TWO COMPETING PARADIGMS IN AUSTRIAN ECONOMIC THEORY

Keywords: History of Economic Ideas; JEL# B13, B20

Paul Schweinzer[†]

Abstract

This paper discusses some aspects of the notion of scientific progress based on the reconstruction of two exemplary economic research programmes. These programmes are the Austrian School of Economics and OTHMAR SPANN'S Intuitive Universalism—two programmes that fought for intellectual leadership during the inter-war period in Austria. The philosophical framework used for the discussion is the Incommensurability Thesis of THOMAS S. KUHN set against the background of KARL R. POPPER'S Critical Rationalism. This is one of the few attempts to use KUHN'S views for the reconstruction of the core hypotheses of competing theories in order to discuss progress.[1]

1. INTRODUCTION

The basis of an inquiry into the question of scientific progress, in economics as well as in any other science, must be an analysis of the epistemological and philosophical foundations of the different notions of 'scientific progress'. This task, however, can only be hinted at in this paper—for a more thorough discussion confer, for instance, [Lak70], [Cal82] or [Mill94]. The results of such an analysis are presented in the introductory section, followed by their application to the two selected economic theories and some concluding remarks.

There are numerous definitions of scientific progress to choose from. Fortunately, since the rise of the *New Philosophy of Science*, triggered, among others, by NORWOOD R. HANSON and KUHN in the mid 1950s, the choice among the respectable definitions is mainly restricted to variations on the theme stemming from two competing hemispheres of philosophical thought: KUHN'S Incommensurability Thesis on the one hand and POPPER'S Critical Rationalism on the other. The well-known views of IMRE LAKATOS,

[†] Birkbeck College, Department of Economics,
7-15 Gresse Street, London W1P 2LL,
email: PSchweinzer@econ.bbk.ac.uk.

PAUL FEYERABEND, HANS ALBERT, WOLFGANG STEGMÜLLER, and others can be seen as intermediate positions between the two main contenders (cf. [Schw97, 40ff]).

POPPER'S view builds on a vision of science where independent theories have, so to speak, a life of their own. They compete with each other and improve through the process of conjectures and refutations among each other. They are sometimes shown to be false in specific situations, and scientists have to contemplate new theories in order to solve the problems not solvable by their older theories. In such manner the play of conjectures and refutations facilitates scientific progress. It is important to understand that POPPER does not describe actual scientific progress as it happens in history, but claims to be able to *rationally reconstruct* the scientist's arguments that ideally lead to a purely rational discourse about the theory's power to predict and explain.

KUHN'S view is, in a sense, the direct opposite. In his view, competing theories are never falsified because they are included in a larger body of knowledge, thought and belief that is defended by scientists as their "general metaphysical world outlook" [Bla80, 28]. KUHN calls these world-views *paradigms*. Paradigms can only be changed in a process similar to a *Gestalt*-switch, where rational discussion about the inherent theories is not the sole reason for accepting a new paradigm. Hence, KUHN'S notion of scientific progress (the switch from one paradigm to another) incorporates at least some irrational moments—and since his retrospective explanation of progress is in part a historical science, his methodology needs to draw on history in addition to logic to explain paradigm shifts. Lacking a purely rational explanation, KUHN 'democratically' accepts the surviving research programme, the one that found more followers in the brief revolutionary discourse between competing paradigms, as the *better* one. LAKATOS cynically calls this novel ingredient of scientific rationality 'mob-psychology' and concludes that KUHN'S scientific progress must be viewed as a process that does not lead to better theories but only to different theories that cannot necessarily be rationally compared.

Naturally, the two methodologies come to radically different prescriptions for the scientist in order to achieve progress. While KUHN wants the scientist to solve the remaining puzzles of his science during his 'normal' work and not to confront the big fundamental assumptions of his scientific framework critically, POPPER prescribes just this. For him only a critical attitude is able to bring about progress.

The technique that will be used in the following in order to illustrate which of the two positions should be seen as advantageous to the economist is twofold. The construction of Kuhnian paradigms depicting the visions and central theories (paradigms) of the competing research programmes will be contrasted with the Popperian method of viewing the epistemological positions proposed by the proponents of the different programmes as systematically groupable solutions to the Problem of Induction. While the Kuhnian paradigms should be incommensurable, the Popperian attempts to solve the problem of induction will yield themselves to comparison.

Having outlined the two competing reconstructions, the core parts of the programmes' empirical content will be investigated and compared. The conclusions that can be drawn from this analysis depend crucially upon the possibility of comparing the fruits of the two approaches. If the programmes are incommensurable, as KUHN would most probably have seen them, we cannot be sure to find inherent arguments in the two programmes that speak for or against their further pursuit. But if POPPER'S method proves to be applicable we should certainly be able to draw conclusions from a comparison.

The two economic research programmes that are chosen for the comparison, the Austrian School and Intuitive Universalism, are not selected for their impact on modern economic theory—at least Intuitive Universalism weighs very lightly from this point of view—but because the two theories struggle for a solution of the same problem: the unification of SMITH'S and RICARDO'S classical theories of price and value. Besides this, the theories are apparently incompatible; they effectively partition the social groups involved in theoretical economics in inter-war Austrian academia. This paper does not attempt to compare the two schools in their totality—only central aspects of their theories of price and value are analysed. For a more detailed discussion of the schools' other aspects, especially on economic policy, the reader must be referred elsewhere.[2]

2. THE AUSTRIAN SCHOOL OF ECONOMICS

Based on a process initiated by GOTTLIEB HUFELAND[3] (1807) and lasting for most of the 19th century, it is CARL MENGER'S formulation of the theory of subjective value (1871) that succeeds in superseding the classical objective theory of value. The main line of attack is, of course, the incompatibility between the classical theories of price and value. MENGER'S formulation serves as the founding principle of the Austrian School of Economics. It allows quantitative pricing to draw on a unified theory of subjective-qualitative marginal valuation and has no need to recur to objective measures (as, for instance, the time of work involved in production).[4] This decisive step in the marginal revolution, taken simultaneously yet independently by STANLEY JEVONS (1871) and LÉON WALRAS (1874), leads to the understanding of ordinal utility represented by modern economic theory. This conception does not allow for inter-subjective comparisons of utility, because it is based precisely on MENGER'S theory of subjective valuation—a concept which is original to the Austrian School.

The first disciples to rally around MENGER are FRIEDRICH WIESER and EUGEN BÖHM-BAWERK.[5] They support MENGER'S key theory by extensions first into capital- and interest theory, and later into business cycle theory. An energetic development ensues and the Austrian programme is already far from MENGER'S original positions by the time it is deprived of its most dynamic proponents through the emigration of, for instance, JOSEPH SCHUMPETER (1925), FRIEDRICH HAYEK (1931), FRITZ MACHLUP (1933), LUDWIG MISES (1934) or OSKAR MORGENSTERN (1938). Although a series of important contributions to its theory are still lying ahead, the 1930s are the period of the Austrian

School's biggest successes. An important feature of the group around WIESER, which remains in Vienna, is that it does not combine its methodological individualism with political liberalism as, for instance, HAYEK or MISES do.[6] This remaining group is treated as *the* Austrian School in what follows—the text will largely abstract from differences within this group.

WIESER is called to the Viennese chair of national economics in 1903 (after thirteen years of professorship in Prague). His friend BÖHM-BAWERK obtains his chair for political economics in 1904. In 1922, MAYER is to succeed WIESER. During this period, MISES holds a series of highly influential private seminars at the Viennese Chamber of Commerce.[7] WIESER'S key contributions to Austrian theory are the theory of marginal productivity, detailed studies on the nature of (opportunity-) costs (he develops the subjective cost pendent to subjective utility theory), and the *Wirtschaftsrechnung* (economic calculation[20]) that he sets against the background of a planned economy. He coins the term *Grenznutzen* (marginal utility) and is the first to recognise the informational character of prices (cf. [Str86, 77]). BÖHM-BAWERK'S treatment of capital interest, especially the rate of time preference, still constitutes an important element of economic theory, and MAYER'S main input is his theory of the valuation of means of production (*Zurechnung*) in the realm of value theory. HAYEK'S main contributions can be seen in his theory of money and, of course, his business cycle theory. MORGENSTERN, together with JOHN VON NEUMANN, develops early insights into the theory of games, based on the complex analysis of individual interaction during, for instance, the forming of price-expectations.

Common to all of the proponents of the Austrian School during this half-century is the rejection of the analytically far superior, more mathematically orientated, marginal utility theory of ALFRED MARSHALL, KNUT WICKSELL and IRVING FISHER.[8] This rebuff isolates the Austrian School from the international discourse, which makes the adoption of scientific progress, now predominantly in the area of 'mathematical' economics, increasingly difficult. Further development on the basis of MENGER'S original ideas becomes more and more painful and the research programme ceases to progress. The group of Austrian economists in exile, as a homogenous group, does not have prolonged successes either: due to the better means of formalisation, the rivalling schools of MARSHALL and WALRAS become ever more influential. A whole series of originally Austrian ideas are incorporated into the body of mainstream Neoclassics, but as a distinct school of economic theory the Austrian School loses most of its influence after a series of defeats in the area of economic policy by JOHN M. KEYNES and PIERO SRAFFA on the one hand, and OSKAR LANGE and ABBA LERNER on the other.[9]

Epistemological position: individualist Inductivism

Since POPPER claims that the epistemological positions held in the social sciences are attempts to solve the Problem of Induction, this section tries to establish a common

epistemological position for the Austrian School around WIESER and MAYER. To accomplish this task, it builds on the elaboration of MILFORD, who extends POPPER'S original idea.[10] Both authors develop their arguments for two distinct groups of epistemological positions: inductivist and deductivist solutions to the Problem of Induction. We will use the arguments aimed at the inductivist group against the positions of the Austrian School, and in the next section the deductivist group of arguments against SPANN'S Intuitive Universalism. As MILFORD points out, MENGER'S solution to the Problem of Induction leads him to an aprioristic position (cf. [Milf89]). Applying the same technique to MENGER'S successors WIESER and BÖHM-BAWERK, we will be able to show that the same characterisation is valid for the whole of the Austrian School. Following MILFORD'S systematisation, the Austrian School can be found among the inductivist positions of Table 1.

Inductivist framework

From the special premises and the general premise of Inductivism we obtain the inductivist positions as consequences by denying one premise at a time.

General premise	*Genuine statements of science are inferred from singular statements describing personal experiences (Introspection) and observations (principle of Inductivism).*
Special premises	(a) *Full decidability*: the truth values of genuine statements of science must be fully decidable; that is, it must be possible in principle to prove either their truth or their falsity.
	(b) *Empiricism*: the truth values of empirical statements are exclusively decided by experience (principle of Empiricism).
	(c) *Strict universality:* the laws and theories science proposes are strictly universal and empirical (principle of Theorism).
	(d) *Logical objection*: it is logically impossible to verify empirical statements which are strictly universal.
Conclusions	(1) *Naïve Inductivism*: it is possible to resolve the conflict between (b) and (c) if (d) is rejected. Strictly universal statements (laws) are verifiable.
	(2) *Strict Positivism:* it is impossible to solve the conflict between (b) and (c); however, (c) can be rejected. The universal statements of science are not strictly but only numerically general; they are a kind of record, a summary of singular observational statements.
	(3) *Apriorism*: it is impossible to solve the conflict between (b) and (c); however, (b) can be rejected. Strictly universal statements are not exclusively decided by experience.
	(4) *Probability positions:* it is possible to solve the contradiction between (b), (c) and (d) if (a) is rejected. Between truth and falsity there are truth values of degree of probability. The truth of strictly universal statements cannot be proven; they are not fully but only partially certain (i.e. 'probable'); only their probability can be decided.
	(5) *Pseudo-statement positions*: it is impossible to resolve the conflict between (b), (c) and (d); but it is not necessary to resolve it if (a) is rejected. Strictly universal statements are not genuine statements of science, but pragmatic entities and the conflict between (b), (c), and (d) is irrelevant to success.

Table 1:Source [Milf92, 507f]

To WIESER, theoretical social science is an empirical science, it is based on observation and has no other objective than to describe reality.'[11] Since economics is only capable of describing particular phenomena, there is a restriction on forming general concepts imposed on economics. This restriction can be overcome, according to WIESER, through the formulation of economic theories with the help of abstract ideal-types. This technique can be employed as long as the area where truth can be readily checked against Introspection is not left.[12] This is WIESER'S solution to the Problem of Induction: through Introspection, the *meaning* of singular observations of economic acts can be recognised and thus its logical state of truth or falseness. To WIESER, this *Verstehen*-doctrine is the inductive law that allows the transformation of the singular truth of a single observation to the general (ideal-typical) truth of an economic theory. It is *a priori* accessible to every sane individual—hence WIESER offers an aprioristic solution to the Problem of Induction.

To the Austrian School, marginal utility theory (the term is defined in [Wie84, 127]) is to be based on the scrutiny of the economic reasons that lead individuals to economic acts. Since the deepest recognisable reason for any activity lies undoubtedly within human psychology, the method of searching for ever more elementary reasons within economic person's psychology is called the *psychological method*. Again, for the Austrians, only Introspection is able to provide the basis of such an analysis. Through its use, the social sciences have an advantage over the natural sciences—while the latter can only recognise laws, the former can truly *understand* them.[13] This understanding cuts through the infinite regress that the requirement of ever more basic explanations for any activity necessarily runs into. Unfortunately, this *a priori* understanding of the primal psychological needs of economic person is above Empiricism, hence, WIESER'S (and the other core proponents of the Austrian School's) aprioristic position can be established from their very theoretical basis: their common theory of needs and wants.

For WIESER himself, the satisfaction of individual needs requires the common fulfilment of certain collective, ethical norms as well. An example of such a norm is the individual's duty to the nation or its people—in stark contrast to HAYEK and MISES, he is certainly not arguing on methodologically purely individualist grounds.[14] This attitude, of course, does not nearly go as far as to necessitate a departure from Individualism, but WIESER is certainly closer to the view of the state (or other institutions) as an organic unit than his Austrian predecessor. To WIESER, the analogy between state and organism has some validity; the analogy only breaks down at the point where he argues that individuals in the state have *some* independence—which is precisely what the cells and organs of the body lack.[15] As examples of individually beneficial activities which hurt the community, WIESER offers tax evasion and customs fraud. It is only because of the lack of a useful alternative that WIESER uses the individual (on the basis of subjective valuations, only the individual is in possession of a full consciousness) as the fundament of his investigations, *not* because of the adoption of a strict methodological Individualism.

The paradigm of the Austrian School

General Remarks

Any analysis of scientific change that follows KUHN must be set—at least to some degree—in a historical framework because the explanation of a Kuhnian revolution relies on the interpretation of historical data.[16] The active period of the Austrian School can be seen as ranging from the 1870s up to the mid-1930s—an extraordinarily extended period of massive social, political and economic turmoil. Confining the debate to economic theory, the beginning in the last quarter of the 19th century is marked by the emergence of three competing Neoclassical schools: MARSHALL'S, WALRAS' Lausanne School and MENGER'S Austrian School. Although they are united in their common approach—Marginalism—the schools set their focus in sufficiently different areas to allow the case for a multi-paradigmatic science to be made.[17]

The different schools' striving to overcome the incompatible classical theories of price and value leads only very slowly to the establishment of an undisputed Kuhnian normal science. The Austrian School's contributions to the theoretical toolkit of this new hegemonic science are numerous and some seem strikingly modern.[18] But before a description of these elements is attempted, some more general remarks on the reconstruction of a Kuhnian paradigm need to be made (the same method is applied to SPANN'S paradigm).

The Austrian School's paradigm is viewed as being endowed with the following structure: A central solution to a single most important or pressing scientific question is used as a sample solution for the medium-term work of the research programme. It guides scientists in their normal work of solving minor scientific 'puzzles'. In accordance with this sample solution, one theory (or a small group of related theories) is selected as the positive world-view of the scientific community under consideration. In addition to this, the community tries to formulate a catalogue (a 'catechism') containing the textbook view that is to be passed on to the apprentices of its trade. This catechism contains all the accepted rules of conduct to which adherence is required from prospective entrants into normal science.

The Austrian paradigm's elements

The key elements of the Austrian School's paradigm can be traced back to its founder MENGER. The sample solution at the heart of this paradigm is his unification of the classical theory of prices on the basis of *subjective valuations*. On this basis, an objective formulation of the theories of price, value, and cost is possible without any regress to the cost of production. Stated in a more Kuhnian terminology, the Austrian School's paradigm (and to some degree also the paradigms of the other Neoclassical schools) is the answer to the anomalies in the classical theory of prices.

The method that makes this Neoclassical breakthrough possible is the subjective valuation of the marginal good by the individual. It focuses exclusively on the use of subjective and individual patterns of explanation for the economic problems under scrutiny. It is exactly this method that is the *catechism* of Austrian normal science. To MENGER, there is no problem in the general application of this method, because the truth of the general insights from which scientific findings are deduced is so obviously recognisable for the individual (by means of Introspection) that empirical refutations are unthinkable (cf. [Str88, 200]).

All of the members of the Austrian School hold that economics is a science *sui generis*, but while, for instance, WIESER or HAYEK view their subject as an empirical science, the same cannot be said of MENGER. The latter thinks that theoretical social science should use a unique methodology that lies in between the methods of natural science and philosophy. However, the Austrians are united in their endorsement of the principle of causality[19] as the technique to establish the chain of reasoning from individual needs (and

the causes of these needs), to the determination of value and price.[20] They think that this is the sphere where economics can deliver unique insights not to be obtained by other sciences. Although the human element is present in this chain of reasoning, the technique is wholly similar to the one used in the natural sciences—natural and social sciences share the same method. Therefore, the Austrian utility concept is causally rooted in the analysis of the (dis-) satisfaction of subjective needs: to find the ultimate, still consciously accessible psychological reasons for economic acts is one of economic theory's most important tasks.[21]

In principle, it is possible to think of an Austrian School substituting Introspection for some inter-subjective empirical mode of observation.[22] Thus, an Austrian research programme that were to use, for instance, participatory observation as its empirical source, is technically possible. The reason why this is absent from the writing of the School (although the possibility is recognised by both WIESER and MAYER), is that to look for subjective explanations would fatally collide with the heart of the Austrian normal science.

Following WIESER and BÖHM-BAWERK, MAYER rejects all *mathematical* theories on the one hand and all *functional* theories on the other, that is, all theories exclusively perpetrating hedonism or utility maximisation (e.g. JEREMY BENTHAM, JOHN MILL, WILFREDO PARETO).[23,24] Equally, GOSSEN'S second law,[25] the law of equalisation of marginal utility, is discarded because as a mere tautology it is deemed unsuitable as the object of fruitful empirical research.[26] Thereby MAYER distances himself from MENGER, who, independently of GOSSEN, states his own version of the law of equalisation of marginal utilities.

The reason for the rejection of WALRAS' mathematical equilibrium theory is the Austrian methodological individualism: there cannot be room for a Walrasian auctioneer in the Austrian world. Apart from that, focusing on the *economic process* as opposed to the inspection of sole equilibrium points, gives the Austrian School reasons to question the simultaneous determination of prices and quantities in equilibrium theory. The Austrian School criticises that equilibrium theory has to assume known prices in order to be able to compute equilibrium quantities and prices—but, according to the Austrians, this cannot be possible because the agents are faced with *necessarily imperfect information* which does not allow them to fix price-expectations within more than very wide bands. Therefore, individuals can calculate expected prices only imperfectly and markets will not clear in general (cf. [Dob51, 43f]). This argumentation goes back to MENGER (cf. [Str87b, 72]).

The key elements of the Austrian paradigm, following MACHLUP (cf. [Mac81]) and KIRZNER (cf. [Kir87, 148ff]), are presented in Table 2.

Constitutive Elements of the Austrian School's paradigm

	Description
Sample solution	MENGER'S unification of the theory of prices on the basis of his theory of subjective valuation.
Central theory	MENGER'S theory of subjective valuation.
Normal science	Use subjective, individualist explanations for economic phenomena.
Catechism (Kuhnian paradigm)	1. Methodological Individualism.[27] 2. Methodological Subjectivism.[28] 3. Marginalism.[29] 4. Utility concept.[30] 5. Opportunity costs.[31] 6. Time structure of consumption and production.[32] 7. Process-like interpretation of markets (contrary to an equilibrium interpretation).[33] 8. Decision under uncertainty (information problem).[34,35]

Table 2

The Kuhnian anomaly that can be regarded as the finally refuting 'counter example' of the Austrian paradigm (and both competing Neoclassical paradigms) is the sustained unemployment of the 30s.[36] It is the remedy offered to this unemployment, which establishes the Keynesian research programme as the economic policy instrument of choice.[37]

3) THE RESEARCH PROGRAMME OF INTUITIVE UNIVERSALISM[38]

During the inter-war years, OTHMAR SPANN'S holistic Intuitive Universalism gains decisive influence in all questions of economic policy. His school can be viewed as one of the main pillars of Austro-fascism which, via the *Spannkreis*, has highly influential supporters in Germany. With the 1938 occupation of Austria, Universalism is deprived of this position and its main figures, O. SPANN[39] and his disciple W. HEINRICH,[40] are banned from University lecturing. The reason for this is most probably the deeply rooted suspicion held by the new national-socialist rulers towards the ideology of the Austrian *Ständestaat*—less probable are ideological differences as SPANN himself is a member of the (illegal) *Nationalsozialistische Deutsche Arbeiterpartei*.[41] After the end of the war, HEINRICH can take up lecturing again at the *Wiener Hochschule für Welthandel* (Vienna Business School) using SPANN'S writings. He continues to read until well into the 60s without altering the ideological basis of Universalism. Until today, the tradition of Universalism is kept alive in the journal literature by the *Zeitschrift für Ganzheitsforschung* (Journal of Holistic Studies) that is accompanied by a lively stream of publications in honour of SPANN and HEINRICH.[42]

Cognition in SPANN

Contrary to the Austrian School of Economics that loosens its ties with international theoretical development only gradually, SPANN'S philosophical and economic school demands a totally autonomous new beginning. The basis on which SPANN'S science should be erected is the *holistic* approach.[43] The emphasis on intuitive elements which are internal to the scientist and on the rejection of empirical, inter-subjective criteria are the reasons for the term *Intuitive Universalism*.[44] The key thesis of Universalism is, "*daß kein Gefühl, kein Begehren, keine seelische und geistige Regung, welcher Art immer, im Einzelnen entstehen und bestehen kann*" [Spa28, 455]. The fundamental lines of Universalist research in economics are characterised by SPANN as follows:

> "Objective instead of subjective; aprioristic instead of relativistic (inner laws of the wholes); deductive instead of inductive; intuitive instead of empiric (inner experience instead of outer experience, inner knowledge instead Enlightenment); a science of the organisation and purpose instead of the causal relations; penetrated by irrationality instead of pure domination of the rational; metaphysic instead of anti-metaphysic; the spirit is concerned with itself – pushing back and committing the economy; pure instead of utilitarian morality; council-organic instead of capitalist."[45]

SPANN'S conception of holistic essences can be related to PLATO'S world of essences[46] and is best understood as an extension of an Aristotelian-Essentialist approach. To SPANN, reliable and lasting knowledge can be gained only by intuitively visioning (*Erschauen*) the essential features of sociological wholes or the relation of these wholes to each other.[47] This obviously relates to HUSSERL'S 'vision of essences' (*Wesensschau*) in his Phenomenology; HUSSERL is, however, not credited by SPANN. Correspondingly, SPANN'S methodology (*Kategorienlehre*) is kept in ontological terms. According to SPANN, the supreme understanding of science is its insight into the structural laws of society (*Gliedlichkeitsgesetze*)—these structural laws represent the pure essence of sociological scientific discovery. These essences alone are durable and *real*. Opposing the traditional Aristotelian view in one important detail, SPANN does not inductively derive the truth of these laws from investigations into the past, from the study of history. On the contrary, to SPANN it is a prerequisite for any understanding that the observer and the subject under investigation form a unit (*Wesensgemeinschaft*), that they share characteristic, essential features. SPANN calls this unit, on different levels of generalisation, 'branching' (*Gezweigung*) (cf. [Spa28, 456]). There are branchings all over the tree of cognition in SPANN'S methodology: the family, and the company, the people are important branchings. According to SPANN, to split the observer from the examined object is the deadly sin of Individualism; Universalism has to overcome the atomising tendencies of Individualism and put unity at the heart of all holistic science. SPANN'S position on the progress of

> science is as Aristotelian as most of his method.[48] He believes in a completely static conception of science—the essence of society never changes. Over the epochs, society realises its different potentials, but they all belong to essentially the same whole.[49]

SPANN rejects every notion of Individualism;[50] he explains the individual's actions by recurring to the purpose of the respective collective unit (partial whole, *Teilgesamtheit*) of which the individual is a part. The basic unit is not the individual, but the collective where the individual plays a role resembling that of a cell in an organism. Although this sociological organism is composed of its cells, it has a soul, a will and a purpose of its own that lies in the aggregate. This is, to SPANN, the *real* essence of wholes—and it is not observable. Philosophically, SPANN derives a case against Empiricism from this unobservability of the essences of the real sociological entities. Since these essences, the objects of science, cannot be observed but only envisioned, Empiricism is a useless concept to SPANN: holistic laws are only animated by experience—their truth, the essence of science, is intuitively envisioned by the scientific elite. The true laws of science can be, and have to be, deductively derived from these basic insights which economists do not necessarily have the power to explain. Therefore, economics can only be regarded as a means to an end (for instance joy or satisfaction), defined in another sphere: it has to obey the imputed holistic truths and is not a science *sui generis.*[51] The purpose of theoretical economics is to search for the laws of connection (*Gliedlichkeitsgesetze)* governing the structure of the economic sphere and not to find true theories. The search for truth, in turn, is an ethical question to SPANN and hence far removed from the realm of economics ([cf. [Räb37, 89]).

In SPANN'S view, the individuals cannot interact with each other directly. They act exclusively as representatives of the respective wholes of which they are part. Society, people, company, family, and the structural laws that govern these units give meaning and purpose to the individual who is born as a *spiritual* being only by means of these wholes.[52] Analogous to the limbs and organs of the human body, SPANN'S individuals have no freedom at all: they perform whatever serves the collective branching.

Given his insights into the holistic structure of society, SPANN considers himself able to criticise both the inductivist and deductivist epistemologies.[53] Needless to say, the alternative he presents lies in holistic inquiry: "*the procedural question of economics is the question of the connectedness of the economy with the rest of society*, of economic theory with the theory of society".[54] The primordial question is whether the pursuit of truth is attempted in an individualist or universalist manner—a question which can be answered only sociologically.[55] Neither induction nor deduction seem applicable to SPANN without prior clarification of this question—therefore they are non-existent in economics as generic methodologies.[56] With this, SPANN declares the epistemological methods to be futile: every attempt to find truth in science has to take account of the

sociological realities, it has to be necessarily normative and cannot be conceived of as value-free.

The only common pattern of explanation that SPANN finds in both the individualist and universalist approaches is the formal structure of their arguments. All (social) sciences use *nomothetic* explanations, that is, they try to find repetitive patterns in their subject field of inquiry (cf. [Spa17, 258]). SPANN'S holistic insights into the essence of science force him to neglect the principle of causality—the building block of inter-subjective testability. He denounces the principle as 'causally genetic', as falling prey to random surface-appearances, and replaces it with his deductivist concept of *achievement (Leistung)*: the contribution of every unit of society to the fulfilment of a common goal. 'Causally mechanic', or 'genetic' explanations, in contrast, can only give a scientistic account of observables. They cannot easily give a decisive answer to the question of *why* something is caused. Therefore, SPANN maintains that Universalism, with its clearly stated aim of finding teleological explanations, is clearly superior in its application to the (social) sciences to any methodology based on the principle of causality.[57]

To SPANN, the intuitive truth of holistic sociological laws is transformed, by pure deduction, through the work of the theoretical economist onto the (structural) laws of economics. Experience has no influence on this transformation, because the laws the economist is after are known to be true beforehand, since their purpose *and* logical value is deduced from the higher-level laws of sociology.[58] As readily conceded, the intuitive findings of the scientific elite, which is concerned with finding the driving forces of society, are of paramount importance to SPANN'S model of science. These findings alone are vulnerable to questions concerning their truth, because all other theories are logically deduced from them. This is the reason why SPANN employs a high authority to defend the truth of these basic laws—his so called 'primary branching' is God. As MILFORD observes, to the top-level scientist, "the world is as he imagines it to be" (cf. [Milf97a, 498]).

SPANN'S arguments are not convincing. He derives the logical value of his theories from the objectives which the political leaders of society agree upon. Every allocation of resources (and economics is concerned with nothing else) has to obey these collective aims or is dismissed as unscientific Individualism. All economic science has to proceed teleologically from the original insights of the elite which are unalterably and eternally true. This worldview of SPANN can be integrated into an analysis of deductivist economic-philosophical positions as done by MILFORD in Table 3.

Deductivist framework

The deductivist positions are obtained from the special premises and the general premise of Deductivism and by denying one premise at a time.

General premise	*Induction does not exist in the logic of knowledge. Genuine statements of science are not inferred from singular statements (principle of Deductivism).*
Special premises	(a) *Full decidability*: the truth values of genuine statements of science must be fully decidable; that is, it must be possible in principle to prove either their truth or their falsity.
	(b) *Empiricism*: the truth values of empirical statements are exclusively decided by experience (principle of Empiricism).
	(c) *Strict universality:* the laws and theories science proposes are strictly universal and empirical (principle of Theorism).
	(d) *Logical objection*: it is logically impossible to verify empirical statements which are strictly universal.
Conclusions	(1) *Intuitive Universalism*: it is not possible to resolve the conflict between (b), (c) and (d). (d) shows that the method of induction cannot yield genuine scientific knowledge that is certain knowledge. (c) needs to be rejected: genuine laws of science are not strictly universal and empirical laws which describe the coexistence and succession of phenomena, but the laws that govern essences. These laws are discovered by intuition.
	(2) *Conventionalism*: it is impossible to solve the conflict between (b), (c) and (d); (c) has to be rejected. Strictly universal statements are arbitrary definitions (analytical statements).
	(3) *Hypotheticism (Critical Rationalism)*: it is possible to solve the contradiction between (b), (c) and (d) if (a) is rejected. Strictly universal statements are falsifiable conjectures—that is, partially but not fully decidable.

Table 3: Source [Milf92, 508]

Although SPANN'S urge to show originality is tangible throughout his œuvre, he nevertheless tries to find some philosophical legitimisation by linking his thought to the ideas of PLATO and ARISTOTLE. As a connection to contemporary philosophy, he uses FICHTE, HEGEL and ADAM MÜLLER, the key figure of German Romanticism. To SPANN, the second group is the counterweight to the basis of the all-influential mainstream of classical economics: Anglo-French Individualism.

The findings of Universalism cannot be criticised. The scientist is either a member of the selected circle of clairvoyants and is thus able to recognise the structure of sociological branchings, or he is unable to see the truth. The same applies to SPANN'S deduction of the institutions of the perfect state—any criticism is futile. Moreover, criticism in POPPER'S sense is not even possible, because social science does not look for reasoned arguments, but for teleological leadership.

SPANN'S Paradigm

General remarks

SPANN is appointed to his first professorship at the University of Brünn (Brno) before World War I, but gains real influence only in the inter-war years. During this period,

SPANN is the most prestigious economist of Austria with powerful supporters—such as FRITZ THYSSEN—in Germany as well.

SPANN'S universalist conception goes far beyond economics. His aim is to 'return' to a stable, reliable and hierarchical state where everybody knows his place in society and his duty to the people. With this, he tries to counter the mortal dangers the German people[59] are exposed to by the late 19th/early 20th century ideologies of Individualism, Liberalism, Marxism and Materialism. In his view, these ideologies atomise and thereby destroy the *Volkseinheit* (unity of the people)—they are the target of his criticism and polemic. Salvation is embodied in the return to the true ideals of romanticist and idealist Germany: the foundation and essence of the true and eternal German state. The duty of science is to find these essential features of the German state, politics and economy.

In the inter-war Austria of economic crises, mass unemployment and general insecurity, SPANN'S ideas fall on fertile grounds—especially his orientation towards Germany is popular at a time when wide circles view Austria as unable to survive on its own.[60] SPANN uses his position at the University with great success in order to systematically enhance the influence of his followers in politics and science. His paradigm becomes the predominant economic doctrine of Austro-Fascism, notably in the thirties when the Austrian School is at the height of its scientific success. Obviously, in the inter-war Austria there is little room for social theories founded on Individualism: SPANN'S triumph is mainly due to his easily instrumentalisable deduction of the duties of every branch of society from abstract norms and collective aims: it legitimises almost every authoritarian measure.

The elements of the universalist paradigm

SPANN'S economic paradigm is deeply rooted in his sociological paradigm. For this reason, Table 4 below consists of the main elements of both of these paradigms. Since to SPANN, only a holistic unit can be the subject of epistemological inquiry, there are only few topics completely contained within economics. Moreover, the application to an almost entirely subordinate branch of science does not fit the Kuhnian term very well. Therefore, SPANN'S scientific paradigm has to be viewed as an inseparable unit: an epistemological decomposition into an economic and a sociological part weakens the plausibility of Universalism.

To SPANN, the main achievement of universalist economic theory and thereby the sample solution of his paradigm is to overcome the separation between historical and theoretical analysis—obviously he refers to the *Methodenstreit* between MENGER on the one side and ROSCHER and SCHMOLLER on the other. Both historical and theoretical investigations are inseparable elements of his holistic theory (cf. [Spa28, 461]). However, since this branching lies outside of economic theory, it is not part of the economic paradigm. The central aspects of SPANN'S economic paradigm's are the planning- and design efforts à la LIST and THÜNEN as discussed below.[61] Economists should try to find

the objective valuation of the contributions (achievements) of sub-groups or individuals to the fulfilment of a collective purpose. This is an objective valuation, since the objective contribution of a sub-group can only be determined if possible alternatives as well as the final purpose of the contributed action or service are known. Precisely this collective nature of valuation is the ultimate reason why the universalist conception and the individualist conception of the Austrian School cannot be compatible: in KUHN'S sense, they are incommensurable.

Constitutive elements of SPANN'S paradigm

	Description
Sample solution	Integration of historical and theoretical economics into a single whole (outside of economics). Within economics, the works of LIST and THÜNEN.
Central theory	All valuation is collective. The quantity of achievement is deduced from the position inside the branchings.
Normal science	To correctly match contributions (achievements) with predefined purposes.
Catechism: (Sociology)	1. Only the whole can be the object of science; in particular, the eternal essence of the whole should be extracted. 2. All institutions have to be rebuilt on the basis of the true insights into the essence of holistic society. 3. Social science must deduce ethical norms and general scientific laws from its holistic understanding of the branching of society.
Catechism: (Economics)	4. Values can only be grasped in their collective meaning. 5. Individuals are not able to perform independent economic actions. 6. Economic policy has to serve the essential interests of the people. Apart from this, there is no useful explanation why institutions are the way they are.

Table 4

SPANN summarises the central aspects of theoretical economics as follows using the example of LIST'S work:

> "*THÜNEN and LIST have shown what fruitful analytical work is contained in the principle to investigate the concrete, living, mutual elements of the economy.* [...] To illustrate this, one can bring LIST'S teachings into the following form: Which is the condition for the prosperity of industry? Answer: if all prosper; and that happens like this: the mine prospers if the iron and steel industry prospers (as its customer); the iron and steel company prospers with the rolling mill, the rolling mill with the tools manufacturers, the tools industry with the processing industries – each large unit of trade and industry prospers only with the existence of a *whole system* of trade and industry is in place – if all prosper!; and when do all prosper? – if the productive forces of society prosper; when do these prosper? – if they form a closed (national) community. And when does agriculture in particular prosper?; Answer: when industry prospers."[62]

The planning and construction of such chains of achievements is, according to SPANN, the subject area of theoretical economics: LIST'S description is a sample solution for normal science in economics. One last quotation should help to establish this point: the normal scientist's job is the "*Aufsuchung der konkreten Wechselseitigkeit des Einzelnen mit dem Ganzen; in der Zergliederung konkreter Gegenseitigkeiten, des handgreiflichen, des konkreten (nicht nur methodologisch Vorausgesetztem) Enthaltensein des Ganzen in bestimmten Teilen*" [Spa19, 39]. The informational problems which are associated with LIST'S planning (as quoted above) are given central attention by the Austrian School (notably by MISES and HAYEK) but are not considered in SPANN'S analysis at all. This comes as no surprise: to realise the public aims, SPANN only needs the abstract insight into the highest branching and to be able to deduce the people's needs from that. Since this insight is true, there cannot exist an informational problem stemming from data collection among numerous individuals.

SPANN develops his paradigm as an answer to political problems—only as a second order question does he look at economic riddles. Therefore it seems sensible that his paradigm is overturned with the change in the political climate. When Austria is annexed by Nazi-Germany in 1938, SPANN and his followers are banned from the lecterns; when the *Reich* is defeated in 1945, his ideas become obsolete too.

The doctrine of achievement (theory of value)

According to SPANN, only the fundamentally flawed approach of Individualism (to view only subjective decisions and thus break up wholes) makes it understandable that phenomena like exchange, human needs and their individual valuation or pricing become the central questions of economics.[63] He rejects the discussion of these in the framework of subjective value and marginal utility theory since, to him, the important category is not individual interaction (or, worse, its psychological reasons) but the functional relationships between parts and wholes.[64] Only these provide real insights and make surface phenomena like price and value possible.

SPANN'S alternative to marginal utility theory is his theory of achievements;[65] the individual action is interesting merely from a psychological point of view, the regress to the all-encompassing whole makes actions economically interpretable. The relationship of the partial-whole to the whole is the economically interesting problem as the associated actions can bring a certain measure of utility (achievement) to the whole. In the theory of value SPANN uses achievement as well; value is the resulting quantity of contributions (achievement) of the respective economic unit; the term significantly transcends the economic sphere but is always related to a specific purpose.[66]

In practice, however, SPANN refers to a distorted version of marginal utility theory in which he replaces the individual, subjective valuations with collective, objective valuations of the respective wholes. In his theory, marginal 'utility' (or, better, marginal achievement) is 'the smallest respective achievement among all achievements of a group

of units in a given constant supply'.[67] According to SPANN, this objective measurement can be used by applied economics (*Leistungsgrößenrechnung*) to calculate the optimal employment of means within the economy. SPANN does not answer the question on which basis any collective partial-whole can make judgements about the value of these crucial marginal achievements—but any argument founded on the 'genetical', Individualism-based theory of subjective valuation cannot lend support to his social theory of value.[68] Quite on the contrary, SPANN'S followers would have to employ a collective utility theory—however, they fail to present any coherent version of such a theory.[69]

When it comes to the question of how precisely to determine prices, SPANN is much closer to marginal utility theory than the above suggests; his price is determined 'where supply satisfies the weakest respective demand, i.e. between excluded buyer and marginal buyer.'[70] In this interaction, of course, marginal household and marginal producer are holistic units.

4) CONCLUDING REMARKS

The two economic paradigms discussed in this paper are neither comparable with respect to their basic view of science as a whole, nor with respect to the claim they make for the explanatory capabilities of economics. Accordingly, they propose very different solutions to the problems that arise from their attempted unification of the theories of price and value. The following table shows that no congruent terms for any of the core areas of the two paradigms can be identified.

Comparison of the Universalist and Austrian School's theories of value and prices

	Austrian School	*Universalism*
Basis	Satisfaction of needs	Purpose
Valuation	Individualist	Collectivist
Actor	Individual	Whole
Purpose of activity	Satisfaction of individual needs	Fulfilment of collective purposes
Reason for exchange	Utility maximisation as satisfaction of needs (=value)	Social utility maximisation as degree of fulfilment of purposes (=value)
Nature of value	Subjective measure of comparison and calculation	Collective measure of contribution
Formation of value	Subjective marginal valuation	Objective marginal valuation
Formation of prices	Individual valuation of marginal utility	Derived from collective achievement

Table 5

The collective nature of valuation is the essential point that renders the findings of SPANN'S Universalist school incompatible with the individual valuations of the Austrian School. To the Universalist, any explanation of economic action will have to be based on the effects it has on the collective whole. To a member of the Austrian School, any such

explanation will have to be founded on the individual. This is the reason for the paradigm's incommensurability—this incommensurability, however, does not prevent the above epistemological argument from reconstructing and comparing the central conceptions of the two theories using the example of the theories of value and prices. A rational argument is possible although the programmes do not share a common framework. In POPPER'S sense, one does not need to presume a common framework to be able to compare incommensurable scientific research programmes (cf. [Pop73, 61]). This makes POPPER'S method of rational reconstruction superior to KUHN'S.

As an economic research programme, SPANN'S Intuitive Universalism does not bring lasting theoretical insights—simply because universalist economics is (as any other science) wholly determined by politics. The same cannot be said about the Austrian research programme: although authoritarian overtones can be found, a comparable totalitarian claim to political leadership cannot be deduced from the Austrian School's epistemological positions. The research programme is able to construct criticisable theories and can therefore transfer its insights into other programmes. The Austrian School can be viewed as the principal source of the modern theory of subjective valuation, Neoclassical business cycle theory and contemporary information economics. Its achievements are of lasting value and the programme is clearly the one with the greater potential for progress.

The result of this investigation is, therefore, that the programmes are comparable using POPPER'S methodology while they are not with the Kuhnian approach. Since the a ranking of competing theories according to their potential for scientific progress is clearly beneficial, we should comply with POPPER'S prescription: to produce criticisable theories.

REMARKS

[1] The author wishes to express his gratitude towards KARL MILFORD for spurring his interest in the problems addressed in this paper. The comments of two anonymous referees were both helpful and elucidating.

[2] For a comparison of the two schools' economic policy, DOBNIG'S dissertation has to be mentioned (cf. [Dob51]) along with numerous papers by STREIßLER (e. g. [Str87b] or [Str88]). The uncoupling of the Viennese University from international discourse is analysed in detail by MILFORD and ROSNER (cf. [Milf97a, 483f]).

[3] For a thorough discussion of HUFELAND'S, who can claim the honour "to have founded the German (i.e. not *only* the Austrian) tradition of the ‚refutation of the labour theory of value'" (author's translation of [Str87b, 44]), the reader is referred to MILFORD (cf. [Milf97b]).

[4] Cf. [Men71, 77f].

[5] Both WIESER and BÖHM-BAWERK are not students of MENGER. After their law studies in Vienna (that contained some economics then as well as today) they are educated by the German economists KNIES, ROSCHER and HILDEBRAND (cf. [Str87a, 921]).

[6] Cf. [Wie10, 140] (quoted in [Dob51]).

[7] Cf. [Ros89, 19f].

[8] Cf. [Wie14, 15].

[9] In a clearly Misesian tone LAVOIE remarks that "the fact that the school fell into obscurity cannot be blamed entirely on the Austrians themselves. Some events, such as the Great Depression and Hitler's seizure of Austria, were certainly undeserved external blows to the school" [Lav89, 471n].

[10] Cf. [Milf92, 507ff] and [Pop33, 330ff].

[11] "Sie beruht auf der Beobachtung und hat kein anderes Ziel als das, die Wirklichkeit zu beschreiben." Author's translation of [Wie14, 9]. With all translations that are the author's, the German original is given in an accompanying note.

[12] Cf. [Wie14, 10].

[13] Cf. [Wie14, 8f].

[14] Cf. [Wie10, 23] (quoted in [Dob51]) and [Wie14, 115].

[15] Cf. [Wie26, 199f].

[16] Such attempts are scarce in economics; the only accessible example is: MEHTA, G., *The Structure of the Keynesian Revolution*, Allied Publishers: London 1977.

[17] Even if this point (which is supported by [Bla62, 287]) is challenged, there should be little disagreement about the classification of classical and Marxist economics as competing paradigms.

[18] Examples of 'modern' contributions of the Austrian School are the informational nature of prices, decisions under uncertainty, and disequilibrium analysis.

[19] Cf. [Men71, 1].

[20] In this context, economic calculation (*Wirtschaftsrechnung*) is meant to be the individual calculation about the gain in utility through the consumption of a good and the loss of utility through payment of the price (loss-principle). This is founded on a marginal utility calculation of opportunity cost that leads to GOSSEN'S second law. (WIESER rejects this law on the basis of technical arguments that have nothing to do with the above mentioned mechanism.)

[21] Cf. [May28, II, 450].

[22] This idea stems from [Milf97a, 485].

[23] "It is not utility theory but rather marginalism as such that gave mathematics a prominent role in economics after 1870. It is no accident that the Austrians, who were always insistent on the primary role of utility, were wholly innocent of any mathematics: neither Menger nor Wieser nor Böhm-Bawerk ever employed a genuine algebraic equation or geometric formulation in any of their writing. More than that: they were opposed on methodological grounds to mathematics as a tool of economic analysis. In a letter to Walras in 1884, Menger insisted that mathematics was of no use in helping the economist to get at the qualitative 'essence' of phenomena like value, rent and profit." [Bla62, 279]

[24] Confer BÖHM-BAWERK, *Positive Theorie des Kapitals*, 4th ed., pp232-46.

[25] WIESER calls the law of equalisation of marginal utilities 'HERMANN HEINRICH GOSSEN'S second law' (cf. [Gos54, 12].) GOSSEN'S originality is not recognised by MENGER—NIHANS assumes that this is due to the fact that GOSSEN destroys, shortly before his death, all remaining copies of his work out of frustration about the ignorance it met. Only JEVONS rediscovers GOSSEN'S book. (cf. [Nie94, 188f]). MENGER independently states the law anew. STREIßLER conjectures that this is one of the few elements that MENGER introduced into German economic thought that was not present (or forgotten) before (cf. [Str87b, 66]).

[26] Cf. [Ros89, 21f].

[27] *Methodological individualism* is the restriction to use exclusively individual acts to explain economic phenomena; it is not necessarily coupled with political or ideological individualism. This is shown above for WIESER, who leaned markedly to the interventionist's side. Also confer [Str88, 200], [Str87a, 922] and note 14.

[28] The notion of *methodological subjectivism* is understood to mean that the acts of the individual should solely be explained by the use of the information, subjective beliefs, opinions and expectations about the future that are accessible to the individual. In this, the Austrian School differs from, for instance, MARSHALL, who attaches some weight to classical, objective production cost arguments in his analysis.

[29] *Marginalism* means that a slight variation of the quantity under observation (e.g. quantities of goods) is crucial for the individual decision. For example, the valuation of the last unit of a good is taken to be decisive for the pricing of all units of this good—not, as assumed by the classics—the average use of inputs for the whole production. The adoption of the equi-marginal principle for both consumption (MENGER) and production (WIESER'S law of costs) is a unique feature of the Austrian School among the competing strands of Neoclassics.

[30] The *utility concept* as the yardstick used by the individual for valuation of the demanded goods or services is another central aspect of the Austrian Schools economic analysis of demand (and therefore, of prices). Closely connected is the idea of *diminishing marginal valuation:* not the

psychological state of satisfaction diminishes marginally, but the valuation of the marginal unit.

[31] *Opportunity costs* are a further feature introduced by the Austrian School into economic analysis. This concept states that because the available funds, in a buying decision, are spent on the most highly valued good and not on the secondly ranked good, costs are created that are equivalent to the valuation of the foregone consumption of the second-best good. Although mostly attributed to WIESER, the idea of opportunity costs can be traced back to MENGER (cf. [Str87b, 70]).

[32] BÖHM-BAWERK'S idea of a rate of time preference shows a deep understanding for the *time structure of consumption and production.* Not only does it incorporate the view that individuals prefer current to deferred (insecure) consumption but it also makes an equivalent statement about the investment of the firm. Investments that yield short-term profits are preferred to more roundabout ways of production (*Produktionsumwege*), even if less than maximum profits are achieved (cf. [Bla62, 480ff]).

[33] Because of its understanding of the market as a *process*, the Austrian School rejects the insights offered by the study of static equilibria. The *dynamic* structure of the markets (just as the *composition* of macro-aggregates) is a key element for the Austrian understanding of economic phenomena—therefore comparative static equilibrium analysis is heavily criticised by the Austrian School (cf. [Str88, 197]).

[34] Here the *informational character* of, for instance, prices comes into the Austrian analysis. Prices offer to individuals concentrated information about the situation in which they have to make their economic decision. Since prices for future goods cannot be firmly established in Austrian theory, every decision should be considered as being made under *incomplete information*. This insight, too, goes back to MENGER (cf. [Str88, 193]).

[35] In contrast to the aforementioned elements of the paradigm, the maxim that institutions should be viewed as the *unintended consequences of individually intended actions* is not undisputed within the School. There are at least three distinct positions: To BÖHM-BAWERK and MISES, every attempt to plan is futile and will leave the economy worse off. MENGER is generally sceptical towards interventions by the state but nevertheless more of a pragmatic (cf. [Str88, 201], [Str87b, 78ff]). WIESER, as stressed earlier, falls only slightly short of an interventionist, and PHILIPPOVICH (who is not generally regarded as a member of the Austrian School) demands conscious large-scale planning.

[36] The above 'counter example' is set within quotation marks because at its core the Austrian School is not concerned with economic policy (cf. [Str88, 192]). Therefore, it is a shortened argument to claim that it was refuted by the Keynesian insights. It is true, however, that more or less all of Neoclassical economics was displaced from economic mainstream by KEYNES' assault on the Quantity Theory.

[37] MEHTA conjectures that the classical and the Neoclassical paradigms are identical. To him the classical paradigm is only replaced by KEYNES'S publication of his *Treatise on Money* (1930) (cf. [Meh77, 7]).

[38] A word on the translation of SPANN'S terms into English is in order here. Since Spann freely invents terms for the main categories of his work and this terminology comes quickly out of

fashion after the decline of Universalism, there are few established English-language equivalents to most of his reading. Therefore, the English text reads as most of the German original—very confusingly in the chosen terminology.

[39] SPANN obtains his habilitation in Brünn (Brno) in 1909 and occupies the Viennese chair from 1919–38. Immediately after the German annexation of Austria in 1938, SPANN is arrested and spends five months in a Munich police prison. After the war he does not take up lecturing again and dies in 1950.

[40] HEINRICH'S habilitation takes place in 1926 at the University of Vienna.

[41] Although SPANN shares the general features of National Socialism, he rejects racial anti-Semitism. A National Socialist critique of SPANN is given in the concluding section of SCHIENERL, W., *Allgemeine Kritik der Kategorienlehre Othmar Spanns*, Habilitation, University of Vienna 1944.

[42] Owner and editor of the *Zeitschrift für Ganzheitsforschung* (founded by WALTER HEINRICH, continued by J. HANNS PICHLER) is the *Gesellschaft für Ganzheitsforschung* (Head: o. Univ.-Prof. Dkfm. Dr. Dr. h.c. J. HANNS PICHLER, M.Sc.); deputy editor is Dkfm. Dr. HUBERT VERHONIG (all: Vienna Business School, Augasse 2-6, 1090 Vienna). A further example of the publication activities is J. HANNS PICHLER (ed.), *Othmar Spann oder die Welt als Ganzes*, Böhlau: Vienna 1988.

[43] Cf. [Spa19, 13].

[44] The term *Intuitive Universalism* was coined by MILFORD (cf. [Milf92, 508]).

[45] "Objektiv statt subjektiv; apriorisch statt relativistisch (innere Eigengesetzlichkeiten der Ganzheiten); deduktiv statt induktiv; intuitiv statt empirisch (innere Erfahrung statt äußerer, inneres Wissen statt der Aufklärung); Gliederungs- und Zweckwissenschaft statt Kausalwissenschaft; durchsetzt mit Irrationalität statt reiner Herrschaft des Rationalen; metaphysisch statt a-metaphysisch; der Geist ist mit sich selbst beschäftigt – Zurückdrängung und Bindung der Wirtschaft; reine statt utilitarische Sittlichkeit; ständisch-organisch statt kapitalistisch." Author's translation from [Spa31, 73].

[46] RÄBER suggests this since one "has to conclude from some of Spann's writing that there exists a distinct world of thought existing outside of this world. " Author's translation of [Rae33, 150].

[47] Cf. [Spa31, 1].

[48] Very similarly to his philosophical predecessors, SPANN perceives social change, the formation of new political powers, and their struggle with the old as incentives to search for the ideals of unalterable and eternal truth. On his way, SPANN happily employs totalitarian, fascist, and national-socialist methods.

[49] Cf. [Spa31, 3].

[50] Cf. [Spa19, 12].

[51] Cf. [Spa19, 10f].

[52] Cf. [Spa19, 14f].

[53] Cf. [Spa23, 333].

[54] "*Die Verfahrensfrage der Volkswirtschaft ist eine Frage der Verknüpftheit der Wirtschaft mit der übrigen Gesellschaft,* der Wirtschaftstheorie mit der Gesellschaftstheorie". Author's translation of [Spa17, 324].

[55] Cf. [Spa23, 330].

[56] If one is determined to attach a logical label to the competing schools, then, according to SPANN, analytic is the suitable one for Universalism and synthetic corresponds to the individualistic method.

[57] Cf. [Spa23, 45].

[58] Cf. [Spa23, 319].

[59] The distinction between German Austrians and Germans is very casual in SPANN: Austrians *are* Germans. In that, however, he is much in line with his contemporaries.

[60] Quite remarkably, this view is not shared by MISES and his followers. He emphasises comparative advantages due to the country's small size.

[61] For a discussion of THÜNEN'S influence, see for example NIEHANS [Nie94, 164ff].

[62] "*Thünen und List haben gezeigt, was der Grundsatz, die konkrete lebendige Gegenseitigkeit der Glieder der Wirtschaft zu erforschen, an fruchtbarer analytischer Arbeit in sich schließt.* [...] Man kann, um sich das zu verdeutlichen, die Lehre Lists in folgende Form bringen: welche ist die Lebensbedingung der einzelnen Industrie, wann gedeiht sie? Antwort: wenn alle gedeihen; und das geschieht so: das Bergwerk gedeiht, wenn ein Hüttenwerk (als Abnehmer) da ist; das Hüttenwerk, wenn ein Walzwerk, das Walzwerk, wenn eine Maschinenfabrik, die Maschinenfabrik, wenn eine verarbeitende Industrie da ist – jedes einzelne Großgewerbe gedeiht nur, wenn ein *ganzes System* von Großgewerben da ist – wenn alle gedeihen!; wann gedeihen alle? – wenn die Produktivkräfte wachsen; wann wachsen und gedeihen die produktiven Kräfte? – wenn sie eine geschlossene (die nationale) Gemeinschaft bilden. Und im besonderen: wann gedeiht die Landwirtschaft?; Antwort: wenn die Industrie gedeiht." Author's translation from [Spa19, 34f].

[63] Cf. [Spa256f].

[64] SPANN does not reject marginal utility theory as such—on the contrary, he boasts that it is one of the big achievements of *Universalistic* economics (cf. [Spa19, 34]).

[65] Achievement is "Geltungsgrad der Leistungen für Ziele, oder anders ausgedrückt, Maß der Zielerreichung" [Dob51, 86f] (cf. [Spa23, 251]).

[66] Cf. [Spa23, 20f].

[67] Grenznutzen (oder besser Grenzleistung) ist "die jeweils kleinste Leistung unter den Leistungen aller Einheiten eines, als gegeben angenommenen, Vorrates." Author's translation from [Spa17, 85].

[68] Cf. [Spa23, 87n].

[69] Cf. [Spa23, 256] and [Spa23, 274].

[70] "Wo das Angebot die jeweils schwächste Nachfrage versorgt, d.h. zwischen ausgeschlossenem Käufer und Grenzkäufer." Author's translation from [Spa17, 140f].

REFERENCES

[Bla62] Blaug, M., *Economic Theory in Retrospect*, 5. edn., Cambridge University Press: London 1997

[Bla80] Blaug, M., *The Methodology of Economics – or How Economists Explain*, 2. edn., Cambridge University Press: Cambridge 1994

[Cal82] Caldwell, B., Beyond Positivism, Routledge: London 1994

[Dob51] Dobnig, R., *Universalismus und Österreichische Schule*, PhD Dissertation, University of Innsbruck 1951

[Hoy93] Hoyningen-Huene, P., *Reconstructing Scientific Revolutions: T.S. Kuhn's Philosophy of Science*, University of Chicago Press: Chicago 1993

[Kir87] Kirzner, I., Austrian School of Economics, in: *The New Palgrave Dictionary of Economics*, vol. I, Macmillan: London 1987

[Lak70] Lakatos, I., Musgrave, A., (Hrsg.), *Criticism and the Growth of Knowledge*, Cambridge University Press: Cambridge 1970

[Lav89] Lavoie, D., The Progress of Subjectivism, in: de Marchi, N., Blaug, M., *Appraising Economic Theories: Studies in the Methodology of Research Programs*, Edward Elgar: Aldershot 1991

[Mac81] Machlup, F., Ludwig von Mises: The Academic Scholar who would not Compromise, in: *Wirtschaftspolitische Blätter*, 4/1989

[May28] Mayer, H., Bedürfnis, in: [Els28, II, 450-6]

[Meh77] Mehta, G., *The Structure of the Keynesian Revolution*, Allied Publishers: London 1977

[Men71] Menger, C., *Grundsätze der Volkswirtschaftslehre*, 1. Theil, W. Braumüller: Vienna 1871

[Milf89] Milford, K., *Zu den Lösungsversuchen des Induktionsproblems und des Abgrenzungsproblems bei Carl Menger*, Österreichische Akademie der Wissenschaften: Vienna 1989

[Milf92] Milford, K., Poppers Lösungsvorschlag des Abgrenzungsproblems und die Methoden der Sozialwissenschaften: Zum 90. Geburtstag von Sir Karl Popper, in: *Wirtschaftspolitische Blätter* 4/1992

[Milf97a] Milford, K., Rosner, P., Die Abkoppelung der Ökonomie an der Universität Wien nach 1920, in: Hagenbach, H. (ed.), *Zur deutschsprachigen wirtschaftswissenschaftlichen Emigration nach 1933*, Metropolis 1997

[Milf97b] Milford, K., Hufeland als Vorläufer von Menger und Hayek, in: [Pir97, 89-160]

[Mill94] Miller, D., *Critical Rationalism: A Restatement and Defence*, Open Court: La Salle 1994

[Pop33] Popper, K. R., *Die beiden Grundprobleme der Erkenntnistheorie*, 2. edn., JCB Mohr: Tübingen 1994

[Pop73] Popper, K. R., The Rationality of Scientific Revolutions, in: Notturno, M. (ed.), *The Myth of the Framework*, Routledge and Kegan Paul: London 1994

[Pri97] Pridat, B. P. (ed.), *Wert, Meinung, Bedeutung: Die Tradition der subjektiven Wertlehre in der deutschen Nationalökonomie vor Menger*, Beiträge zur Geschichte der deutschsprachigen Ökonomie, Metropolis: Marburg 1997

[Räb37] Räber, H., *Othmar Spanns Philosophie des Universalismus*, G. Fischer: Jena 1937

[Ros89] Rosner, P, Winckler, G., Aspects of Austrian Economics in the 1920s and 1930s, *Research in the History of Economic Thought and Methodology*, 6/1989, 19-30

[Schw97] Schweinzer, P., *Wissenschaftlicher Fortschritt bei T.S. Kuhn am Beispiel zweier konkurrierender Paradigmen in der theoretischen Nationalökonomie*, MSc Thesis, University of Vienna 1997

[Spa17] Spann, O., *Fundament der Volkswirtschaftslehre*, 3. edn., G. Fischer: Jena 1923

[Spa19] Spann, O., *Vom Geist der Volkswirtschaftslehre*, Antrittsrede an der Universität Wien (5.5.1919), G. Fischer, Jena 1919

[Spa28] Spann, O., Universalismus, in: [Els28, VIII, 453-63]

[Spa31] Spann, O., *Der Wahre Staat*, 3. edn., G. Fischer: Jena 1938

[Str86] Streißler, E., Arma virumque cano – Friedrich von Wieser, der Sänger als Ökonom, in: Leser, N. (ed.), *Die Wiener Schule der Nationalökonomie*, Böhlau: Vienna 1986

[Str87a] Streißler, E., Freiherr Friedrich von Wieser, in: *The New Palgrave Dictionary of Economics*, vol. IV, Macmillan: London 1987

[Str87b] Streißler, E., Carl Menger, der deutsche Nationalökonom, in: [Pri97, 33-88]

[Str88] Streißler, E., The Intellectual and Political Impact of the Austrian School of Economics, *History of European Ideas*, 9/2, 191-204

[Wie10] Wieser, F., *Recht und Macht*, Leipzig 1910

[Wie14] Wieser, F., Theorie der gesellschaftlichen Wirtschaft, in: *Grundriss der Sozialökonomik*, I, 125-444, JCB Mohr: Tübingen 1914

[Wie26] Wieser, F., Das Gesetz der Macht, Springer: Vienna 1926