Statistica*, 65: 111-115.
- De Viti de Marco A. 1925, Maffeo Pantaleoni, *Giornale degli economisti*, 45, April: 165-177.
- Donnelly M. 1987, "Spencer Herbert", in Eatwell J., M. Milgate e P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, London, Macmillan: 437.
- Dorfman J. 1934, *Thorstein Veblen and His America*, New York, Viking.
- Ekelund R.B. Jr. and E.S. Olsen 1973, Comte, Mill, and Cairnes: The Positivist-Empiricist Interlude in Late Classical Economics, *Journal of Economic Issues*, Vol. 7, No. 3 (Sep., 1973), pp. 383-416.
- Ferri E. 1894, *Socialismo e Scienza Positiva: Darwin-Spencer-Marx*, Roma, Casa editrice italiana.
- Fiamingo G. 1895, "Sociology in Italy. The Sociological Tendency of Today", *American Journal of Sociology*, 1 (3): 335-352.
- Fiorot D. 1976, Lettere di Maffeo Pantaleoni ad Achille Loria, *Storia e politica*, 15 (3): 439-495 and 15 (4): 553-604.
- Fisher I. 1898, Review of M. Pantaleoni "Pure Economics", *Annals of the American Academy of Political and Social Science*, 12: 122-125.
- Francis M. 1978, Herbert Spencer and the Myth of Laissez-Faire, *Journal of the History of Ideas*, 39 (2): 317-328.

- Frank R.H. 2011, *The Darwinian Economy: Liberty, Competition, and the Common Good*, Princeton, Princeton University Press.
- Friedman, W.A. 2013, *Fortune Tellers: The Story of America's First Economic Forecasters*, Princeton, Princeton University Press.
- Ganci S. M. 1959, *Democrazia e socialismo in Italia: carteggi di Napoleone Colajanni 1878-1898*, Milano, Feltrinelli.
- Gide C. 1898, Has Co-operation Introduced a New Principle into Economics?, *The Economic Journal*, 8 (32): 490-511.
- Groenewegen P.D. 1998, "Maffeo Pantaleoni", in F. Meacci (ed.), *Italian Economists of the 20th Century*, Cheltenham, Elgar: 44-68.
- Hawkins M. 1997, *Social Darwinism in European and American Thought, 1860-1945*, Cambridge, Cambridge University Press.
- Hayek, F.A. von, 1992, Friedrich von Wieser, in P.G. Klein (ed.), *The Fortunes of Liberalism*, London, Routledge: 108-125.
- Hiskes R.P. 1983, Spencer and the Liberal Idea of Community, *The Review of Politics*, 45 (4): 595-609.
- Hodgson G.M. 1993, The Mecca of Alfred Marshall, *The Economic Journal*, 103 (417): 406-415.
- Hodgson G.M. 2002, Darwinism in Economics. From Analogy to Ontology, *Journal of Evolutionary Economics* 12: 259-281.
- Hodgson G.M. 2004, Social Darwinism in Anglophone Academic Journals: A Contribution to the History of the Term, *Journal of Historical Sociology*, 17(4): 428-463.
- Hofstadter R. [1944] 1962, *Social Darwinism in American Thought*, Boston, The Beacon Press.
- Isenburg T. 1977, Il dibattito su Malthus e sulla popolazione nell'Italia di fine '800, *Studi Storici*, 3: 41-67.
- Keynes J.M. [1926] 1972, "The End of Laissez-Faire", in *Essays in Persuasion*, in *The Collected Writings of J.M. Keynes*, vol.IX, London, Macmillan: 272-294.
- Knight F.H. 1939, Ethics and Economic Reform, III. Christianity, *Economica* n.s. 6: 398-422.
- Laurent J. 2000, Alfred Marshall's annotations on Herbert Spencer's Principles of Biology, *Marshall Studies Bulletin*, 7: 1-6.
- Laurent J. 2004, "Herbert Spencer's Influence on Economics", in G. Jones and R.A. Peel (eds.), *Herbert Spencer. The Intellectual Legacy*, London, The Galton Institute: 61-84.
- Leonard T.C. 2005, Retrospectives: Eugenics and Economics in the Progressive Era, *The Journal of Economic Perspectives*, 19(4): 207-224.

- Leonard T.C. 2008, "More Merciful and Not Less Effective: Eugenics and American Economics in the Progressive Era", in S.J. Peart and D.M. Levy (2008: 358-382).
- Leonard T.C. 2011, Religion and Evolution in Progressive Era Political Economy: Adversaries or Allies?, *History of Political Economy*, 43(3): 429-469.
- Levy D.M. and Peart S.J. 2009, Sympathy, Evolution, and "The Economist", *Journal of Economic Behavior & Organization*. 71: 29-36.
- Llano A. 1900, The Race Preservation Dogma, *American Journal of Sociology*, 5 (4): 488-505.
- Loria A. 1886, *Teoria economica della costituzione politica*, Torino, Fratelli Bocca.
- Loria A. 1893, *Les bases économiques de la constitution sociale*, Paris, Alcan.
- Maccabelli, T. 2008, Social Anthropology in Economic Literature, *American Journal of Economics and Sociology*, 67 (3): 481-527.
- Macchioro A. 1970, "Marxismo ed economia politica fra XIX e XX secolo", in *Studi di storia del pensiero economico e altri saggi*, Milano, Feltrinelli: 476-560.
- Macchioro A. 1996, Per una storia dell'economia politica italiana nell'età del positivismo. Abbozzi, *Il pensiero economico italiano*, IV (1): 7- 70.
- Martello T. 1912, *L'economia politica e l'odierna crisi del darwinismo*, Bari, Laterza.
- Messedaglia A. 1891, *L'economia politica in relazione colla sociologia e quale scienza a sé*, Roma, Tipografia Fratelli Pallotta.
- Michelini, L. 1998, Idealismo e marginalismo (1897-1924). Lettere di Maffeo Pantaleoni a Benedetto Croce, *Il pensiero economico italiano*, VI(2): 9-37.
- Michelini, L. 2011, *Alle origini dell'antisemitismo nazional-fascista. Maffeo Pantaleoni e "La Vita Italiana" di Giovanni Preziosi (1915-1924)*, Venezia, Marsilio.
- Mill, J.S. 1865, *Auguste Comte and Positivism*, London, Trubner.
- Miller L.M. 1972, Herbert Spencer's Theory of Welfare and Public Policy, *History of Political Economy*, 4 (1): 207-231.
- Mingardi A. 2011, *Herbert Spencer*, New York, Continuum.
- Morgan M.S. 1993, Competing Notions of "Competition" in late Nineteenth-Century American Economics, *History of Political Economy*, 25(4): 563-604.
- Moss, L.S. (2010) Evolutionary Change and Marshall's Abandoned Second Volume, *The American Journal of Economics and Sociology*, 69 (1): 359-374.
- Nitti F.S. [1894] 1971, "La popolazione e il sistema sociale", in L. dal Pane (ed.), *Scritti di economia e finanza*, Bari, Laterza, vol. I.
- Nitti F.S. [1903-36] 1972, *La scienza delle finanze, 1903-1936*, edited by F. Forte, Bari, Laterza, vol. IV.

- Nock A.J. 1939, "Introduzione", in Spencer (1884a: vii-xiv).
- Norman B. 1982, The Tradition of Spontaneous Order, *Literature of Liberty*, V(2): 7-58.
- Offer J. 2010, *Herbert Spencer and Social Theory*, Basingstoke, Palgrave-MacMillan.
- Orano P. 1918, *Spencer e Darwin in Italia*, s.l., s.n.
- Orsina G. 2002, *Anticlericalismo e democrazia: storia del Partito radicale in Italia e a Roma, 1901-1914*, Soveria Mannelli, Rubbettino.
- Owen W.C. 1891, *The Economics of Herbert Spencer*, New York, Humboldt.
- Pantaleoni M. 1882, *Teoria della traslazione dei tributi*, Roma, Paolini.
- Pantaleoni M. [1883] 1904, "Contributo alla teoria del riparto delle spese pubbliche", in *Scritti vari di economia*, Palermo, Sandron, vol.I: 49-110. English translation in R.A. Musgrave and A.T. Peacock (eds.), *Classics in the Theory of Public Finance*, London: Macmillan, New York: St. Martin's Press, 1967: 16-27.
- Pantaleoni M. [1887] 1904, "Teoria della pressione tributaria", in *Scritti vari di economia*, Palermo, Sandron, vol.I: 11-201.
- Pantaleoni M. 1889, *Principi di Economia Pura*, Firenze, Barbera. English translation: *Pure Economics*, London, MacMillan, 1898.
- Pantaleoni M. 1891, Die Theoretische Nationalökonomie Italiens in Neuester Zeit, *The Economic Journal*, I(4): 765-769.
- Pantaleoni M. [1892] 1925, Cenni sul concetto di massimi edonistici individuali e collettivi, in *Erotemi di economia*, Bari, Laterza, vol.II: 1-47.
- Pantaleoni M. 1898a, An attempt to analyze the concepts of "Strong" and "Weak" in their economic connection, *The Economic Journal*, 8: 183-205.
- Pantaleoni M. [1898b] 1925, "Esame critico dei principi teorici della cooperazione", in *Erotemi di economia*, Padova, Cedam, vol. II: 127-178.
- Pantaleoni M. [1899] 1909, "L'origine del baratto", in *Scritti vari di economia*, Roma, Castellani, vol.II: 261-460.
- Pantaleoni M. [1900] 1925, "Il secolo XX secondo un individualista", in *Erotemi di Economia*, Bari, Laterza, vol.I.
- Pantaleoni M. 1909, Di alcuni fenomeni di dinamica economica, *Giornale degli economisti*, 39: 211-254. English translation in *International Economic Papers*, 5, London, Macmillan, 1955: 26-57.
- Pantaleoni M. [1913] 1925, "L'atto economico", in *Erotemi di economia*, Padova, Cedam, vol I: 63-145.

- Pantaleoni M. [1916] 1917, "Gli insegnamenti economici della guerra", in *Tra le incognite*, Bari, Laterza: 1-129.
- Pantaleoni M. [1917] 1918, "Nazioni giovani e vecchie", in *Politica. Criteri ed eventi*, Bari, Laterza: 91-105.
- Pantaleoni M. 1918, "Cenni sull'imperialismo tedesco e britannico", in *Politica. Criteri ed eventi*, Bari, Laterza: 119-136.
- Pantaleoni M. 1919, "Danni economici della sostituzione di prezzi politici a quelli economici", in *La fine provvisoria di un'epopea*, Bari, Laterza: 61-83.
- Pantaleoni M. [1924] 1938, "In occasione della morte di Pareto: riflessioni", in *Studi di finanza e di statistica*, Bologna, Zanichelli: 327-358.
- Pantaleoni M. 1925-26a, "Boccardo Girolamo", in H. Higgs (ed.) *Palgrave's Dictionary of Political Economy*, London, Macmillan, vol.I: 824-825.
- Pantaleoni M. 1925-26b, "Cognetti de Martiis Salvatore", in H. Higgs (ed.) *Palgrave's Dictionary of Political Economy*, London, Macmillan, vol.I: 840.
- Pareto V. [1891] 1960, *Lettere a Maffeo Pantaleoni*, edited by G. De Rosa, Roma, BNL.
- Pareto V. 1896-7, *Cours d'économie politique*, Lausanne, Rouge, 2 vols.
- Parsons T., [1937] 1949, *The Structure of Social Action*, Chicago, The Free Press.
- Pearl S.J. and D.M. Levy 2004, Sympathy and Its Discontents: "Greatest Happiness" versus "General Good", *European Journal of History of Economic Thought*, 11(3): 453-478.
- Pearl S.J. and D.M. Levy 2005, From Cardinal to Ordinal Utility Theory: Darwin and Differential Capacity for Happiness, *American Journal of Economics and Sociology*, 64(3): 851-880.
- Pearl S.J. and D.M. Levy (eds.) 2008, *The Street Porter and the Philosopher*, Ann Arbor, University of Michigan Press.
- Ranzoli, C. 1904, La fortuna di Erberto Spencer in Italia, *Rivista di Filosofia e Scienze affini*, 1: 217-236, 440-467.
- Rosenberg A. 2014, From Rational Choice to Reflexivity: Learning from Sen, Keynes, Hayek, Soros, and most of all, from Darwin, *Economic Thought*, 3.1: 21-41.
- Schneewind, J.B. 1977, *Sidgwick's Ethics and Victorian Moral Philosophy*, Oxford, Clarendon Press.
- Schumpeter J.A. [1954] 1966, *History of Economic Analysis*, London, Routledge.
- Schweber S.S. 1980, Darwin and the Political Economists: Divergence of Character, *Journal of the History of Biology*, 13(2): 195-289
- Skorupski J. 2014, "Spencer and the Moral Philosophers: Mill, Sidgwick, Moore", in M. Francis and M.W. Taylor (eds.), *Herbert Spencer: Legacies*, London, Routledge.

- Spencer H. 1851, *Social Statics or, The Conditions essential to Happiness specified, and the First of them Developed*, London, Chapman.
- Spencer H. 1852, A Theory of Population deduced from the General Law of Animal Fertility, *Westminster Review*, 57: 468-501.
- Spencer H. 1855, *Principles of Psychology*, London, Longman, Brown, Green, and Longmans.
- Spencer H., 1857, Progress: Its Law and Cause, *Westminster Review*, 67: 445-485.
- Spencer H. 1864-67, *Principles of Biology*, London, Williams and Norgate.
- Spencer H. 1868, *Essays: Scientific, Political, and Speculative*, London, Williams and Norgate.
- Spencer H. 1872, "Mr. Martineau on Evolution", in *Essays Scientific, Political and Speculative*. 3 vols. New York: D. Appleton and Company, Vol. II: 371-388.
- Spencer H. 1873, *The Study of Sociology*, London, Henry S. King & Co.
- Spencer H. 1876-96, *Principles of Sociology*, New York, Appleton.
- Spencer H. 1879, *Data of Ethics*, London, Williams and Norgate.
- Spencer H. 1884a, *The Man versus the State*, London: Williams and Norgate.
- Spencer H. 1884b, The Coming Slavery, *Popular Science Monthly*, 24, April: 721-742.
- Spencer H. 1892, *Social Statics*, 2nd edition, London, Williams and Norgate.
- Spencer H. 1892-93, *The Principles of Ethics*, London, Williams and Norgate, 2 vols.
- Spencer H. 1904, *An Autobiography*, London, Williams and Norgate, 2 vols.
- Sraffa P. 1924, Obituary. Maffeo Pantaleoni, *The Economic Journal*, 34 (136): 648-653
- Tedder, H.R. [1894-99] 1925-26, "Spencer Herbert", in H. Higgs (ed.) *Palgrave's Dictionary of Political Economy*, London, Macmillan: 776-778.
- Turner J.H. 1985, *Herbert Spencer. A Renewed Appreciation*, Beverly Hills, Sage.
- Vadalà-Papale G. 1883, *Darwinismo naturale e darwinismo sociale. Schizzi di scienza sociale*, Torino, Loescher.
- Vanni I. 1886, *Saggi critici sulla teoria sociologica della popolazione*, Città di Castello, Lapi.
- Vanni I. 1893, *Il sistema etico giuridico di Herbert Spencer*, Città di Castello, Lapi.
- Virgilio F. 1892a, Il problema della popolazione, critica dei sistemi, *Giornale degli Economisti*, March: 24-274.
- Virgilio F. 1892b, Gli elementi per risolvere il problema della popolazione, *Giornale degli Economisti*, December: 575-614.

Wagner, R.E. 2014, *James M. Buchanan and Me: Reminiscing about a 50-Years Association*, GMU Working Paper in Economics, No. 14-13, June 16.

Weikart R. 2009, Was Darwin or Spencer the Father of Laissez-Faire Social Darwinism?, *Journal of Economic Behavior & Organization*, 71: 20-28.

Werhane P.H. 2000, "Business Ethics and the Origins of Contemporary Capitalism: Economics and Ethics in the Work of Adam Smith and Herbert Spencer" *Journal of Business Ethics*, 24: 185-198.

Zafirovsky M. 1999, Economic Sociology in Retrospect and Prospect: In Search of Its Identity within Economics and Sociology, *American Journal of Economics and Sociology*, 58(4): 583-627.

Zafirovsky M. (2000), Spencer is dead, long live Spencer: individualism, holism, and the problem of norms, *The British Journal of Sociology*, 51 (3): 553-579.