

One Hundred Years From Today

Joseph A. Schumpeter. *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*. Berlin: Duncker & Humblot. 1908

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Readers might be a little surprised to find an assessment here of *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie* (*The Nature and Essence of Theoretical Economics*). They might object that *Wesen und Hauptinhalt* is a contribution to a controversy (the first *Methodenstreit*), which nobody is interested in anymore, that it aims to explain Walrasian equilibrium theory to a school of economics (the German Historical School), which has vanished from the earth's surface, and that it does not offer any insights that will expand the body of economic theory, neither conceptually nor empirically. All of these objections are, to some extent, justified.

Das Wesen und Hauptinhalt der theoretischen Nationalökonomie is certainly the least known of Schumpeter's major works (aside from perhaps *Vergangenheit und Zukunft der Sozialwissenschaften*, 1915). It has never been translated into English – only into Japanese – and hence sadly it is still inaccessible to a majority of economists. But these observations certainly do not mean that this publication is unimportant. On the contrary, *Wesen und Hauptinhalt* is a key to understanding Schumpeter's entire work for two main reasons: (i) it acts as the firm ground on which everything that follows is built. His very rigid interpretation of the Walrasian representation of the economy and his concept of economic statics pave the way for both his critique of this framework and his concept of economic development that emerged from this critique. This concept of economic development contains his early understanding of the Walrasian equilibrium as an essential element. In other words, without *Wesen und Hauptinhalt*, Schumpeter's theory of economic development is impossible – both from an evolutionary and a systematic point of view. In addition: (ii) the methodological foundation of the Walrasian equilibrium theory, which Schumpeter develops in *Wesen und Hauptinhalt*, is path-breaking – I would even go so far as to state that the methodology of *Wesen und Hauptinhalt* is half a century ahead of its time. The methodological dimension of Schumpeter's work is, even today, not very well known to many economists. In *Wesen und Hauptinhalt*, Schumpeter not only presents a very early application of neo-positivism to economics (and simultaneously one of the earliest methodological foundations of Walrasian equilibrium theory), he also does this in an 'enlightened' manner by recognising the difficulties of such a foundation and by avoiding the traps into which many recognised philosophers of science succeeding Schumpeter have fallen.

For these reasons: yes, it is worth commemorating this book and this recognition is a great merit to the editors of this journal.

Wesen und Hauptinhalt was written in Vienna during the *fin de siècle*, the last day's of the old monarchical order in Europe. It was a time of great scientific discoveries and a growing belief in technical progress and in the progress of civilisation. As Stefan Zweig (1942 [1964], p. 3), the great chronicler of that epoch, described so

vividly: 'In its liberal idealism, the nineteenth century was honestly convinced that it was on the straight and unfailing path towards being the best of all worlds'. It was also the time of opulence and decadence, of glamour and operas. Vienna, as the capital of the Austro-Hungarian Empire, one of Europe's superpowers, was a centre of the cultural and intellectual ferment that accompanied this belief in progress. This confidence in the future, a defining feature of Viennese life, was only checked (and then not entirely) with the outbreak of the 1914-18 War.

Wesen und Hauptinhalt is Schumpeter's *Habilitationsschrift*, or a 'second book', which was the precondition for a full professorship at an Austrian University and somewhat comparable to gaining tenure in the Anglo-Saxonian system. Consequently, this book must be read in the context of Schumpeter attempting to convince a deeply split and interdisciplinary faculty to grant him the *venia legendi*. However, in advancing to that end, he did not take the safe path. Rather, Schumpeter adopted a bold position in which he laid the foundations for his general research programme.

How Schumpeter got to the point of writing *Wesen und Hauptinhalt* is a remarkable story in itself. The members of the Schumpeter family had been cloth manufacturers for many generations and belonged to the establishment of Třešť, a remote village in the Moravian province, which is now located in the Czech Republic at some distance from Vienna (Shionoya 1991). After the untimely death of his father, in 1893 his Mother was remarried to a field marshal lieutenant of the Austro-Hungarian army and moved (via Graz) to Vienna. This move to Vienna was perhaps a decisive step that enabled Schumpeter's entire life-story to unfold. Here Schumpeter received a first-class education at the Theresianum, which allowed him to study law at the University of Vienna (Swedberg 1991b, p. 4).

As already suggested, at this time Vienna was not only one of Europe's leading metropolises, but also one of the world's centres of academic and artistic life. Outstanding promoters of fine arts (such as Gustav Klimt and the *Wiener Werkstätte*, Egon Schiele and Oskar Kokoschka), music (such as Gustav Mahler and Arnold Schönberg), literature (such as Hugo von Hofmannsthal and Arthur Schnitzler), psychology (in particular Sigmund Freud and his school), and philosophy (particularly Ernst Mach and, after World War I, Karl Popper, Ludwig Wittgenstein and the Vienna Circle) created a unique intellectual climate in the city. But, most of all, Vienna was the home of the Austrian School of Economics, one of the roots of Neoclassical Economics. During Schumpeter's formative years it was still an important centre for economic research. His teachers were first-class economists like Eugen von Böhm-Bawerk and Friedrich von Wieser. Many of his fellow students subsequently made their mark in the world, including, Ludwig von Mises, Emil Lederer, Felix Somary, Otto Bauer and Rudolf Hilferding (Swedberg 1991b, p. 7). Here was indeed an active community, of which Schumpeter became a member, that shaped the nature and direction of future economic research.

In *Wesen und Hauptinhalt*, Schumpeter pursues two main targets: (1) to convince the members of the German Historical School of the benefits of economic theorizing; and (2) to lay out a methodological foundation for economic theory, particularly Walrasian equilibrium theory.

As early as in the introduction Schumpeter states that, with *Wesen und Hauptinhalt*, he wishes to address the German audience in particular:

One of my goals is to make the German audience familiar with a host of things—concepts, theorems and perspectives—which

have remained alien to it, since it did not participate in the development of economic theory in an adequate way. German economists often only very roughly know what 'pure' theorists deal with. (Schumpeter 1908, p. XXI, all translations by the author)

To understand this concern, we have to take a brief look at the specific context of economics in the German-speaking regions. This context is well known to those who work on the Austrian and German schools of economics that dominated this period, but I nonetheless feel obliged to present the briefest of sketches of the contextual background here to allow the general reader to understand Schumpeter's objectives in *Wesen und Hauptinhalt*. From the beginning German-speaking economists often set out on paths not taken by the English-speaking Classical Economists. This was caused, in part, by the differences in the philosophical traditions followed in Britain and the German-speaking regions. It was also certainly due to the different political, social and economic conditions, as well as the historical trajectories by which they achieved these conditions, in Britain and the German-speaking states. Britain was, after all, fully occupied with its industrialisation in the first half of the nineteenth century, while what now constitutes Germany was still an undeveloped country that was dominated by traditional agriculture and handicrafts, and scattered into a multitude of independent kingdoms, principalities and other independent entities. This dramatic contrast across regions must explain, to some extent, the nature of certain German tracts published early in this period, such as Adam Müller's critique of liberalism and Friedrich List's rejection of free trade and support for protective tariffs.

It is therefore not surprising that from the late 1840s onwards (at the time when John Stuart Mill brought the Classical system to a conclusion in his *Principles of Economics*), Wilhelm Roscher, Bruno Hildebrandt, Karl Knies and others established an independent school of economics, a school which was eventually referred to as the German Historical School. While it could be objected that Hildebrandt and Knies did not see themselves as belonging to a school, they were nevertheless fundamental to the creation of the German Historical School (see Senn 2005). The common stance taken by all of these economists was their critical attitude towards the Classical Economics. Most of all, they rejected its theoretical rigour, its 'unrealistic' abstractions and simplifications. They were fundamentally opposed to the idea of explaining human behaviour through universally valid laws, such as in physics, and indeed the Historical Economists promoted the distinction between natural and social science, which was especially put forward by Wilhelm Dilthey later on. In accordance with Leopold von Ranke's credo, 'Jede Epoche ist unmittelbar zu Gott' (Every epoch is immediately to God), the members of the German Historical School emphasised historical relativity. Instead of speculative theorising, they aimed to 'embed' their hypotheses in historical studies and observations. One way of conceptualising historical relativity was the identification and distinction of different phases of economic (and cultural) development – an approach that had already been put forward by Friedrich List. The forces behind historical change were of particular interest (Roscher 1854 [1906], p. 42). It was within this framework that the German Historical Economists, in contrast to the English Classical Economists, promoted interventionism rather than economic liberalism. One of the key associations founded by the German Historical Economists was named 'Verein für Sozialpolitik' (Association for Social Policy). In other words: in the mid-nineteenth century, German-speaking economists finally

began to go their own way – a road that they would follow for almost a century (Häuser 1988).

This was the academic climate in which Herman Heinrich Gossen's 'discovery' of marginal utility was totally ignored. And this was the academic climate in which Carl Menger published his *Grundsätze der Nationalökonomik* (1871). As is well known, Menger was one of the initiators of the so-called Neoclassical Revolution and hence could not be described as a Classical economist. Yet like the Classical economists Menger was interested in the formulation of universally valid economic laws – in other words, he wanted to pursue theory. As in the case of Gossen, German economists did not react to Menger's contributions, not because they 'thought his [Menger's] doctrines were wrong, but because they assessed his analytical approach as being useless' (Hayek 1934 [1968], p. xx).

But unlike Gossen, Menger did not want to accept his fate, and began to defend his work. This defence led to the publication of *Untersuchungen über die Methoden der Socialwissenschaften und der Politischen Ökonomie insbesondere* (1883) in which he openly questioned the demand of the Historical School to command the only valid method. The answer did not come from Wilhelm Roscher, but from Gustav Schmoller, the leading figure of the second generation of the Historical School, the so-called 'Younger Historical School' (see Schmoller 1883). It was an open, mostly methodologically motivated attack, but it was the attack from the high horse of the establishment towards a newcomer, and it was neither sophisticated nor well articulated. To some extent this is understandable, as Schmoller had, at this stage, not worked on methodological issues to any extent. As a result, Menger did not yield his ground and picked up the gauntlet (see Menger 1884).

What followed went down in history as the first *Methodenstreit* (which is often translated into English as 'Strife over Methods') in German-speaking economics. John Neville Keynes characterised the increasing polarisation of the two positions as the 'conception of political economy as a theoretical, abstract, and deductive science' (1891 [1955], p. 9) on the one hand, and the 'conception of political economy as an ethical, realistic, and inductive science' (1891 [1955], p. 20) on the other (see also Milford 1995). Later this was simply phrased as a dispute between 'inductive' and 'deductive' economics. As no party could defeat the other, German-speaking economists were divided into two fractions, with Berlin becoming the centre of the Historical School and Vienna becoming the centre of the Austrian School.

When writing *Wesen und Hauptinhalt*, Schumpeter was convinced that the *Methodenstreit* had never been brought to a real conclusion (Schumpeter 1908, p. 108). After a quarter of a century the parties were just tired of fighting. But the schism of German-speaking economics continued and the hostility between the parties was expressed through a mutual indifference (and sporadic aggressions).

In *Wesen und Hauptinhalt*, as in his entire later life, Schumpeter deeply disapproved of the *Methodenstreit*, and he perceived it as a waste of scientific energy. He was convinced that the procedures associated with *both* theoretical *and* historical research were not only valid, but also provided meaningful insights. In line with this, Schumpeter announces: 'Our standpoint can be briefly characterized to the effect that historical and abstract course do not contravene each other, that the sole difference lies in the interest for different problems' (Schumpeter 1908, p. 7). Consequently, he demands 'that the *Schulensstreit* [the dispute between different schools of thought] between pure theory and history may, for the most part, be

considered overcome. And, at any rate, we do not want to take a share in it' (Schumpeter 1908, p. vii).

However, Schumpeter's goal of convincing the members of the German Historical School that there were benefits from economic theorising was to some extent an ambitious one. The great Carl Menger himself had tried in this endeavour and failed dismally. So Schumpeter's undertaking was certainly not unproblematic and he was certainly well aware of the difficulty of his task. However, at the time when Schumpeter wrote *Wesen und Hauptinhalt*, the situation was fundamentally changed due to the fact that Menger did prevail and, as a result, he was able to establish an independent theoretical research tradition: the Austrian School of Economics. Thus Schumpeter did not act as a lone deviant, as Menger did, but as a (young) representative of a well-established research tradition.

The manner in which Schumpeter had chosen to address the members of the Historical School and the proposal that he made to solve the *Methodenstreit* are both clever and innovative (although already proposed earlier by John Neville Keynes in a similar way): a peaceful coexistence of two independent approaches that are distinguishable through their interest in different problems (and consequently their use of different methods), yet contribute equally to economic research. This implies that both approaches are valid and should acknowledge each other. And it implies that neither of the schools had to change their positions on method in order to solve the controversy, since neither one of the schools need accept defeat.

Besides acknowledging their right to exist, his approach to solving the *Methodenstreit* meant one thing in particular to Schumpeter: to solicit the members of the Historical School also to acknowledge that theoretical economics had a right to exist, and to convince them of the benefit of this approach. This was indeed a new and, at that time, unheard voice among Austrian economists: not an attack, not a rude rejection, but a modest plea for acceptance. And Schumpeter had good reasons to hope that this voice would not fade away unheard. The current situation was unsatisfactory for the members of the Historical School and Schumpeter perceived that its youngest generation had begun to take an increasing interest in theoretical methods (Schumpeter 1908, p. 101). Schumpeter's perception was not completely unjustified. It has been explicitly supported by a statement that Ludwig Pohle made in reply to *Wesen und Hauptinhalt*:

We clearly live in a time of an interest which is regaining strength within theoretical research in the national economic field. ... Also within the historical school, the necessity is understood to play to the changed zeitgeist and to seek alignment with it. (Pohle 1909, p. 332)

The justification of theoretical economics to the members of the Historical School was, however, only one of the motives for Schumpeter to construct his methodological foundation. Another key motive was that he was obviously striving to gain a deeper understanding of economic theory himself. It was seemingly this motive that brought him to the statement:

What is to be thought about the pure economy of today, which is its nature, its methods, its results, and where and how the work is to be continued, that is something we would like to elaborate. (Schumpeter 1908, p. XVIII)

In *Wesen und Hauptinhalt*, Schumpeter was obviously striving to create a starting point or foundation for his own future work. In modern parlance, he was trying to map out the research frontier rather than push it outwards. In this sense, we can read the title thus: *Das Wesen der theoretischen Nationalökonomie* is the method, the procedure of theoretical economics, which he aims to clarify, and the *Hauptinhalt* are the insights that can be gained on the basis of this method. In *Wesen und Hauptinhalt*, Schumpeter shows no serious effort to contribute to the body of economic analysis itself. Instead, he is mostly concerned with explaining and justifying its procedure and results – that is basically what *Wesen und Hauptinhalt* is about.

It is well known that Schumpeter's general approach to economic theory was 'surprisingly un-Austrian' (as Samuelson 1951, p. 99 has put it). Instead, in *Wesen und Hauptinhalt* Schumpeter praises the Walrasian equilibrium analysis as a climax of economic theorising – a standpoint that he was to maintain during his entire lifetime. In his majestic *History of Economic Analysis* (1954, p. 827) he even goes as far as to state: '... as far as pure theory is concerned, Walras is in my opinion the greatest of all economists'. Against this background, the methodological foundation of economic theory in *Wesen und Hauptinhalt* is ultimately nothing more than a foundation of mathematical Walrasian equilibrium analysis.¹

In *Wesen und Hauptinhalt*, Schumpeter does not explicitly refer to one specific methodological doctrine and only tells us that he follows 'one branch of recent epistemology' (Schumpeter 1908, p. XVI). But it was soon recognised that his foundation of economic theory closely follows the principles of the so-called Empiriocriticism (or early neo-positivism) of Ernst Mach (see Spann 1910; von Wieser 1911). Schumpeter himself never reflected on this choice. However, his choice is not very surprising since Mach's doctrine was very widespread in Vienna at this time. Moreover, Mach's doctrine is well suited to countering the criticisms of the German Historical School, which suggest that economic theory simply builds on empty speculations instead of (reliable) empirical insights. But, most of all, Mach's doctrine seems to 'fit' perfectly with the Walrasian equilibrium analysis – a point to which I will return later.

Mach himself is not what one might call a classical theorist of science, but a physicist, who was driven by the necessity of creating a methodological foundation for his research. The point of departure for Mach (and other Empiriocritics) was the perception of an increasing gap between philosophy and the academic disciplines. Specifically, whilst the disciplines could carry out a rapid progress in this era of discoveries (of which Mach was a vital part), philosophy seemed to be caught in a standstill and in endless debates about questions that nobody can fully answer. If we take physics, for instance, these were debates about the 'nature' of energy and mass. Immanuel Kant previously identified these questions and characterised them as 'metaphysical.' To use an explanation from Kant:

In metaphysics we want to expand our a priori cognition. In order to do this, we must use principles which go beyond the given concept and which add to it something that was not contained in it; and, by means of such synthetic a priori judgments, we must presumably go so far beyond such concepts that even experience can no longer follow us; as in the proposition: The world must have a first beginning—and others

like that. And hence metaphysics consists, at least *in terms of its purpose*, of nothing but synthetic a priori propositions. (Kant 1781 [1997], B p. 18)

Kant was convinced that without such metaphysic propositions, human understanding is not possible. Consequently, his concern was the location and purification of metaphysics. Kant's guiding question was: '*How are synthetic propositions a priori possible?*' (Kant 1781 [1976], B p. 19). He developed his answer to this question in his transcendental philosophy.

Mach was convinced that the Kantian problem of a *a priori* synthetic propositions could be avoided when human understanding of 'outside' phenomena is fixed from the 'inside' as subjectively authenticated sensations. Mach calls this connection between the inside and the outside an 'element' (Mach 1905 [1917], p. 10). The associated research activity entails describing the functional (in the sense of a mathematical function) interdependence of these elements as accurately and simply as possible. The results should lead to a system of equations that represents in a (formal) language the elements and their relations (Mach 1885 [1922]).²

Along these lines, Mach was convinced that he was able to liberate research from all distracting metaphysical speculations. Or as he has put it so distinctively:

The land of the transcendental is barred to me. And if I may add moreover the open avowal that its dwellers are by no means able to allure my intellectual curiosity, one may conceive the gap which exists between many philosophers and me. (Mach 1905 [1917], p. VII)

Subsequently, Mach's agenda is to eliminate all metaphysical elements from the academic disciplines. From a contemporary perspective, Mach's effort and his claims might sound a little naïve. However, we must not forget that Mach acted long before the modern theory of science had been developed. In his time and context, Mach's ideas were path-breaking and paved the way for many fruitful developments in a range of disciplines, not only in philosophy.

In *Wesen und Hauptinhalt*, Schumpeter adopts Mach's methodological programme. In line with this, he criticises previous theoretical work with the words: 'Like dense fog the ambiguities of metaphysics blur our paths and impede the free outlook' (Schumpeter 1908, p. 23). Accordingly, the leitmotiv of his methodological foundation is 'to wave away all metaphysical obscurities from our way' (1908, p. 79). In this line, the target of his methodological foundation is 'a critique of our science with the purpose of elaborating the exact content of all those verbose assertions that we encounter at the threshold of the economy, which are presented to us if we inquire about the fundamentals of theoretical economy; this is the point we want to contribute to' (Schumpeter 1908, p. 26).

As in Mach, in Schumpeter the corpus of economic theory is a system of elements, which he formulates as a Walrasian system of equations:

Given: m individuals $A, B, C \dots$ and their value function for n goods $I, II \dots$, then their possession of these goods $q_{a1}, q_{a2} \dots q_{b1}, q_{b2} \dots$ Wanted: the exchange ratios p_1, p_2, \dots , according to which the exchange will be made, and the – positive or negative – accretions $dq_{a1}, dq_{a2}, \dots dq_{b1}, dq_{b2} \dots$, which these given possessions of goods will experience. (Schumpeter 1908, p. 261)

At this point, Schumpeter realises the fit between Mach's system of elements and Walras' system of equations. The sequence by which Schumpeter

came to link Mach with Walras must, however, remain a mystery. Was it really the structure of the Walrasian equilibrium analysis that brought Schumpeter to Mach? Or was it not rather Mach's system of elements that brought Schumpeter to break with the Austrian tradition and turn to Walras? Schumpeter himself never commented on this point.

It is, however, certain that Schumpeter adapts Mach to Walras by changing the specification of the elements. Schumpeter is not very clear on his new specification. Basically, he understands elements as quantities of goods, but he also subsumes manpower among them. The structural difference from Mach is that, according to the new specification, an element is not a subjectively authenticated sensation anymore, but an 'experienced fact that is so evident that it does not require further justification' (Schumpeter 1908, p. 28). However, this quotation indicates that Schumpeter's concept of 'facts' is very rudimentary and does not take into account any of the difficulties in establishing empirical insights.

But now comes the interesting part: in contrast to Mach, Schumpeter does not see any possibility of extrapolating from single observations to draw generally valid economic laws. With this insight, he certainly reflects on the difficulties of the Historical School to induce generally valid laws from historical studies (Schmoller 1883, p. 978). When is the empirical basis sufficient? How is one to obtain the certainty that the next event will not diverge from the past? This problem was identified and pointed out with pleasure in the *Methodenstreit* by the adversaries of the Historical School. But, with this position, Schumpeter also rejects Menger's method of 'singular induction' and his claim to formulate rigorous economic laws 'which not only present themselves to us as being invariable, but, with regard to the ways of gaining knowledge with which we arrive at the selfsame, well-nigh comprise the pledge of exceptionlessness' (Menger 1883 p. 38). Schumpeter is convinced that economic laws cannot 'be concluded immediately from the facts, but have to be gained on the devious route of a schematization' (Schumpeter 1908, p. 45). But what does this schematisation look like? How is a researcher to establish economic laws, if neither by synthetic propositions *a priori* nor by empirical investigations?

To solve this problem, Schumpeter falls back on the insights of conventionalism; a contemporary research stream whose main promoter was Henri Poincaré. Conventionalism was primarily concerned with axiomatic systems, that is, sets of axioms from which theorems can be deduced by logically valid conclusions. (Today, axiomatic systems are a methodological paradigm for many formal theorists.) The focus of conventionalism was on the investigation of the methodological status of the axioms. The development of a number of non-Euclidian geometries in the first half of the nineteenth century, in particular, brought Poincaré to the conviction that the axioms of these systems cannot have the status of synthetic propositions *a priori* (that is, of universally valid truths) that Kant gave them. Poincaré was convinced that:

The geometric axioms are neither synthetic propositions *a priori* nor experimental facts ... They are determinations resting on agreements; among all possible determinations our choice is guided by experimental facts; but it remains free and is just limited by the necessity to avoid any contradiction. (Poincaré 1902, p. 51)

This conventionalistic approach delivered the key for Schumpeter to address the problem of the epistemological status of economic laws. Consequently,

he interprets the Machian systems of elements as axiomatic systems. The purpose of these axiomatic systems is 'to provide a review of a group of facts not just by simple individual description but by drawing a schema, which does not have to correspond with reality in itself, but just in its results' (Schumpeter 1908, p. 131).

What counts are the results of the systems, the theorems that can be concluded from the axioms in a finite number of logically valid operations. In contrast, the axioms are only 'formal assumptions for methodological purposes' (Schumpeter 1908, p. 68). They do not have to be authorised by any metaphysical or empirical evidence. Consequently, an axiomatic system 'is a formation of our arbitrariness still not made up out of thin air, a creation of the researcher still not without relationship with reality' (Schumpeter 1908, p. 131).

Against this background, a theory can never be true or false, but only more or less accurate. Core criterion for the accuracy of a theory (and hence for its acceptance) now becomes a matter of how its theorems match with the facts.

[A]ll metaphysical or elsewhere retrieved reason for my hypothesis could not rescue it if its application would lead to results, which collide with reality. To deliver a schema, which yields an appropriate image of the economic reality, that is its sole purpose, only here are its merits, and for this purpose it does not matter at all where it is derived from and how it is adorned. (Schumpeter 1908, p. 60)

This approach contains an inherent dynamic of theoretical research, launched by the recurring mismatch of theories with the facts and the reaction that follows. Schumpeter's description of this dynamic is very sophisticated: he is convinced that it makes no sense to drop a theory immediately after the observation of one mismatch of its theorems with 'the facts'. Instead, the defect might be repaired by the introduction of a supportive hypothesis (*Hilfshypothese*).

Finally and eventually the number of supportive hypotheses grows to an extent that we abandon the patchwork as soon as we can do without it; and a new hypothesis, more general, more simple, and of juvenile power, supersedes the old one in order to finally fall victim to the same fate as soon as its daily task is done. (Schumpeter 1908, p. 60)

Subsequently, he argues: 'that the development of the human culture at least, and notably the development of knowledge comes about erratically. Enormous attempts and periods of stagnation, ebullient hopes and bitter disappointments take turns, and even if the new is based on the old, the progress is not a steady one' (Schumpeter 1908, p. 8). And here he has one particular example in mind: the rise and fall of Classical Economics and the Neoclassical Revolution.

To sum up: in *Wesen und Hauptinhalt* Schumpeter maintains that theories are axiomatic systems whose axioms are established by assumptions (and not authorised by metaphysical or empirical evidence). Theories are not true or false but only more or less accurate. The accuracy of theories is established by how its theorems match with the facts. This methodological approach to economic theory or 'program' is what Schumpeter calls *Theoretische Nationalökonomie*. And this is what he offers to the members of the Historical School (and, of course, to the academic community as a whole).

Now we can understand how Schumpeter addresses the members of the Historical School with his methodological reflections in *Wesen und Hauptinhalt*: He admits

that the critique of the Historical School has been completely justified in many cases: 'that the economic theory is not at all based on the observation of facts but on supra-propositions of an ambiguous character'. He concludes: 'Maybe the *Methodenstreit* would never have gained this extensiveness had not the theorists claimed the theory to have a quasi upper consecration' (Schumpeter 1908, p. 48). But he is also eager to show that this critique does not reveal a structural problem of economic theorising, but only reflects on avoidable mistakes that had been made in the past.

Against this background, *Wesen und Hauptinhalt* is nothing less than a comprehensive argument that it is possible to do theory without such metaphysical speculations:

So if the historian says that our theory was a formation of our imagination he is right in a sense. Certainly, neither our 'assumptions' nor our 'laws' are located in the world of phenomena itself. But out of this does not follow any objection against them yet. Because this does not prevent them from being in line with the facts. (Schumpeter 1908, p. 572)

When economists like Menger were looking for universal truths, they were wrong. And the members of the Historical School were right in criticising that. Yet, at the same time, when the fit of its theorems with the facts is the central criterion for its acceptance or rejection, economic theory can be prevented from undertaking unrealistic mental acrobatics. He concludes: 'Had the statement ever been duly considered, I think, no one could ever have gone so far in the rejection of the theory' (Schumpeter 1908, p. 572).

But why pursue theory? What is the benefit of economic theorising? On this point, Schumpeter is surprisingly weak. First of all, he understands economic theorising as an expansion of exact reasoning, which he presents as an accomplishment in its own right (Schumpeter 1908, p. 563). Furthermore, he reflects on Mach's concept of *Denkökonomie* (economics of reasoning) according to which it is desirable to cover a multitude of facts with a few simple statements (Schumpeter 1908, p. 42). His strongest argument is perhaps that it is possible to conclude from axioms to unexpected counter-intuitive insights so that theorising can provide insights that simple observations cannot (Schumpeter 1908, p. 561). But Schumpeter also cares to point out the restrictions and limitations of economic theorising. Most of all, he is very sceptical towards the possibilities of applying economic insights to political decision-making – as is well known, this is an attitude that Schumpeter will maintain during his entire lifetime. But here he gave away the strongest argument for economic theorising: to support decision-makers to compare different alternatives and to assess the consequences of economic actions.

Another limitation is the static character of the Walrasian system. Schumpeter admits that change is an important aspect of economic reality and that the Walrasian system is not suitable to cover it. But, as is well known, he does not understand this limitation as a structural problem of economic theory in general, so in *Wesen und Hauptinhalt* he identifies the formulation of a 'dynamic theory' as the greatest future challenge for theoretical research.

The most critical point of *Wesen und Hauptinhalt*, however, is perhaps the proposed 'solution' to the *Methodenstreit* itself. With his concept of peaceful coexistence of two independent approaches, Schumpeter does not offer a real solution to overcoming the disconnection between theoretical and historical

research, but rather manifests it. Strictly speaking, a peaceful coexistence changes nothing but the attitude of the members of the different schools.

But in the context in which Schumpeter wrote *Wesen und Hauptinhalt*, it was certainly advantageous not to be too pushy. It showed that Schumpeter did not want to evangelise the members of the Historical School and that he did not raise demands that had an impact on the existing research routines. Everybody could carry on as usual. The only thing that Schumpeter pleaded for was acceptance (and maybe a little more interest). In this sense, *Wesen und Hauptinhalt* was first of all an overture to the historical economists, who, I might add, readily recognised this act as such. Eventually, it resulted in Schumpeter being asked by Max Weber, one of the leading figures of the third generation of the Historical School, to write the section on history of economics in *Grundriss der Sozialökonomik* (1914), the standard compendium of German-speaking economics whose conceptualisation was dominated by the members of the Historical School.

What is the significance of *Wesen und Hauptinhalt*?

First of all, *Wesen und Hauptinhalt* has to be regarded as an outstanding book on economic methodology that was far ahead of its time. In it Schumpeter has carried out a very early (to my knowledge even the first) application of the insights of early neo-positivism and conventionalism to economics. As a result, it contains a very early methodological foundation of Walrasian equilibrium theory. However, when applying the insights of early neo-positivism and conventionalism to economics in *Wesen und Hauptinhalt*, Schumpeter avoided falling into the traps into which the Vienna Circle fell after him. He did not strive towards empirical evidence or any kind of 'higher authority' for theoretical statements. Instead he understood theories as somewhat arbitrary axiomatic systems whose accuracy has to be judged by how well their theorems fit with the reality. If it does not fit sufficiently anymore, a theory has to be rejected and replaced by a more accurate one. In *Wesen und Hauptinhalt*, Schumpeter clearly and explicitly puts forward a principle of falsification – and this was a quarter of a century *prior to* Popper's *Logic of Scientific Discovery*! Furthermore, Schumpeter's concept of falsification is much more sophisticated than that of the more naïve Popperians, since Schumpeter has realised that the falsification of scientific theories is a complex process and not a once and for all 'execution' of simple statements (like 'all swans are white'). Here Schumpeter is obviously reflecting on the experiences with the Neoclassical Revolution in economics. I think that Schumpeter's concept of *Theoretische Nationalökonomie* is, ultimately, closest to Milton Friedman's 'methodology of positive economics' (1954), which remains a popular methodological approach in contemporary economic research. Both methodologies understand economic theorising as a speculative but informed creation of axiomatic systems (albeit, compared to today's standards, in a rather informal way). Both reject the demand for realism or any kind of higher authority for the axioms, or 'assumptions.' And both have in common their somewhat naïve belief in the significance of empirical investigations. However, against this background, it is time to praise Schumpeter not only for his economic, but also for his methodological contributions. And it is time to acknowledge that Schumpeter's early understanding of *theoretische Nationalökonomie* diverges significantly from his later understanding of 'economic analysis'.

Second, and perhaps even more importantly with regards to contemporary research, *Wesen und Hauptinhalt* has to be regarded as a starting point and a

foundation of everything that follows. And first of all, this concerns his theory of economic development. After all, Schumpeter's concept of economic development can only be understood against the background of his somewhat rigid concept of economic statics. In *Wesen und Hauptinhalt*, Schumpeter elaborates on what a future dynamic theory might look like. This elaboration gives us perhaps the most authentic insight of how his theory of economic development was originally intended: as an investigation of the forces that drive an economy from one equilibrium to another. This means that with his theory of economic development Schumpeter did not intend to *replace*, but to *complete* the Walrasian equilibrium theory. And indeed, many neoclassical concepts play a prominent role in his theory of economic development, the most important of which are: the Walrasian optimiser, which Schumpeter accepts as a valid description of one class of economic actors, the existence and relevance of equilibrating forces, and methodological individualism. This does not mean that Schumpeter's theory of economic development *consists* of neoclassical principles, but rather that it essentially *builds* on them.

It also must not be forgotten that *Wesen und Hauptinhalt* is the starting point for Schumpeter's following work on economic methodology. As is well known, Schumpeter later revised his concept of *theoretische Nationalökonomie* and turned his attention from the elimination of metaphysics to the integration of historical relativity and historical change into theoretical research (see in particular the considerations in Schumpeter 1926 and Schumpeter 1927). Only at this later date did Schumpeter offer a 'real' solution of the *Methodenstreit* that tries to unify the different approaches into a comprehensive concept of 'socio-economics.' And this concept of socio-economics is the methodological approach that Schumpeter is broadly renowned for. But it has to be remembered that socio-economics is only a revision of something Schumpeter considered at an earlier date and that it still contains *theoretische Nationalökonomie* as a reference point. But even more than that, for his entire life, Schumpeter would stick to the principles of *theoretische Nationalökonomie* (and the Walrasian equilibrium analysis) as the methodological ideal for economic theorising.

In addition, Schumpeter would soon discover the sociological dimensions of research and finally develop his early concept of disruptive scientific changes to a comprehensive theory of scientific development (Kesting 2005).

As Swedberg reports (1994a, p. 174), Schumpeter toyed with the idea of writing a second edition of *Wesen und Hauptinhalt* for some time. This second edition, however, never appeared and Schumpeter later tended to neglect the original version and, further, to characterise it as a sin of his youth. A consensus view subsequently seems to have formed that mirrors Schumpeter's own rather negative view of this publication. However, I am not certain that this is entirely correct. I am convinced that there are many good reasons for arguing that Schumpeter was indeed able to almost finish a subsequent book that serves the same purpose as *Wesen und Hauptinhalt*; namely, to investigate the 'essence' and 'main content', not of 'theoretical economics' as a closed discipline, but of 'economic analysis' as a comprehensive approach and as dictated by Schumpeter's late understanding of socio-economics. This book appeared posthumously in 1954 with a new title: *History of Economic Analysis*. The publication of this work, however, is a completely different story.

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Notes

1 It has to be noted, however, that one can also find some non-Walrasian elements in *Wesen und Hauptinhalt*, most of all Schumpeter's capital theory, which closely follows Böhm-Bawerk and his considerations about the *Zurechnungsproblem* (the problem of attribution) that are obviously influenced by Friedrich von Wieser.

2 An interesting (and a little surprising) aspect is that Mach was familiar with Menger's economic writings and acknowledged them in *Die Analyse der Empfindungen* as a realisation of his methodological programme (Mach 1885 [1922], p. 81).

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