Economics as a Comparative Science from the Historical School to Otto Neurath

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Introduction

The comparability of economies in time and space was taken for granted by many cataloguers and encyclopaedists in the centuries leading to enlightenment. The dawning thought of a development path for humanity put an end to such ingenuous comparisons. Along with the consciousness of the evolutionary nature of history, Europe developed the hubris of civilisation, condemning the rest of the world to an uncivilised backwardness. Comparisons became impossible, except for societies at the same stage of development. The study of economies suffered the same fate at the hand of all historicists who conceived complex models of growth in stages. Comparisons were allowed only by presuming the permanence of some characteristic of men or the existence of natural laws. While modern economics was funded on such assumptions, historicists became more and more sceptical about the possibility of comparisons over time: every event was unique. This profound difference in philosophical assumptions led to the famous debate between primitivists and modernists in respect to the study of ancient economies. Causality or contextualisation? That was the question. This essay will relate the nineteenth-century discussion on the comparability of ancient and modern economies, extending the analysis to the holistic vision of Otto Neurath. Some conclusions will be drawn on the possibility to construe in-kind indexes of wealth, allowing fruitful comparisons of different institutional settings across time and space.

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Looking Back at Antiquity in Nineteenth-Century Germany

During the nineteenth century, German-speaking economists and historians looked at antique economies under the influence of two factors. The long and troubled process of national formation, on the one side, favoured the emergence of nation-centred historical recounts stressing the importance of culture and agency and the unicity of historical facts. Philological studies had in this case the upper hand (Leghissa 2007; Heller 1998). A typical example is the study of ancient Germans: Indogermanen and Urindogermanen (Schleicher 1863). This kind of philological studies aimed at researching language per se and the way in which words reflected the reality of a precise timespan (Frohberger 1876, 70). Launching the *Osterprogramm* in 1845, Adalbert Kuhn (1845) stated that linguistics could help to reconstruct the circumstances in which an ancient population was living, or as Jacob Grimm would say in 1848, to pass from words to facts (Grimm 1848, XIII). Nonetheless economic questions were rarely addressed until the last decades of the nineteenth century (Frohberger 1876, 71). Main exception was the work of August Böckh on the public finance of Athens, published in 1817. One of the major difficulties of this approach was the paucity of statistical data in antique sources. Without reliable numbers many of the scarce studies on ancient economies proved to be only theoretical reflections. A more fruitful approach was to analyse ancient written sources to reconstruct the economic legislation, the class structure, and the political thought on economic questions in ancient Greece or Rome. Notably, in 1866, the founding father of German's historical school, Wilhelm Roscher, opened up the field of the history of economic thought in antiquity with his booklet, based on his dissertation, on the beginning of political economy in ancient Greece (Roscher 1866).

Another factor that influenced economic studies on antiquity was the growing specialisation inside universities and the related professionalisation of many intellectual figures. At stake were university chairs, the methodology of enquiry of specialising disciplines and the acceptability of interdisciplinary research (Fornaro 2013). The philological approach so diverted, since its start, from archaeological research, a division that struggles to be overcome even today. While the method of analysis might have been the same, the source of knowledge was different: ancient artefacts and not writings. Christian Gottlob Heyne, who defined archaeology for the first time in the 1770s, spoke of a comprehensive and encyclopaedical discipline that would call upon ancient monuments to testimony practices, norms, representations, mythological and religious concepts, and even historical circumstances and facts (Heyne 1822, 4–8). Heyne's approach justified a comparability of artefacts based on moral judgements. The ideal perfection of classical antiquity's art represented a superlative on which to measure the present mediocrity. Touring the ruins of ancient civilisations was, so, a way to moral betterment. In this sense ideal beauty represented a meta-historical value that allowed intertemporal comparison. If such universal values or forms could exist for the economy became a major dispute when researching ancient economies became fashionable in the last quarter of the nineteenth century. The question on the comparability of economies over time was the object of a *Methodenstreit* between

historians and economists of the historical school that would prove long-lasting and possibly insoluble. Main representatives of the opposite camps were the historian of antiquity Eduard Meyer (1855–1930), and the economist Karl Bücher (1847–1930).

The issue is widely known.[1] Bücher,[2] an adherent of the younger historical school,[3] affirmed that ancient economies were fundamentally different from the modern one and as such incomparable. In his speech on the emergence of political economy (*Die Entstehung der Volkswirtschaft*), held in October 1890 to inaugurate his chair at the *Technische Hochschule* in Karlsruhe, Bücher identified 'the economic development laws of populations' as the object of the German political economy (Bücher 1893, 4). Since 'all economic phenomena and institutions underwent a slow and often secular process of change', the main methodological tool became 'the reconstruction of economic stages' (Bücher 1893, 10). The economic historian had to sublimate this process in its main phases, neglecting the times of passage, to enucleate the causal relationships that brought about the changes in economic development. The analysis of ancient economies acquired importance because the progress of economic phenomena was 'nowhere better to be experienced as in the characterisation of the differences between the present economy of cultured people and the economies of antiquity or of culturally poor people' (Bücher 1893, 10).

The classical school of economics, for Bücher, had erroneously imposed onto the past concepts derived from the study of present-day economies, primarily regarding the ubiquity of exchanges. Bücher believed that the modern *Volkswirtschaft*, based on trade, had been born simultaneously with the modern state, while before, 'humanity had experienced lengthy time periods without exchanges or with exchanges of products and services that could not be defined as "*volkswirtschaftlich*"' (Bücher 1893, 14). By adopting, as a general explicative criterion, the distance between production and consumption, Bücher defined three stages of development (Bücher 1893, 16):

1. the period of the closed house-economy in which goods would be consumed in the same economy in which they were produced;
2. the period of the city-economy in which produced goods moved directly from the producing economy to the consuming economy;
3. the period of the political economy—*Volkswirtschaft*—in which wares passed through many economies before being consumed.

The first period had characterised the Western world at least until the thirteenth-century A.D. The difference between this stage and the following was not in the appearance and character of economic phenomena only, but of man also. *Tauschen*

[1] The main texts regarding the controversy have been published in volume by Moses I. Finley (1979). For a recent appraisal see: André Reibig (2001).

[2] On Bücher see: Jürgen G. Backhaus (2000).

[3] Bücher himself defined the German historical school as the tradition of thought having emerged in Germany in the 1830s in opposition to the French and English liberal tradition. The main point of dispute was the absolute value of the liberal theory. The historical school "by following back the changes in time of economic institutions and phenomena, came to define the present economic order as only a phase in the general economic development of populations", denying the a-historical normativity of any explicative theory (Bücher 1893, 4).

(to exchange) and *täuschen* (to cheat), underlined Bücher, were one and the same in antiquity, and everyone was, in consequence, as averse to trading as possible. Exchanges, then, were rare and had to be officially sanctioned by an authority, by testimonies, or by specific rituals. Even in the medieval development of the *Hauswirtschaft* exchanges still lacked the main character of trade exchanges, which Bücher defined as the relationship between the exchanged goods and services and the freedom of choice of the economies that entered the trade (Bücher 1893, 35). Money could circulate even in massive quantities, but was used as a measure of value, a store of value, and a means of payment outside trade (taxes, fines, etc.). In direct exchanges, the use of money was trivial, while in-kind exchanges were most common (*Naturalwirtschaft*) (Bücher 1893, 38).

Another characteristic of Bücher's first stage of economic development was the dependence from the land. Only control over a sufficient measure of land granted survival and men with no availability of resources were forced into serfdom. The economic unit, followingly, was the house—an extended family characterised by kinship ties that controlled a certain territory—variously named clan, breed, stock, tribe, *gentes,* etc.[4] The family, firstly matriarchal than patriarchal, held all property in common, subdivided the workloads among members and exercised a common law. Outside the family, man had no property, no rights, no protection, and no ties (Bücher 1893, 18–19). Whenever the division of labour inside families proved insufficient to complete a task, available solutions were the artificial expansion of the economic unit through slavery, the extensive use of servants, or temporary associations with other economic units.

In consequence of this peculiar economic organisation, many modern institutions and phenomena and the related concepts and words were completely absent: enterprise, circulating capital, loaned capital, etc. Even income, as a concept, could not be properly applied in its modern significance to ancient home economies, where it was limited to the agricultural produce of the controlled land (Bücher 1893, 40). For Bücher the scope of the house was not to generate a certain level of income, but to grant a certain level of consumption to its members. As such, taxation based on income would have appeared irrational.

[4] In this regard, Bücher openly referred to the work of Rodbertus and his definition of οἶκος economy. From 1864 to 1873, Rodbertus dedicated many writings to ancient economies (Rodbertus 1864, 1865, 1867, 1870, 1873), defining them as economies in which the property was distributed only quantitatively in respect to the possession of land, while in modern economies property could not only be quantitatively different but also qualitatively. In antiquity patrimony was so under the rule of the master of the οἶκος and trade was the exception. Money was not necessary and the economy was for the greatest part a '*Naturalwirtschaft*'. Laws reflected these characters of the economy and property was not sanctioned as in modern times: the state detained an absolute power not limited by any individual right (Rodbertus 1865, 344–346). See also: Warnke (1997).

Stage theories, as Bücher's, were no novelty in German economic thought. From Friedrich List[5] to Karl Marx,[6] from Bruno Hildebrand[7] to Gustav Schmoller,[8] many proposed theories of economic development characterised by relevant changes in economic institutions, economic phenomena, and the related law systems. Defining stages, photographing economies in one habitus after the other, was deemed necessary to discover the laws of economic development.[9] The relevant questions to answer were: what moved the economy from one stage to the other? where was the economy moving towards? The analysis of ancient societies, in this sense, had the value of a negative example. Describing the different functioning of the economies of the past was instrumental in defining the present economy: a bias that could lead to exaggerating the distance between 'primitive' and 'modern' economies.

The main critic of this methodological approach to the study of ancient economies became the historian Eduard Meyer (1910a). He gravely sanctioned the historiographic turn towards the analysis of societies, social groupings, classes, or nations that was spreading in German-speaking academia at least since the middle of the nineteenth century. The emerging and popular disciplines of sociology, anthropology, Marxist historiography, and the economics of the historical school applied a method of research based on a socialised man, on statistically average behaviours, on permanent psychological attitudes, on typified historical periods.[10]

> 'These modern research strands - lamented Meyer – constrain the infinite richness of history in such formulas. The living characters are destroyed and reduced to phantoms and vague generalisations. Even if the new definitions would be chosen with more care, generating more precise representations, nothing would be gained because they would always be generic and could never embrace the infinite variety of the real world. But our time is governed by the drive to define and by the foolish certainty to be able to know something and to understand a phenomenon by giving it a definition. We have experienced and experience still that some economists (*Nationalökonomen*) believe that with the framework of natural economy/monetary economy/credit economy they have unveiled the secret of historical development, reducing it to a simple formula. Since then, many more schemes, as that of Lamprecht,[11] have been devised and many more will surely follow. All of them find an easy diffusion, because they simplify the studying of historical facts or even make it superfluous

[5] Friedrich List's stages were: hunting-gathering, nomadic husbandry, agriculture, agriculture and manufacture, agriculture with manufacture and commerce (List 1841).

[6] Marx's stages of economic development were: primitive communism, slave society, feudalism, capitalism, socialism and communism (Marx 1965).

[7] Hildebrand defined three stages of economic development: *Naturalwirtschaft*, *Geldwirtschaft* and *Kreditwirtschaft* (Hildebrand 1848). On Hildebrand, see: Schefold (2016).

[8] Schmoller defined the economic stages of *Dorfwirtschaft, Stadtwirtschaft, Territorialwirtschaft, Volkswirtschaft, Weltwirtschaft* (Schmoller 1923).

[9] For a critical appraisal of the methodology of the German historical school, see: Weber (1985).

[10] In this sense, Meyer was particularly critical towards the methodological approach of Paul Barth (1971) and Ludwig Gumplowicz (1892).

[11] Meyer refers to the the historian Karl Lamprecht and his stages of cultural history, based on the study of socio-psychological traits and strictly referring to the nation as unit of analysis (Lamprecht

> and give to their believers a sensation of infinite superiority over all others. From the height of the modern worldview (*Weltanschauung*) they can look down with contemptuousness to the backward spirits who persist in the old ways and won't leave the study of the real facts' (Meyer 1910a, 12).

In their relentless chase for causal relationships and laws of development, economists' stage theories and all other strands of historical research criticised by Meyer lost three explanatory factors: chance as a cause of historical events; free-will defined as the setting of goals to human action and the attempt to reach them; and lastly the importance of 'ideas', widespread in a certain time and place, in influencing human action (Meyer 1910a, 8). Meyer, evidently, still championed the historical method, canonised by Leopold von Ranke, that had granted to German political historians the total control over university chairs for most of the nineteenth century (Dreitzel 1981; Hardtwig 1982). Ranke had identified in the singularity, of man and of historical facts, and in the moral freedom of human action the grounding notions of historical research (Chickering 1994, 168): the same points developed by Meyer. The polemic reference to Karl Lamprecht points in the same direction. Lamprecht had been appointed to a chair in history at the University of Leipzig as the first historian following the new methodology of cultural studies that was alternative to Ranke's. The defensive walls around the German citadel of political historians had received a decisive blow. Hence the vehemence of Meyer's response to the formulations of Karl Bücher in the 1890s. The heated debate between the latter and the historian became, in the discipline of ancient history, the question of the century. Meyer firstly addressed Bücher's work at the third Conference of German Historians, held in Frankfurt in 1895. The resulting pamphlet '*Die Wirtschaftliche Entwicklung des Altertums*' (Meyer [1895] 1910b) was an 'uninterrupted polemic' (Hartmann 1896, 153) against the thesis of Bücher.

Meyer attacked the simplified description of the *Hauswirtschaft* by revealing the many inconsistencies of the historical reconstruction of Bücher and the, at times, gross errors in textual interpretation. The etymological identity of *Tauschen* (to exchange) and *täuschen* (to cheat), for example, was typical only of the German language and had no correspondence in Latin or ancient Greek (Meyer [1895] 1910b). With his precise criticism Meyer intended to demonstrate that man in antiquity was not averse to exchanges and that closed economies could coexist with advanced city economies, open to wide ranging exchanges and fully monetised. Even in a *Naturalwirtschaft* as ancient Egypt, argued Meyer, trade was an important part of the picture (Meyer [1895] 1910b, 92–94). With the development of ancient economies in time, whatever their nature, both in Egypt and in the Near East, the extensiveness and pervasiveness of trade always increased (Meyer [1895] 1910b, 97). Trade was also present and determining in the most primitive phases of Greek development—so went Meyer's argumentation—and it would become decisive since the eighth-century

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1897). Lamprecht's socio-cultural stages (Animism, Symbolism, Typism, Conventionalism, Individualism and Subjectivism) corresponded perfectly to economic development stages: the collective employment economy, the individual employment economy, the collective in kind economy, the individual in kind economy, the associative monetary economy and the individual monetary economy. On a recent evaluation of Lamprecht's methodology, see: Chickering (1994).

BC. 'Through the introduction of money - wrote Meyer - and the general and encompassing trade, the social and economic relationships were upturned, causing the social crisis of the seventh and sixth century and the revolutionary movements that brought about the downfall of the aristocratic regimes. The monetary economy disrupted the old patriarchal connections, constrained the peasants into debt and stimulated the adoption of a capitalist mentality in the management of estates' (Meyer [1895] 1910b, 109). A further momentous consequence of the expansion of trade was the creation of a third social stratum between aristocrats and peasants: a bourgeoisie made of merchants, seamen, and independent workers that, in building an alliance with the peasants, gained power over the state. Xenophon so became, for Meyer, the Adam Smith of classical Greece, describing the effect of trade on the division of labour and the specialisation of craftmanship, up to a veritable 'industrialisation' process. 'Word after word - he affirmed - his description corresponds to the present-day conditions of a town with a population of two thousand inhabitants or even of a modern city'(Meyer [1895] 1910b, 116).

Meyer, as clear from the quoted passages and the terminology he used,[12] believed that a comparison between the development process that took place in the West between the fourteenth and the sixteenth centuries and that of classical Greece from the seventh to the fifth century BC was legitimate and hermeneutically fruitful. Against the linear development in stages devised by economists, he—the historian—embraced so, by wide and hazardous comparisons, the eternal return as his philosophy of history. 'It cannot be underlined sufficiently - he affirmed, challenging Bücher - that up to now the development of Mediterranean people happened in two equivalent cycles and that with the end of antiquity the development, returning to the primitive conditions that had been overcome for a long time, began anew'(Meyer [1895] 1910b, 89). The end of the second cycle, with the crisis of the Roman empire, had had the same causes of the decadence of Athens: 'the emergence of enormous capitals and landed possessions on one side and of a growing proletariat without properties on the other side, while the middle-class continuously decreased' and 'the disastrous attempts to solve the social problems that made a revolution unavoidable' (Meyer [1895] 1910b, 142). The use of modern-day economic terminology was not without rationale in Meyer. 'These all are processes - he concluded - that are highly interesting also in economics and have a deep-rooted significance for the present' (ibid.).

Notwithstanding Meyer's historical description of the cyclical recurrence of growth and decadence, his was no attempt to define laws of development. His methodology allowed the extrapolation of 'rules', not laws. Such rules were not constraining and prescriptive. So that, for example, the Middle Ages were not the same in antiquity and in European history. The end of the first cycle, in fact, saw the decadence of the city as the main political and economic unity. The same city, which had nurtured economic growth and cultural excellence in the beginning, had become in the end the cause of disruption (Meyer [1895] 1910b, 111 and 157; Meyer 1910a, 25). In

[12] Writing about cities like Athens and Syracuse immediately before Hellenism, Meyer defined the evolving social strata as 'capitalists' and 'proletarians' (Meyer [1895] 1910b, 133–134).

the ensuing cycle the city lost its centrality because the increasing role of Christianity injected in the system a powerful universalistic attitude (Meyer 1910a, 34). 'The term "middle-ages" - wrote Meyer - is a strong concept, implying a rule that connects specific economic, political and cultural orders. Middle-age conditions can be found in distinctive epochs of the development of mankind, not only among the German-Christian populations but also in the ancient world, and the use of this rule in the investigation and in the reconstruction of these times can prove extremely useful. But it would be a grave error to believe that it is sufficient to understand and recreate the historical conditions in all details. In the political construction of the middle-ages, for example, the prevalent form is that of the city-state. But in the Christian middle-age, in respect to the Greek one, this political form did not reach a complete autonomy, because the same had maintained from the past the idea of universality, of political and religious unity. The attempt to realise this idea and make it predominant constituted a powerful opponent to centrifugal tendencies and further generated influential historical manifestations. This same idea of universality, of a world-kingdom, dominated the whole successive historical development. The nations of modern Europe were born in opposition to it, at war with it' (ibid.).

Meyer's criticism to the economists' view of antiquity, while righteous in respect to many historical inaccuracies, nonetheless indulged in a comparability that was equally questionable. Ludo Moritz Hartmann, professor of ancient history in Vienna, observed: 'It seems that Meyer exaggerates the weight of the deviations from the scheme of Bücher. By reading his speech it could easily be concluded that the ancient economy did not differ significantly from the modern one. But exactly such a view seems to me, contrary to the intentions of Meyer, to hinder an accurate comprehension of antiquity and of the historical development of humanity and to contradict the evidence we have' (Hartmann 1896, 153). Hartmann even considered the comparative attitude of Meyer dangerous in respect to the negative judgement felled on urbanisation processes and related migrations and on the spread of extensive landed possessions. These elements were identified by Meyer as causes of decline and revolutionary movements in antiquity, but the historian also hinted at the possibility that they could have similar consequences even in the present: an assertion of dubious validity and politically perilous (Hartmann 1896, 156–157). The similarity, and hence comparability, of Meyer's complex historical cycles suggested an organic view of societies with unavoidable periods of decadence following growth and cultural splendour.[13] Similar interpretation was that of Oswald Spengler, de facto predicting the inevitable '*Untergang*' of the western civilisation.[14]

The comparability or incomparability of ancient economies with contemporary economic phenomena became so a crucial point of debate in the *Methodenstreit* involving political historians, economists, sociologists, and cultural historians in

[13] As such, WWI would further convince Meyer of the inevitability of a decadence of Germany, novel Cartago, at the hand of modern-day Rome: the United States (Meyer 1924).

[14] Eduard Meyer himself would publish a pamphlet with his observations on Spenglers' work. While Meyer generally shared Spengler's evaluation of the problems of Germany, he refuted many of his philosophical premises and a much too easy comparison among high cultures (Meyer 1925).

German-speaking academia from the end of the nineteenth century to the first World War. Times of abrupt political and economic changes—industrialisation and national unification happened in Germany in just a few decades time—influenced the work of researchers, who looked at the past in search for clues to understand the present and the future. At the same time, different philosophical premises favoured positivistic evolutionary perspectives or biologically ever-returning lifecycles as interpretative tools, but neither of these attitudes would prove, in time, without fault.

A Study in Comparability: Otto Neurath

At the beginning of the twentieth century, Otto Neurath (1882–1945), economist and philosopher, was still caught in the ebbing of the *Methodenstreit* and in the manifold academic disputes that thorn apart German and Austrian academia on issues of economics (Poettinger 2012, 12–29). His chief endeavour became therefore to find holistic solutions that might reunite economists of different schools and at the same time increase the hermeneutic capacity of the economic science, restoring its credibility (Neurath 1910b, 66–67). One of the first clashes Neurath experienced, while completing his studies in Berlin, was the continuing dispute between the supervisor of his dissertation work, Eduard Meyer, and Karl Bücher.

Neurath had been sent to the University of Berlin by the advice of Ferdinand Tönnies, who thought that his extensive knowledge of economics and ancient history, gathered in his father's library[15] and in intensive personal studies, could be valued best in the fortress of the German historical school.[16] His research resulted in two dissertations: a study on ancient economies[17] and a history of social classes based on Cicero's *De Officiis*.[18] This last one was selected by Meyer to grant Neurath the title of Doctor. The thesis also received the honour of publication in its first part (Neurath 1906a), and was then published in its entirety in Schmoller's *Jahrbücher für Nationalökonomie und Statistik* in 1906 (Neurath 1906b) and 1907 (Neurath 1907).

Neurath's thesis, although being a juvenile work, addressed some of the crucial points of the Meyer-Bücher debate. Firstly, the problem of the relative importance of trade in an economic system, deemed the major sign of its 'modernity'. *Zur Anschauung der Antike über Handel, Gewerbe und Landwirtschaft* was dedicated, in fact, to a sketched representation of the historical evolution of social classes based on different evaluations of Cicero's work from antiquity to the eighteenth century. Through a complex study of all translations made of *De Officiis* and their reception and diffusion, Neurath exemplified the stance towards diverse professions and crafts,

[15] On the influence of Wilhelm Neurath on the ideas of his son, see: Uebel (1995).

[16] At the time Neurath had already published a brief essay on the interest rate in ancient economies (Neurath 1904).

[17] This dissertation would later be published as: *Die Entwicklung der antiken Wirtschaftsgeschichte*, (Neurath, 1908) and as *Antike Wirtschaftsgeschichte* (Neurath 1909).

[18] A recent commented edition has been edited by Michael Winterbottom (Cicero 1994).

particularly trade, and the cultural use of the historical past made at different times in different countries. As he would later vindicate, sometimes the analysis of literary texts could explain much more about the social and economic situation of a time than many useless statistics, based on erroneous or partial theorising.

As a conclusion to his study, Neurath summarised: 'Two kind of evaluations have emerged. The first underlines the social utility of man and, on this base, measures the value of his occupation. The second favours the personal qualities of man. The conceptions regarding social ideals and valuable personal qualities, though, change over time, as the circumstances that determine them' (Neurath 1907, 205). The different evaluation, in time, of *De Officiis* and followingly the social respect tributed to trade had so been affected by the prevailing idea of the path of historical change. Whether a time period was perceived as comparable with Cicero's or instead as completely different, had an effect on the reception of *De Officiis*. The second chapter of Neurath's dissertation was therefore dedicated to resume all possible approaches to the philosophy of history. This part of the work directly addressed the comparability of economies in time and space, with the intention of shedding light on the Meyer-Bücher debate, if not to solve it. 'In the absence of a definite theory of the conceptions of history, to which I could refer, - wrote Neurath - I will try in the following to systematically order and analyse the founding premises of the most important theories, more or less clearly expressed by the diverse authors' (Neurath 1907, 145). The resulting taxonomy, by representing all possible interactions between history and theory in the economic discourse, proves useful in evaluating the fruitfulness of a comparative approach (Poettinger 2012, 12–24).

Neurath distinguished among an evolutionary philosophy of history, a stationary philosophy of history and an anarchic philosophy of history.[19] The first attitude, present in some form at any time, postulated 'that from year to year the world would move closer to a given end' (Neurath 1907, 145). Graphically, it can be represented as a societal characteristic that, with the passing of time, shows a definite direction (Fig. 1). Given such a credence, when people were confronted with a set back of the evolutionary process, they would still believe that the direction of change would be maintained as a trend. This could be represented as an undulatory or periodic evolutionism, where in the periodic one the distance between the minimum and the maximum deviation points would always be the same, while in the undulatory one it would be random.

The evolutionary point of view was typical of the Christian philosophy of history. 'There had to be an evolution of men in some direction,—wrote Neurath—be it Paradise or Hell. The corresponding force of historical imagination has maintained its impetus for a long time and its echo can still be recognised in the systems of idealistic philosophy'.[20] Given this kind of philosophical premise, comparisons over time could only have a symbolic or exemplary validity as in the Old and New Testament. A similar view on the direction of history was championed by all those economists,

[19] The taxonomy is here translated literally from Neurath's work. Neurath himself expressed some doubts about the chosen terminology and considered it a temporary attempt at classification (Neurath 1907, 146).

[20] ibid., 150.

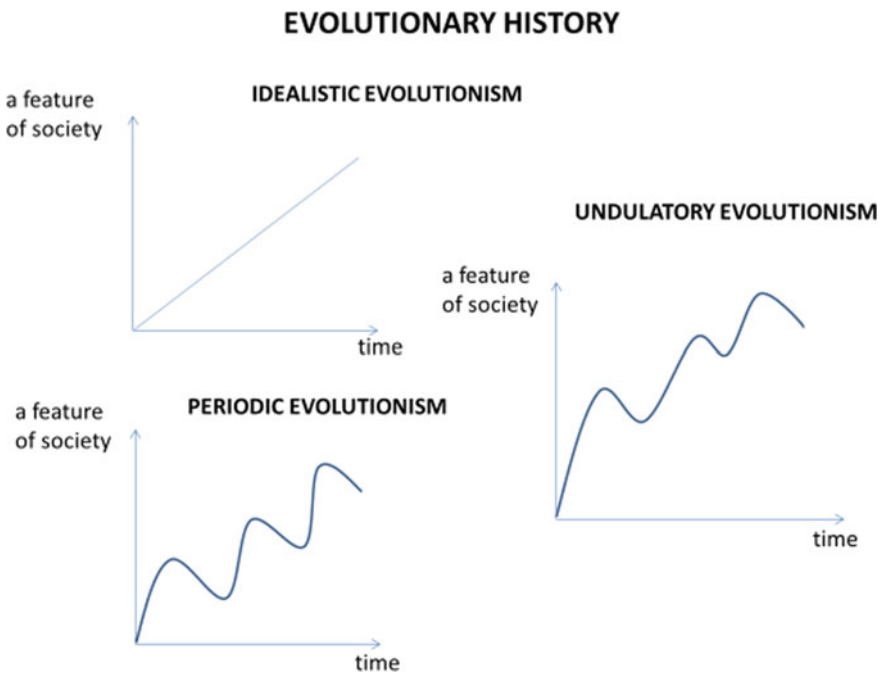

Fig. 1 Evolutionary philosophy of history

Bücher among them, who devised some sort of stage theory along a path of linear development. Bücher's idealistic evolutionism allowed comparisons only between two different societies at the same stage of growth, be it at different times or at the same time. Idealistic evolutionism could not admit, instead, for a same society to return to an already concluded stage of growth.

'Many people, though, - observed Neurath - would not be satisfied by such an evolutionary vision and would affirm that, in respect to a certain end, mankind would remain unvaried: for example, the sum of all happiness or unhappiness, or morality etc.' (Neurath 1907, 146). Neurath called such an attitude stationary and represented it graphically as a line parallel to the progressing of time (Fig. 2). In this case also, deviations from the permanence of a character would be considered only temporary, cyclical, or erratic. 'The history of mankind is, for this people, just an up and down, in the end all returns to the same state' (ibid.). The Austrian school of thought (Menger 1883), and later what is collectively termed as neoclassical economic theory, by refuting historicism, implied a historical premise of idealistic permanence. As Neurath underlined (Neurath 1907, 152), their methodological attitude was based on Machiavelli's maxim that:

> Any one comparing the present with the past will soon perceive that in all cities and in all nations prevail the same desires and passions as always have prevailed; for which reason it should be an easy matter for him who carefully examines past events to foresee those which are about to happen in any republic, and to apply such remedies as the ancient have used in such cases. (Machiavelli 2012, 98)

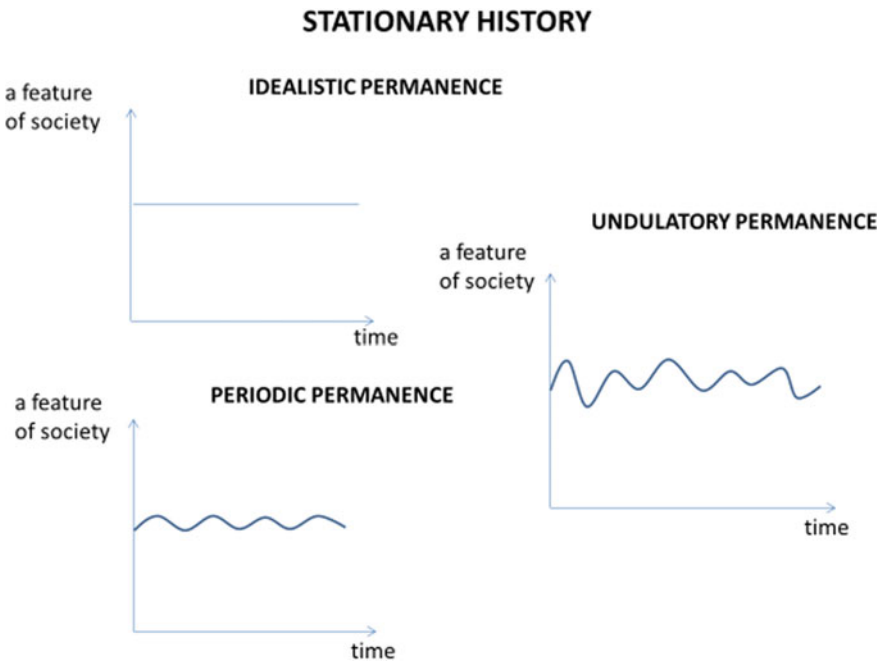

Fig. 2 Stationary philosophy of history

According to such premises, economic actions derived from characteristics that were invariable in respect to time and space: idealistic permanencies. Invariable the problem of scarcity, invariable the rationality in the efficient use of resources, invariable man's self-interest. The economy could so be studied independently from varying institutions or social norms, and different economies were fully comparable across time and space.

Meyer's circular interpretation of history, instead, perfectly represented the periodic permanence hypothesis. The cycles of western evolution, one in antiquity from the twelfth-century BC to the spreading of Hellenism and the modern one, starting with the fall of the Roman Empire up to the nineteenth century (Hatscher 2003, 67–68), allowed comparisons among their phases, 'middle-age', 'classic' and 'modern', and among the institutions that characterised them (Neurath 1907, 145–148).

Stage theories like that of Bruno Hildebrand allowed a different approach to the problem of comparability (Neurath 1907, 147–148). By graphically representing the three stages of economic development: '*Naturalwirtschaft*', '*Geldwirtschaft*' and '*Kreditwirtschaft*', it is possible to confront the different results in terms of comparability by adopting a premise of idealistic evolutionism or periodic permanence (Fig. 3). As seen, assuming a linear evolution of history towards a teleological end would not allow for the same economy to return to the same stage of growth, followingly comparisons could only be between different societies that at the same time or in different times passed through one specific stage (Fig. 4). According to Neurath, this

kind of comparison had been the first to be practiced by historiography, in the seventeenth and eighteenth centuries, even in a simplified and often superficial fashion. Main studies had analysed the emergence of the cities in antiquity and in the German states, or the functioning of the agricultural systems from the economic and juridical point of view. A boost to comparative studies had then come from the popular doctrine of the state of nature and the successive evolutionary path of history (Neurath 1907, 153). Main setbacks had followed the French revolution and the spreading of liberalism, both events that, in the eyes of Neurath, had made the comprehension of the past more difficult and had hindered fruitful comparisons (Neurath 1907, 158). Only the German historicist tradition had fostered again this strand of research in the nineteenth century, even if through harsh debates and methodological disputes. Fruitful results in economic historiography would be borne until the 1930s (Heaton et al. 1930) and even further, not only in the Marxian tradition (Rostow 1960).

Adopting the premise of the periodic permanence (Fig. 3), instead, comparability became possible even for the same economy, passing through the same stage of development again and again (Fig. 4). Well before Eduard Meyer, this kind of philosophical assumption and historiographic tradition was typical for all family and clan recounts based on a biological view of society (Neurath 1907, 148). This implied, obviously, an idealistic permanence assumption in regard to the character of men: confronted with the same situation, leaders as common people would react in the same way and cause the same consequences, putting the eternal cycle in motion. The same applied to all those economic cycle theories that assumed the inevitability of boom and boost periods in consequence of some permanent characteristic of men or of the economic system.

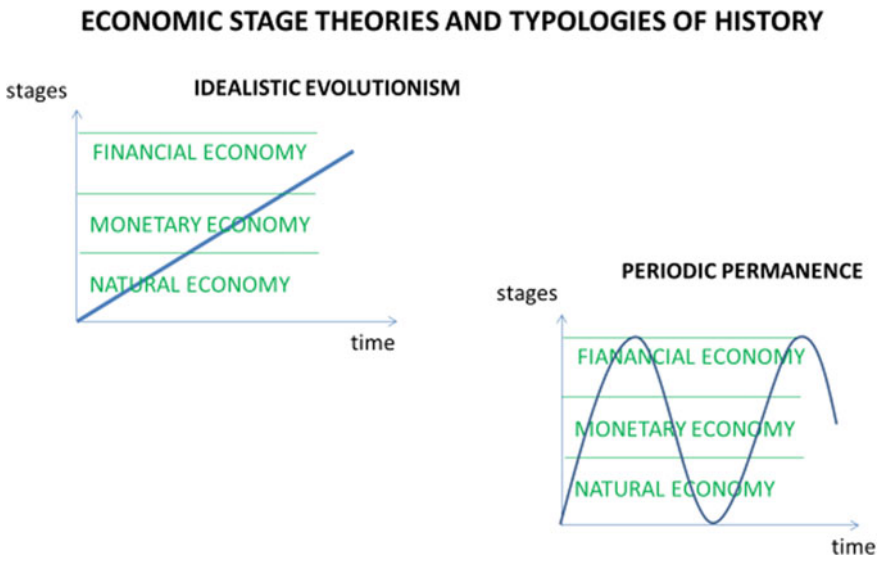

Fig. 3 Stage theories and typologies of history

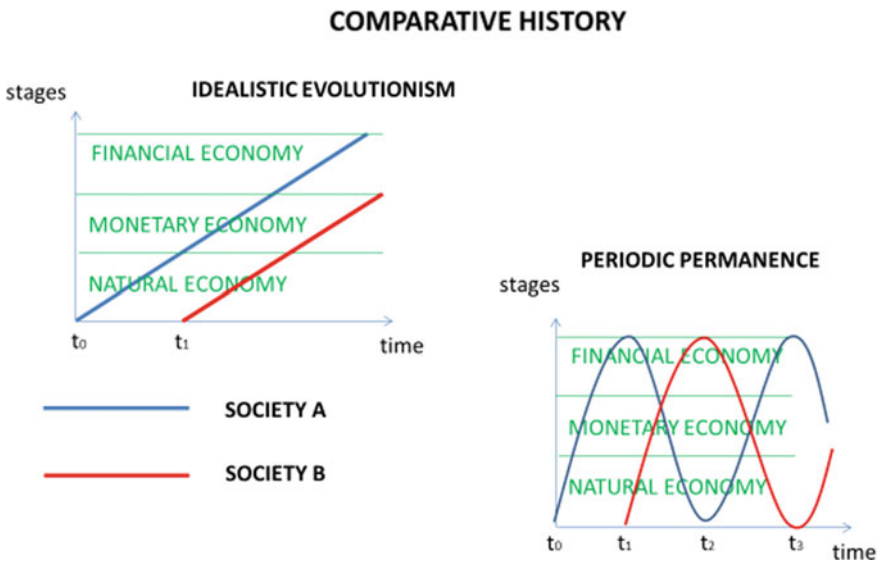

Fig. 4 Stage theories and comparability

In Neurath's scheme, a third philosophic assumption, that of an anarchic philosophy of history, finally regrouped anyone who would not admit any permanence or constant improvement in societies. Changes would be continual, undulatory, or periodical, but erratic, showing no direction or end. Comparisons, in this case, would have no sense.

Lessons from History: Economics as a Comparative Science

Neurath believed that much had been lost to the economic science, by abandoning the study of antiquity (Neurath 1910a, 244). By devising a refoundation of the economic science, he so decided to make out of it not only a science of happiness, but also a comparative science open to the suggestions of the past.

The set of variables he chose to measure and compare the happiness of people and the wealth of an economy was simple and quantifiable in kind (Neurath 1917a, 1917b). Neurath defined as *Lebenslagen* the life conditions influencing individual happiness (*Lebenstimmung).* Life conditions included necessity goods and services available for consumption and consequently the productive forces and natural constraints of a country, but also 'its state organization, the diffusion of innovative capability, the organizational know-how, stupidity and laziness and so forth' (Neurath 1917a, 8). In his statistical book *Modern Man in the Making*, published in

1939, Neurath implemented this kind of measurement and vividly represented statistics regarding *Lebenslagen* with Isotypes[21] comparing the availability of food and drinks, raw materials, and energy resources in the United States and Canada, Europe, and the Soviet Union. Out of the collected data, Neurath further construed silhouettes for many countries in the world, representing the average length of life of female population, suicide rates, literacy, and the possession of radio sets. The resulting scheme allowed an intuitive comparison of the wealth, in Neurath's definition, of the respective nations. Compared, for example, with simple data on income per capita, the suicidal rate comprised in the silhouettes cast a shadow on the otherwise brilliant performance of the United States and Great Britain, while giving merit to countries as India, Spain, and Italy that were conventionally classified as poor.[22] It should be underlined that all the compared quantities consisted of in-kind measures, not monetary measures. The reason for this choice was that while monetary and in-kind values were both useful to measure states of happiness, the latter could be collected also in absence of a market economy and thus had a wider use and a greater hermeneutical value.

At the beginning of time Neurath considered *Lebenslagen* as fully determined by natural and physical conditions—i.e. quantity of available fields, minerals, forests, water supply, etc. He consequently defined such situation in a precise set of time as *Lebensboden* (life base) (Neurath 1917b, 487). But with the evolution of society an order of society had emerged that could counter the effect that such primary conditions had on *Lebenslagen*: the *Lebensordnung*. It was this slow emergence of a *Gesellschaft* out of the primordial *Gemeinschaft* that had led to the development of theories studying the causal relationship between the newly erected institutions and the sensations (pleasure and pain) of individuals (Neurath 1913, 442). A calculation of happiness had arisen, as in Aristippus and Epicurus, that through mercantilism had developed all the way down to modern economics. Neurath's own definition of economy derived from this tradition of thought.

Denominations were, as always in Neurath, full of significance: *Lebensboden* is the base of life, *Lebenslage* is the condition of life, and *Lebensordnung* is the order of life. *Lebensboden* is historically determined, while *Lebensordnung,* as the material construction of the *Weltanschauung,* is determined by men and given only in each period of time. Comparing the *Lebenstimmung* caused by a *Lebensboden* with the *Lebenstimmung* of another, gave as a result a judgement of relative happiness. Given the same *Lebensboden* to start with, instead, comparing the *Lebenstimmungen* related to diverse *Lebensordnungen* resulted in a judgment of relative economy (Neurath 1917b, 490).

Neurath would so define an economy as the comprehensive set of actions, prescriptions, and attitudes—*Lebensordnungen* - having in any way influence on the happiness/wealth of men. In his words: 'The scientific study of these economies,

[21] On Neurath and his international picture language, see: Neurath (1936) and Hartmann (2014).

[22] Similarities between Neurath's theory and recent contributions of Amartya Sen to welfare economics, as well with statistical instruments as the human development index are unmistakable (Leßmann 2007).

the Lebensordnungen determining the Lebenstimmungen, will be named economic theory'(Neurath 1917b, 492).

Given this definition, Neurath considered the study of ancient economies as a source of inspiration for modern-day economists, suggesting feasible alternative institutional settings to the existing free market economy. His own popular booklet on *Antike Wirtschaftsgeschichte* (Neurath [1909] 1918) analysed in detail the economies of antiquity from the point of view of their *Lebensordnung* and specifically their *Wirtschaftsordnung*. The pamphlet contained information concerning economic institutions, taxation, monetary circulation, exchanges but also economic thought and the social appreciation of the diverse professions from ancient Egypt to the European middle ages. The influence of Eduard Meyer is unmistakable (Neurath [1909] 1918, 5). Neurath, in fact, identified three stages of development that had characterised both the economies of Ancient Greece and Rome: a first stage subject to bureaucratic control, a second stage of free market, and a last stage of renewed bureaucratisation with new institutions. The West, though, had not followed the same stages in its modern development, but had substituted the bureaucratic control of the third stage with an ulterior fragmentation of economic action. Another echo of the teachings of Meyer is to be found in the description of the negative consequences of the monetisation of in-kind economies. 'We see - wrote Neurath - that the monetisation conquers land after land, as an infection, and with it the slavery of debt that for centuries oppressed even Rome and Greece. Monetisation is a creation of international trade and would not have arisen in a national context. When it comes in touch with a developed economic order, it brings about change, in simpler economic orders, instead, it causes disruption' (Neurath [1909] 1918, 17).[23] Neurath, in fact, preferred the grand in-kind economy—*Großnaturalwirtschaft*—of ancient Egypt,[24] a preference that cost him the derision of many colleagues.[25] Imagination, sparked by historical comparisons, was not *en mode* among German economist, even of the historical school, who preferred to relegate the past to a primitivism in respect to which modernity would remain incomparable. 'Economics - countered Neurath - should not so much ascertain the historical course of facts but understand the functioning principles of given institutions'(Neurath 1910a, 244–245). The past would so become an unending source of knowledge and perhaps happiness. This is the case of the pictorial language, isotype, that Neurath derived from primitive paintings and hieroglyphics (Neurath 2010). His aim in creating a universal language, understandable by everyone, was to spread all kind of notions and statistical data regarding the present economic order and other comparable ones to the widest public possible, to enable people to democratically choose the best economy in respect to their prospective happiness.

[23] Similar the judgement of Meyer with particular reference to the effect of monetisation on the mentality of the landed proprietors in Rome (Meyer [1895] 1910b, 110).

[24] On the case of Egypt see also: Meyer ([1895] 1910b, 92–93).

[25] Lujo Brentano defined Neurath a "romantic economist of the Ancient Egyptian school" (Uebel 2004, 75).

Neurath's attempts to holistically redefine economics as a comparative science were not appreciated by contemporaries, with the exceptions of Max Weber and Joseph Schumpeter who vainly attempted to facilitate his academic career. The harsh judgement felled by Ludwig von Mises was just one among many (Mises 2009, 32). The many debates that lacerated the economic science at the eve of the twentieth century were a question of academic power and politics as much as of methodology of research. As such the participants in those debates did not search for a solution but mainly aimed at a revolution that would open the way up to academic positions and allow the spreading of new economic policies and practices. Historical comparisons would so be mainly undertaken by the newly founded sociology under the wing of Max Weber, while Neurath himself would be appreciated and remembered for his philosophical studies.

Conclusions

The flourishing of studies on ancient economies in German-speaking academia in the course of the nineteenth century sparked many debates. The one between the economist Bücher and the historian Meyer represented best the different philosophical assumption on history of political historians on one side and economists of the historical school on the other. Not only did the methodologies of enquiry differ between the two camps—singularity of the historical fact and contextuality here and causality there—but also the philosophy of history—biological cycles in one case and linear evolution in the other. The consequences on the usefulness of comparisons of the same economy at different times or of diverse economies at the same time or in different moments were relevant. As the economist Otto Neurath synthesised in his dissertation in 1907, Meyer's conception would allow wide ranging but hazardous comparisons, while linear theories of growth in stages created an unsurmountable divide between 'modern' and 'primitive' economies. A solution to the problem, proposed by Neurath, was to transform economics in a comparative science, based on in-kind statistics, capable of evaluating the effect of different economic systems on the happiness of people. The study of antiquity, in this regard, would offer the richest material of enquiry and many future options of institutional change. One example was the pictorial universal language, devised by Neurath on the basis of ancient examples, that enabled people to acquire information easily and as such enriched their capacity to participate in the democratic decision process, enhancing their happiness.

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