AN OUTLINE OF
CARL MENGER'S CAPITAL THEORY
1867-1888

Yannis Petrzak
Austrian Student Scholars Conference 2020
Grove City College

I. Introduction

The importance of Carl Menger's *Principles of Economics* as constituting the sole systematic foundation of causal-realist, or "*Mengerian* economics" (Salerno 1999, 71), is agreed upon by all scholars within the Austrian tradition (Hayek 1936; Salerno 1999; Schulak and Unterköfler, 2011). Likewise, it is also generally agreed upon that Austrian Capital Theory, as developed by Böhm von Bawerk (1959), von Strigl (2000), Hayek (1941), von Mises (1949), Rothbard (2009), and Lachmann (1978), is fundamentally based on Menger's discussions of production and capital, as contained in the *Principles* (Huerta De Soto 2012, 510-11). While the latter view is, in fact, correct, that is, while Carl Menger was indeed the sole founder of Austrian Capital Theory as elaborated upon by Böhm Bawerk and others, the truth of the matter is that Menger's theory as found in the *Principles* constitutes, when the rest of his work is taken into account, a mere anomaly, and it cannot be maintained that Menger, over the whole of his scholarly output, held to the view today ascribed to him.[1] In what follows, it will thus be argued the the commonly held view of Carl Menger's capital theory is mistaken, and needs to be overcome, if one wants to present a truthful reflection of the views held by the school's founder.

Firstly, Menger's thoughts on capital as contained in the 1867 draft of his *Principles* will be illuminated, thereby setting the stage for a sound interpretation of his later work. Secondly, Menger's thought on capital as contained in the *Principles* themselves, as published in 1871, will be outlined. Thirdly, the capital concepts that Menger taught Prince Rudolph will briefly be outlined. Fourthly, the capital concept contained in Menger's almost entirely forgotten 1888

[1] A notable exception in the interpretation of Menger's overall work is the work of Braun (2014, 2015a, 2015b). While Braun does not cover Menger's pre-1871 thought and hence regards Hildebrand's (1883) influence on Menger as the main factor, he correctly exposes Menger's shift in ideas. He further (2015b) correctly points out the continuity of Menger's approach, as found in the work of Mises (1949).

monograph will be presented and compared to the one contained in the *Principles*. Lastly, in conclusion, the findings regarding the development, and overall nature of Carl Menger's work on the theory of capital can be summarised.

II. Menger on Capital in 1867

The development of Carl Menger's thoughts on capital can be traced all the way back to 1867, the year "he threw himself into the study of economics and the entirety of the science's literature at the time" (Menger 1923, V), a process ultimately culminating in the 1871 publication of his *Principles of Economics* (1994). Some of Menger's very first thoughts on the subject are captured in the *Erster Entwurf zu Seinem Hauptwerk Grundsätze* (1963).[2] This volume, compiled by Emil Kauder from material found in the Carl Menger Library at the Hitotsubashi University Library in Japan, contains what can be regarded as a "prototype" (Morita 1963, viii) of Menger's theory, found in the form of handwritten notes in a treatise written by another 19th century German-speaking economist, the German Classical economist Karl Heinrich Rau (1792-1870).

As recounted by his son Karl (Menger 1923, V), Menger began his studies of economics in the fall of 1867. One of the first books the young Carl was to study was the second volume of Karl Heinrich Rau's *Lehrbuch der politischen Ökonomie* (1826-1837).[3] In the *Lehrbuch*, Rau, "one of the most outstanding German economists of the nineteenth century" (Hentschel 2003), systematically covered the field s of economic theory, economic policy and public finance. The

---

[2] Literally, "First Draft of his Main Work 'Principles.'"

[3] "Textbook of Political Economy."

second volume of the *Lehrbuch*, titled *Grundsätze der Volkswirtschaftslehre* ("Principles of Economics"), the same title that Menger would choose for his own work four years later, contained Rau's thorough discussion of most foundational aspects of economic theory, including the theory of the good, the theories of production and distribution, a discussion of labor, commerce, and trade, as well as, and of relevance here, a discussion of the concepts of wealth and capital. Some of these concepts, as we shall see, would end up finding their way (in adapted form) into Menger's own analysis, if only after the publication of the *Principles*. Menger's notes on Rau's *Grundsätze*, in any case, commence on page one of the latter's work, following his own outline for a brief introductory section and table of contents on pages.

Rau divides goods, which he defines as all things that are used as "means for human wants" (1863, 1) into essentially two kinds. Firstly, and to him in the foremost place, there are material goods, those being all tangible things of the "sensual world surrounding man" (Rau ibid., 1) that he utilises for the satisfaction of his wants. Secondly, there are immaterial, or "personal" goods. Rau defines this category as the "conditions or characteristics of man" that are demanded, "sometimes for their own sake (as ends), sometimes as means for the acquisition of other goods" (ibid., 2). An example of such a "characteristic" of man is the "ingenuity in business matters" of the businessman. Rau furthermore refers to Plato, giving additional examples of non-tangible goods, such as "health, beauty, strength and prosperity" (1863, 2).[4]

Rau thus correctly perceives that a thing need not be tangible in order to be useful, and, by implication, "acquire goods-character" (Menger 1994, 52). However, this division of goods

[4] Rau also lists a third category of goods, which, however, appears to be a subcategory of immaterial goods. This category includes "social goods" that are based "on the relationship of the individual to others […] such as fame, or credit" (1863, 2).

into material and non-material has implications for Rau's understanding of the relationship of economic science to human action in the broadest sense. He argues that only human action directed at the "acquisition, preservation, and application" of *material* goods is "economic activity." The task of economic science is consequently strictly limited to the material aspects of man's actions. Economic actions, claims Rau, "constitute a specific field of human action, which aims at the acquisition and subjugation of the external nature, becoming more successful as the knowledge of nature advances. The ordered sum of all truths regarding these matters is *economic theory*, or *economics*" (1863, 2).

Menger disagrees. His note reads that the "object of economics ["Nationalökonomie"] are all those goods that have a <u>public value</u> (exchange value),[5] regardless of whether or not they are <u>material</u>, since <u>labor</u> is also immaterial, yet also a good" (1963, 8). "Personal characteristics," Menger argues, are also part of this analysis, as they are "goods, insofar as we regard them, indirectly or directly, as connected within the <u>causal nexus</u> with those goods that have a public value" (1963, 8). While "they are as such not capable of exchange," the only goods that are in fact excluded from economic analysis are "all things that have neither a public value, nor are connected to a public value within the causal nexus" (1963, 9). Menger's approach thus includes Rau's "personal goods." To Menger, then, economic analysis deals not only with human activity pertaining to material things, but also with man's activity as it pertains to the immaterial, as long as the immaterial ("personal") goods are associated with a monetary outcome within the actor's "causal nexus."

[5] "Instead of '<u>public value</u>' it would be better to say <u>goods</u> that are in exchange in a relationship to their value," so Menger (1932, 11). He thus obviously refers to market prices.

This disagreement with regard to economic goods and, by implication, the scope of economic inquiry, leads to two differing concepts of wealth. Based on his materialistic understanding of economic goods, Rau (1863: 2) defines the concept of wealth as "the sum of material goods, which, at a given moment in time, are under the control of a person." Later, he even more explicitly states that "all wealth is only the command over material goods" (1863, 58). Menger, however, understanding economics to deal with all goods of "public value," recognises the shortcoming of this approach,[6] and expands the wealth concept. "I regard as wealth the sum of all individual public values under the ownership of someone" (1963, 10), argues Menger. His view of wealth hence includes all goods within the possession of a given actor, as long as they are expressed in monetary terms.[7]

Rau moves on to use this materialistic concept of wealth to discuss the in his eyes much more significant idea of a "Volksvermögen" ("national wealth"),[8] defining the same as comprising "all material goods under the control of the citizens" (1863, 62). Menger, however, already firmly expressing methodological individualism, perceives that both ownership, and much more so the idea of a causal nexus (i.e., a plan for future income-generating activity) must always be understood in terms of a given individual, not a group, society, or nation, and

---

[6] The shortcoming consists in the simply and easily observable fact that immaterial goods, such as "rights and relationships," to use the term employed by Böhm, do in fact have market values, the explanation of which must be the task of economic inquiry. Menger firmly believed this to be the case, as is most evidently seen in his criticism of Böhm's approach as "standing in contradiction to experience" (1915).

[7] This view is at odds with the view Menger holds in the *Principles,* where he regards wealth as all economics goods an actor owns (1994, 109).

[8] The primary concern of economic science to Rau is the elucidation of large-scale social phenomena. The task of political economy is, claims Rau (1863, 8), to explain how a people's wealth is acquired, transferred, and used.

consequently correctly understands that wealth is a phenomenon always to be investigated in a strictly individual context. As a consequence,

> National wealth is to be understood as the sum of all the wealths in the ownership of economising individuals. One must not regard it as <u>one</u> wealth, but rather as an organism of individual wealths. (1963, 31)
>
> It is no entity in the sense that the latter [i.e., private wealth] is, and must not be investigated from the standpoint of private wealth. (1963, 11)

Rather than being an analytically separate, collective unit, as proposed by Rau, a nation's wealth is thus merely the organic whole of the wealth of all of its individual citizens.

After his discussion of the nature of national wealth, Rau, still focused on the illumination of national phenomena, proceeds to discuss the twofold division of the components of national wealth, before arriving at the capital concept. According to Rau, one means of understanding national wealth is to divide its constituent goods into two categories, distinguished by their purpose. The first category is that of "Genussmittel," or "means of consumption." All goods within this category of wealth are directed, as the name suggests, at being used to satisfy ends directly (1863, 64). The second category is that of the "Erwerbsmittel," or "means of acquisition." All of these goods are "used only as a *means* to bring new material goods into the wealth, be it through production, or be it through exchange" (1863, 64). Whether a given good is a means of consumption or acquisition is not dictated by its physical characteristics, notes Rau:

> Some goods can, at will, be utilised for one application or the other, some can be used for both at the same time. Means of consumption that are given by their owner, against payment, to others for further usage, are for the same [i.e., their new possessor] means of acquisition, without losing their objective nature. (1863, 65)

This distinction between means of consumption and means of acquisition leads Rau to his concept of capital. As he believes economics to investigate national phenomena, however, he distinguishes between capital from the viewpoint of economics, and capital from the viewpoint of business life.

Rau's analysis of capital *from the viewpoint of economics* begins by dividing national wealth into two fundamental categories. The first category is the "Gebrauchsvorrat" ("usage stock"), which consists of all movable means of consumption. The second category is what Rau calls *capital,* or the "acquisitive stock of goods," and consists of the totality of the means of acquisition. Capital from the viewpoint of economics thus consists of all material means o acquisition used to gain income. While this is the capital concept that Rau proceeds to operate under for his own analysis, he points out that there is another view of capital, a view not used in economic science, but in the world of business.

This "business life" view of capital differs from the economic one. "With regard to a private economy, thus, all that movable wealth that is used by the owner not for mere personal consumption, but for the acquisition of other goods, is regarded as *acquisitive,* or as *capital*" (Rau 1863, 67). This private view of capital will then include "not only the true national economic capital, but also those means of consumption that their owner uses as means to acquire income, as well as the monetary sums designated to be lent out and the interest receivable accrued from the loan, which, to the creditor, take the place of the lent goods. […] The lent sums themselves will then be used by the debtor as capital, and as consumptive means" (Rau 1863, 67-8).

This concept of capital, as Rau himself perceives, is much broader and closer to the common parlance of business life. In it, *all* goods (including money), as long as they are used to acquire further income, are counted as part of the actor's capital. Hence, to business life the distinction between goods of the first order and goods of higher orders is irrelevant. What determines whether a given good is capital is whether or not it is used in acquisitive purposes. An apple destined to be consumed directly by the entrepreneur at lunchtime is just as much part of the same entrepreneur's capital as are the machines in his factory, as long as he understands the apple to contribute to his income-generating activity.

Rau concludes that "the private economy concept and the national economy concept of capital are both grounded equally in the nature of their economies, and the double meaning of the same term, as uncomfortable as it might be in the first investigation of the science, cannot be avoided" (1863, 67).

Menger's remarks again are insightful. He appears to agree with Rau's overall approach to the subject, seeking to explain actual economic life. There are no remarks whatsoever proposing a capital concept in terms of the historic origin of *produced means of production* as one of the three productive factors. Neither does he propose a concept of capital as a *heterogeneous structure*. More insightful than what he does not say, Menger's positive remarks make it clear that he in fact already developed his own ideas as based on Rau's concept of capital from the viewpoint of business life.

Menger interjects that in fact "a capital is a sum of *public values* that is used productively" (1963, 24, emphasis added). This view can be regarded as a modified form of Rau's business view of capital. To Rau, as shown above, all productively used goods (including money) are capital. The key to a good obtaining the character of capital is thus use within the acquisitive actions of man. To Menger, however, this approach is missing the point. He regards capital as a strictly monetary concept. What makes a good part of an actors capital is whether or not its productive contribution is captured in terms of a "public value," i.e. a monetary value within the actor's economic calculation.

Just as much as any good can "represent capital, as long as it represents a public value" (1963, 25), goods that most observers would immediately classify as an obvious case of capital, such as, for example, machines commonly used in industrial production, can fail to be capital. The key lies in understanding that the historical origin and common technical use of a factor as a produced means of production are entirely irrelevant to it becoming part of capital. Menger argues that

> A pile of machines in the hands of an enthusiast that only collects them is not capital, yet it is in the hands of the industrialist or merchant. There are many things that have only indirect uses (e.g. machines), yet, as long as they do <u>not</u> take a position within a production, are not capital. They can even be entirely worthless. <u>Machines</u> yield an indirect service — capital is the <u>stuff</u> with which the speculator works. It includes all goods that represent public values, as long as they are parts of a production. (1963, 24-5)

It can thus be concluded that Menger, in 1867, understood capital as a given actor's acquisitive wealth expressed in monetary terms, since it is this approach that is found throughout the *Entwurf*. Hence, capital is to Menger not a technical category of produced means of production,[9] nor is it a heterogeneous structure of productive factors. Rather, capital is the embodiment of an entrepreneur's economic calculation of the monetary value of the productive

[9] Later passages further substantiate this a-technical interpretation (Menger 1963, 73).

assets within his enterprise.[10] That being said, Menger presents an entirely different capital concept in his *Principles,* published only 4 years later. Said view will be investigated next.[11]

III. Menger on Capital in 1871

Menger's remarks on capital in his *Principles* are brief and dispersed throughout the work. The only section in which Menger deals with the subject explicitly spans not even two and a half pages (1994, 302-205), and is in, the English translation, relegated to the appendix. Hence, Menger must have regarded the subject as not of high importance, or he must have regarded his own view as too undeveloped or unsatisfactory to be expanded further. Whatever the case may be, it will become evident that the theory we are presented with in the *Principles* is by no means what Menger regarded to be the correct understanding of the capital concept during his studies in 1867.

Menger's discussion in the footnote begins with his critique of various approaches he considers to be mistaken. A recurring idea already present in his *Entwurf* (1963, 73), Menger argues that the "most frequent mistake that is made not only in the classification but also in the definition of capital, consists in the stress laid on the *technical* instead of the *economic*

[10] Since not all subtleties of Menger's analysis could be dealt with here, the reader is referred to the *Entwurf* to obtain a full picture of Menger's embryonic thought. On capital as the "basic stock" of an entrepreneur's enterprise, see Menger (1963, 60). Menger's thoughts on subjective valuation as the ultimate factor deciding market prices can be found in various passages (Menger 1963, 27-32, 75-82). On the fact that it is entrepreneurial appraisal, through economic calculation, that determines the value of capital, and not objective factors (including, according to Menger, even market prices), cf. Menger (1963, 60). On Menger's further discussion and commentary of Rau's approach to the nature of capital and its appraisal, cf. Menger (1963, 59-72). On the topic of interest on capital, see Menger (1963, 115-127).

[11] It must be noted that the *Entwurf* is full of other fascinating insights of the young Menger, dealing with many subjects. Future research into the *Entwurf* might aide in better understanding Menger's ideas (and their origin), as found in his *Principles.*

standpoint" (Menger 1994, 303).[12] This approach leads then to two possible erroneous view of capital. The first one regards capital, in analogy to the division between goods of lower and higher order, as all higher order goods within an actor's wealth. The second one regards capital as all items of wealth that "yield a permanent *income*" (Menger 1994, 303). The problem with these approaches, Menger seems to imply, is that they are conceiving of capital as too broad of a concept, since

> if the concept of wealth is stretched to include *labor power*, and if the concept of income is extended to include the services of consumption goods to their owners […], a consistent extension of this doctrine leads one to the proposition that *labor power* […], land […], and finally also all consumption goods of any durability […] must all be called capital. (1994, 303)[13]

Menger proceeds to propose a relatively more *limited* concept of capital. Referring to his earlier discussion of capital-using production over the course of time (1994, 150-161), he argues that for the emergence of capital, two conditions must be met. First, the time period within which a given array of goods of higher order is to be used must be "long enough to permit a production process (in the economic sense of the term […]) to take place" (1994, 304). Menger here simply refers to the fact that production does not occur outside of time, and hence requires "a certain period of time: time within which capital (or, its "services") will be "*fixed,* and not available for other productive purposes*"* (1994, 157).

Secondly, "the amounts and kinds of the available quantities of goods must be such that through them, the economising individual has either direct or indirect command of the

[12] As will be shown below, Menger, by his own standards, falls prey to the error of analysing capital based on technical considerations.

[13] Menger himself, both in 1867 and, as will be shown, in 1888, extended the capital concept to include consumer's goods, as the "real" concept is purely a-historical.

complementary goods of higher order that are necessary for the production of goods of lower order."

What Menger seems to say here is that the array of goods used in production must function, within the production process, as higher order goods allowing the production of lower order goods. What Menger tries to communicate is illuminated, at least somewhat, in the next paragraph:

> The most important difference between capital on the one hand and items of wealth that yield an income (land, buildings, etc.) on the other is that the later are concrete durable goods whose services themselves have both goods character and economic character, whereas capital represents, directly or indirectly, a combination of economic goods of higher order (i.e., complementary quantities of these goods). (1994, 304)

The point that Menger seems make is that, instead of being mere concrete (individual), unrelated income-yielding goods (e.g. a building), unrelated to any time-consuming production process, capital rather represents combinations, or sums of higher order goods, used in a production process that extends throughout time, and yields lower order goods. Hence, the key to the capital concept is its *structural* nature.[14]

This approach, as should be immediately evident, is entirely different from that which Menger seemed to favour not long before the *Principles* were published. His emphasis on daily business life, leading him to a concept of capital as a homogeneous, monetary concept, as found in the *Entwurf,* had given way to, by his own standards, a more *technical* understanding of

[14] Dingwall and Hoselitz's English translation is somewhat inaccurate here. Firstly, the German term translated as "combination" is not singular but plural, namely "Gesammtheiten." This is of relevance as it implies that a given actor's capital is not limited to a single production process (unless he is engaged in only one), but rather related to all of his productive enterprises. He does hence not have various "capitals," one for each production process, but rather, he has capital (which he will keep, accounting-wise, separated by enterprise) encompassing all of his productive endeavours and the assets used within them. Secondly, translating the term as combinations is a little too suggestive, as "Gesammtheiten" merely means sums, wholes, totalities, or entireties.

capital as a heterogeneous sum of income-yielding higher oder goods.[15] What is more, Menger even proceeds to explicitly reject the view he held before, and will again hold later.

First, it must be pointed out that Menger does allow money to be a *part* of capital. For example, in his discussion of money (1994, 278), he argues that the "portion of an economising individuals's capital that does not already consist of specialised factors of intended production is […] more suitably held in the form of money than in any other form." Further, in the footnote (1994, 304), he argues that "money capital is only one convenient form of capital that is especially suitable fo ruse under advanced trading conditions." What is more, he even admits that the emergence of capital was only possible within a monetary economic order in which all goods are expressed in terms of a single unit, i.e., money (1994, 305).[16]

However, Menger warns against the equation of money with capital. Based on "developed trading conditions" present in modern world, Menger notes (1994, 304) that capital "is usually reckoned in terms of money and is also most frequently offered in the convenient form of money to persons requiring it." Hence, capital is "generally being interpreted in ordinary life as a sum of money." However, "this concept of capital is much too narrow, and a particular form of capital has been elevated to the status of the genus itself." While it is equally mistaken to not accredit to money the character of "true capital at all," Menger argues that the ordinary life view of equating capital with monetary sums falls prey to the old mercantilist error of equating wealth with money. He even goes so far to say that "the concept of money is entirely foreign to

---

[15] Finding out *why* it was that Menger changed his mind would require a detailed and careful study of his notes in the Carl Menger Papers at Duke University.

[16] Menger here refers to Knies' (1853) discussion to support his argument. Within the Austrian tradition, the importance of the monetary order to the emergence of capital was further elaborated by Frank A. Fetter (1977), Ludwig von Mises (1949: 260-70) and, more recently, Braun (2017).

the concept of capital" (1994, 305). Thus, while he allows for money to be a component of capital, as such, the concept of capital he presents in the *Principles* is entirely non-monetary. There can hence be no doubt about Menger abandoning, if only briefly, the private view of capital.

Since these brief remarks in Menger's *Principles* are commonly the only source used to interpret his views on the capital concept, it comes then as no surprise that most economists within the Austrian tradition regard him as the originator of the *structural* approach, understanding capital as a heterogenous structure of higher oder goods. If Menger's output on the subject ended here, one might indeed claim this interpretation to be justified. This was, however, not the case, as Menger continued studying the capital concept.

IV. Menger on Capital in 1876

As is well-known (Schulak and Unterköfler 2011, 31; Salerno 1990, 75), Menger was awarded the honour of tutoring the young Crown Prince Rudolf von Habsburg in 1876. Prince Rudolph's notes were discovered in 1986 in the State Archives of Austria, and subsequently published in by Streissler as *Carl Menger's Lectures to Crown Prince Rudolf of Austria* (199. As they are often corrected by Menger (Streissler 1994, 3), one might reasonably regard them as a somewhat rough reflection of Menger's thought shortly after the publication of his *Principles.* Nonetheless, it can be assumed that that the purpose of the *Lectures* was not convey to the prince what Menger regarded as state of the art economic analysis, but rather to convey to him economic theory as it pertains to wise decision making by the sovereign. Hence, the significance of the *Lectures* in the development of Menger's thought on capital is limited. In any case, the discussion of the capital concept itself is contained in Rudolf's notes on "Political Economy III. 1876 January" (Streissler 1994, 61-77).

Menger's analysis in the *Lectures* begins with a discussion of wealth. He distinguishes between two concepts of wealth, a "scientific" one, and a "popular" one. The scientific one regards wealth as the entirety of a person's economic goods, "thus the embodiment of a person's whole belongings in the widest sense" (Streissler 1994, 61). The popular concept, on the other hand, regards wealth as "only those <u>economic goods</u> that yield an <u>income</u>, e.g. monetary sums, houses, land holdings, enterprises, stocks" (ibid.). Income is defined in the standard way as those new quantities of economic goods that enter into the actor's wealth (ibid.).

Menger's subsequent definition of capital is somewhat roundabout. He first describes the concept of a "stock of wealth" ("Vermögensstamm") as a "lasting foundation of all incomes." In the popular sense, "a stock of wealth is regarded only as those transferrable objects of wealth that yield an income independent of the labor of the owner" (Streissler 1994, 62). In the everyday sense, then, there are three commonly agreed upon main groups of stocks of wealth. Firstly, there is "land ownership and real estate," secondly, there are "monetary sums," and thirdly, there are "enterprises" (ibid.). In the scientific sense, Menger points out, the "stock of wealth" concept would also include man's labor, as the same is a source of his lasting income (ibid.).

In any case, Menger proceeds to again distinguish between two concepts of capital. The first, scientific one, "understands as capital every stock of wealth." Economic science, claims Menger, thus regards capital as all "lasting foundations of incomes." This concept seems to argue, somewhat similarly to the one we find in his *Principles*, that a given actor's capital consists of all those durable (higher order) goods within his wealth that yield him income.

Compared to the Principles, this approach contains similarities, as well as differences. Most evidently, the concept does not refer to capital as a structure, or as a complex of higher order goods. There is hence no emphasis on heterogeneity or structure to the concept. Rather, capital here encompasses all higher order goods, as long as they are durable and yield income. Continuity from the *Principles* concept, however, can be seen in the emphasis of the time element in production. In 1871, Menger stressed the time-consuming nature of the production process. By emphasising that the stock of wealth's is a "lasting foundation," i.e., is durable, Menger excludes short production processes that fail to take "a certain period of time" within which assets are fixed (Menger 1871, 157).

More insightful for the interpretation of Menger's later understanding of capital is the second concept of capital that he presents to the Prince, if only very briefly. "In the popular sense," argues Menger (Streissler 1994, 64), "any monetary sum that yields an income or return is understood as capital." While the first concept is "much broader, as it includes in itself all lasting income," the latter one is much narrower, as only "monetary sums are called capital." As correctly pointed out by Streissler (ibid., footnotes 11 &13), Menger here obviously borrows again from Rau (1863). After abandoning the "popular view" in the *Principles,* and even criticising its entirely mistaken nature, Menger here seems to at least consider the view as worthy of mentioning, while, it must be noted, all other views go entirely unmentioned. Admittedly, he still seems to be criticising the approaches limitation relative to the "scientific" approach, since it excludes every non-monetary object of wealth. Nonetheless, if he had no regard for the idea, why would he present it to the Prince in this almost value-free way?

Whatever Menger's true feelings regarding the "popular" view might have been in the *Lectures,* the discussion of the subject is so brief that drawing strong inferences from it would be outside of the scope of sound historical investigation. In any case, as will be demonstrated below, Menger was to adopt the private view of capital again relatively soon. Just about a decade later, in one of his last contributions to economic analysis, Menger would boldly defend the popular view, and leave all other views behind.

V. Menger on Capital in 1888

As evidenced by Prince Rudolf's notebook, Menger continued to grapple with he capital concept after the publication of the *Principles*. The culmination of his post-1871 thought is, however, not embodied in his *Lectures*, as those were not directed at teaching pure economic theory to Prince Rudolf. Rather, Menger's capital theory culminated in his almost fifty page long article *Zur Theorie des Kapitals* ("On the Theory of Capital"), published in 1888.

While highly insightful and analytically sharp, this publication has been almost entirely neglected by the profession. Often going entirely unnoticed (Lachman 1978, Garrison 2001; Skousen 2007; Rothbard 2009, Lewin 2011), the article is mentioned by only a handful of scholars (among them Hayek 1934; Stigler 1937; Lachmann 1976, 1977; Salerno 1990; Endres 1997; Ravix 2006. Kirzner 2010; Endres and Harper 2011; Schulak and Unterköfler 2011; and Braun 2014, 2015a, 2015b, 2017). Even fewer scholars have attempted to systematically interpret the positive thought contained in the article (Endres 1997; Braun 2015a, 2015b).[17]

[17] As demonstrated by Braun (2014), Endres' (1997) assessment of Menger's monograph misses the point entirely, and will hence not be discussed here.

Lachmann, for example, after first arguing that modern "Austrians" ought to follow Menger's approach as contained in the 1888 monograph (1976, 147), a year later (1977) admits that "Menger's own theory of capital, I regret to say is something somewhat more difficult. I have, having read the article several times, never been able to make out what Menger's definition would be."[18] Stigler (1937, 249) elegantly circumvents the problem of having to interpret Menger's monograph by claiming that, in the article, "no positive theory is presented."[19] Although Hayek (1936, xxvi) correctly points out that "it is pretty certain that we owe this article to the fact that Menger did not quite agree with the definition of the term capital which was implied in the first, historical part of Böhm-Bawerk's *Capital and Interest,*" and although he even correctly interprets Menger's aim in the article as consisting of "rehabilitating the abstract concept of capital," he ends his brief comments on the article on the the unsatisfactory note that the contributions of the article "even to-day, have not yet received quite the attention they deserve." Since then, not much has changed.

This state of affairs is unacceptable, since, unlike what Stigler would have us believe, Hayek is quite correct in claiming that Menger's article does contain significant theoretical contributions. In what follows, the article will thus be investigated. *Zur Theorie des Kapitals* is made up of five sections, the first four of which contain Menger's criticism of other views of capital, and the last one defending his own view, that is, the same view he already held in 1867.

---

[18] Lachman (1977) does, however, seem to be close to a correct interpretation, when arguing that "in general, what he seems to say is we must regard as capital whatever the market regards as capital."

[19] Stigler proceeds (1937, 250) to quote Menger's exact definition of capital. Why he nevertheless believes that the article contains no positive theoretical insights appears to be simply incomprehensible.

The critical section of the article spans 33 of the 49 pages and sets the stage for Menger's own approach, which will sound very familiar. While it deserves serious attention, its critical content will, for the sake of brevity, only be presented in abbreviated form.[20]

Menger deems this extended section of criticism necessary as he perceives that economic theory has unjustly introduced terminology that is at odds with that used in everyday life. It is an "unacceptable blunder when a science not merely conceptually defines more exactly expressions of common life, […] but rather, for entirely new concepts, uses words with which common parlance already describes, correctly and appropriately, a scientifically different, and for the relevant discipline significant, category of phenomena" (1888, 2). Yet, Menger argues (ibid., 3), economic science need not search for new theory of capital, and invent new terminology. Rather, if we want to "find out what capital is, we can directly ask life" (ibid.).

Menger proceeds to critique four views that fail to "ask life" and it's "real concept" (ibid.) of capital. The first three of the four views he criticises regard capital as:

> *first*, the components of a person's wealth dedicated to the acquisition of income, as opposed to the so-called provision for consumption;
> *second*, the means of production, as opposed to the products, that is, the nascent consumption wealth as opposed to the consumption goods themselves), and finally
> *third,* the "products" destined for further production, as opposed to the goods of a different kind destined for production (the respective natural things and labor services!). (1888, 4)

Fourth, Menger will also critique the national view of capital we encountered earlier. While investigating only four views might appear somewhat limited, Menger firmly believes (ibid., 4) that the "almost incalculable rest of views" can be categorised as being "more or less clearly thought variants or combinations" of the three main views.

[20] For an extended discussion of the critiques contained in *Zur Theorie des Kapitals,* see Braun (2015a).

Menger begins with the view the view that regards capital as equivalent to all wealth dedicated to the acquisition of income. The key problem with this view, argues Menger (ibid., 6-7), lies in the fact that it has essentially no explanatory power. If all acquisitive income is termed capital, then "theory opposes not only common parlance, it in fact suffers from an even more severe defect," in that it does not allow us to deliver a satisfactory theory of the return on wealth. "If all that yields an income […] is called capital, then not only the owner of movable material things that fall into the category of acquisitive wealth earns a capital income, but so does the worker from his labor, the farmer from his land, the owner of a reputable commercial name [from the same], and even the owner of furniture from the same" (ibid., 7).

If this is done, argues Menger, any explanatory value of the capital concept, which will have been equivocated with the wealth concept, will have been lost, since one could not, with such a theory, satisfactorily explain, for example, interest on capital as a phenomenon separate from wages. The root cause for this mistaken view, Menger is convinced (ibid., 8) stems from the desire of the science to base their concepts on etymological considerations. Since the term "caput" refers to the good itself, and not its fruit, the analogy to the economic concept of capital has been drawn, that is, capital has simply been equivocated to the "caput" of all acquisitive goods. (ibid., 8).

The second view that Menger criticises is the one that regards capital as the entirety of an actor's means of production, as opposed to his consumer's goods. While Menger emphasises (ibid., 9) that the distinction between goods of higher and lower order is essential to economic theory, he maintains that one must not analogically divide "individual wealth into capital and the remaining categories" (ibid., 9), based the order of goods as either consumer's goods or factors of production. The flaw of this approach, claims Menger (ibid., 10) lies in the fact that it regards only the "technical nature" of goods. There are, to a private household, for example, many goods that are technically speaking higher oder goods, yet they are not part of the household's capital (ibid., 10). By the same token, "consumer's goods in the hands of the producer, or merchant, who seeks to sells them, are no less capital than raw materials or auxiliary materials" (ibid.). Hence, the technical classification of a given good, as being either of lower or higher order, is irrelevant to the discussion of capital. Menger thus "rejects *any* theory that equates capital with higher over goods, combinations of higher order goods, or a heterogeneous structure of higher order goods" (Braun 2015b, 13).

Correctly noted by Braun (2015b), this appears to be the root cause of Menger's famous criticism of Böhm-Bawerk's theory as "one of the greatest errors ever committed" (Schumpeter 1954, 847), since Böhm regarded capital as "nothing but the sum total of intermediate products which come into existence at the individual stages of the roundabout course of progression" (Böhm-Bawerk 1959, 14). Even though, or rather because, Böhm here follows Menger's very own approach, as found in the *Principles,* regarding capital as a sum of intermediate products, he misses the point, since his analysis focuses on the *technical* aspects of production.

Menger then proceeds to criticise, over the span of 18 pages, the view he traces back to Adam Smith. The key problem with Smith's view is that it, similarly to the view described above, focuses on essentially irrelevant technical characteristics, as it regards as capital only produced factors of production, as opposed to land and labor (ibid., 13). While he notes (ibid., 14) that the technical analysis of goods, and their classification into the three historical categories of land, labor, and produced means of production is not unwarranted, he once more reminds us that this technical analysis is in opposition to everyday life (ibid.). He illustrates the problem that this approach suffers from in a twofold way. First, he argues that no one could deny that even entirely natural (meaning nature-given, or not produced) things can be capital (ibid., 14). For example, no one could claim, argues Menger (ibid., 15) that a naturally grown tree to be used in the construction of a ship is not capital, while a purposefully grown one is. Hence, land can be part of capital, just like produced factors of production (and consumer's goods) can be.

Secondly, Menger reminds us that, in a society in which slavery is the law, even human beings, and, of significance here, their labor, can become capital (ibid., 18). Likewise, "also labor services of free worker are for the economy of the entrepreneur 'capital' as soon as the same purchases (rents for their work) the labor services, in order to sell either the services themselves or their products" (ibid.). Hence, "all goods of any kind can become capital for the entrepreneur" (ibid.). Noting that this principle applies also to non-tangible goods, it is clear that Menger's view of capital entirely disregards any consideration for the technical classification of goods into land, labor, and produced means of production. This a-historical approach, rather then being regarded as a novelty, can be regarded as a continuation of the thoughts Menger expressed in 1867.

While the problem of the first three mistaken views of capital was found in their emphasis on technical aspects, the fourth view, which regards capital as a national concept, is mistaken due to its aggregated approach. Menger's criticism is simply that there are, in actual fact, no national economies, and hence no national capital, as distinct phenomena, separate from private action, and private capital (ibid., 32). Again directly following his 1867 discussion, Menger argues that "the nation's capital is a collective whole which includes all capitals of the individual economies" (ibid., 33).

What, then, *is* the correct capital concept, according to Menger? The answer should be evident. It is the same exact same concept that Menger had already arrived at in 1867. At the very outset of the fifth and last section of *Zur Theorie des Kapitals,* Menger declares that,

> In common life, and also in the parlance of jurisprudence affiliated with the latter's notions, capital is understood as something essentially different than it is in our science. The practitioners in the field of business and the jurists signify with the above expression neither raw or auxiliary materials of technological production, nor commodities, machines, buildings, or other goods. Wherever the terminology of the Smithian School has not yet invaded the language of common life, only monetary sums are signified by the above word. (ibid., 37)

Yet, not all monetary sums are capital, Menger clarifies. "Only monetary sums which are dedicated to the acquisition of income — components of the acquisitive wealth — are signified by this word" (ibid.). Common life thus "in no way confuses *money* and *capital"* (ibid., 38). The key to Menger's concept is rather that capital is always and everywhere a monetary phenomenon.

As capital is always embodied in the generally accepted medium of exchange, it can comprise all economic goods, whatever their technical nature and historical origin may be, as economic calculation can appraise the value of any asset. Hence,

> The real concept of capital encompasses the acquisitive wealth, of whatever technical nature the same may be, in so far as its monetary value is object of our economic calculation, that is, if the same is expressed, according to calculation, as an acquisitive monetary sum. Common life understands capital as effective monetary sums dedicated to the acquisition of income, or as monetary sums representing wealth of any other kind, dedicated to the acquisition of income (and thus, in this sense, acquisitive). (ibid., 40).

This is Carl Menger's view of the capital concept. What is more, this is the exact same view he held in 1867, when he argued that "a capital is a sum of public values that is used productively" (1963, 24). Capital, to Menger, both in 1867 and in 1888, was an entirely private, monetary, homogenous concept, denoting the entirety of a given actor's acquisitive wealth, consisting of both money itself, and of other goods (of any order) expressed, through economic calculation, in monetary terms.[21]

Not just is the fact that Menger held this view almost entirely forgotten, what is more, the fact that notable economists within the Austrian tradition held this view, or views closely related to it, is also neglected. Frank A. Fetter (1911, 115), for example, defines capital as"economic wealth expressed in terms of the general unit of value." Herbert Davenport (1904, 39) argues that "productive agents, technologically considered, as there are in competitive society will, under the value denominator, rank as capital, whether these be land agents, or other; all consumption goods, also, will in strict logic be included." Ludwig von Mises (1949, 262) defines capital as "the sum of the money equivalent of all assets minus the sum of the money equivalent of all liabilities as dedicated at a definite date to the conduct of the operations of a definite business unit." It is hence evident that "Menger's" later theory of capital in fact, just like his structure approach, has a legacy. This legacy, however, undeservedly so, has spawned much less research. Hopefully, this state of affairs will change.

[21] For the sake of completeness, it must be pointed out that the second edition of Menger's *Principles* (1923) also contains some modifications of his 1871 capital concept. As noted by Braun (2015a), however, the passages are somewhat convoluted and the book "does not contain a coherent theory of capital, but rather several sections on the topic that do not harmonise with each other." This is due to the fact that not Carl Menger himself, but his son Karl, edited the second edition, who, in his introduction (XII f.) reminds the reader that the sections on capital are selected from a set of "various, sometimes inconsistent records on the capital concept." These records, found in Menger's estate, were written over the course of up to 40 years (ibid.). Hence, the second edition should not be regarded as a further development of Menger's thought.

VI. Conclusion

As should have become evident from the presented discussion, the development of Carl Menger's though on capital was a rather roundabout process. If one only regards the brief comments in the *Principles,* one would not notice this process of Menger changing his mind multiple times. One would then only regard Menger as a promoter of the structural concept. If, however, one includes Menger's other works, especially his *Zur Theorie des Kapitals,* it is evident that Menger, over the course of a little less than two decades, "turned against *all* capital theories — including his own one — which have been developed by economists in disregard of everyday language used and established business practices" (Braun 2015b, 77).

This turn did not come out of nowhere, however. Rather, Menger adopted the view that he had entertained and seemingly adopted even before he published his *Principles*. The critical connection in the development of his views is the German Karl Heinrich Rau, and his *Lehrbuch.* In the *Lehrbuch*, Rau describes the "private view" of capital, a concept that Menger, as his notes show, seemed to entertain, and approve of. Braun (2015b), regards Richard Hildebrand's work (1883) as the decisive influence, from whom Menger is said to have "derived the capital concept." Given the above investigation, it appears much more likely that Hildebrand's work merely convinced Menger to resume the view he had already held before.

Whatever the case may be, Menger's view, as found in *Zur Theorie des Kapitals*, must no longer be disregarded, and the capital theory that Menger adopted, which is also found in the works of Frank A. Fetter, Herbert Davenport, and Ludwig von Mises is in need of further investigation.

REFERENCES

von Böhm-Bawerk. Eugen. 1959. *Capital and Interest.* South Holland, IL: Libertarian Press.

Braun, Eduard. 2014. "The Menger-Lachmann Trajectory on Capital: A Comment on Endres and Harper." *Journal of the History of Economic Thought* 36 (01): 97-102.

——. 2015a. "Carl Menger's Contribution to Capital Theory." History of Economic Ideas 23, No. 1: 77-99.

——. 2015b. "Unsuspected Origins of Modern Austrian Economics: The Historical School of Economics on Capital and Economic Calculation." In The Next Generation of Austrian Economics. Essays in Honour of Joseph T. Salerno. Per Bylund and David Howden, eds. Auburn, AL: Ludwig von Mises Institute.

——. 2017. "The Theory of Capital as a Theory of Capitalism." *Journal of Institutional Economics,* 13 (2): 305-325.

Davenport, Herbert J. 1904. "Capital as a Competitive Concept." *Journal of Political Economy* 13, Vol. 1 (December): 31-47.

Endres, Anthony M. 1997. *Neoclassical Economic Theory. The Founding Austrian Vision.* London and New York: Routledge.

Endres, Anthony M., and Harper, D. A. 2011. "Carl Menger and his Followers in the Austrian Tradition on the Nature of Capital and Its Structure." *Journal of the History of Economic Thought* 33: 347-384.

Fetter, Frank A. 1911. *The Principles of Economics. With Applications to Practical Problems*. New York: The Century Co.

——. 1977. "Capital." In *Capital, Interest, and Rent. Essays in the Theory of Distribution,* edited by Murray N. Rothbard, 143-150. Kansas City: Sheed Andrew and McMeel.

Hayek, Friedrich August. 1936. "Carl Menger." In *The Collected Work of Carl Menger*, v-xxxviii. London School of Economics.

——. 1952. *The Pure Theory of Capital*. University of Chicago Press.

Hildebrand. Richard. *Die Theorie des Geldes: Kritische Untersuchungen.* Jena: Gustav Fischer.

Knies, Karl. 1853. *Die Politische Ökonomie vom Standpunkte der geschichtlichen Methode.* Braunschweig: Schwetschke und Sohn.

Lachmann, Ludwig M. 1976. “On Austrian Capital Theory.” In *The Foundations of Modern Austrian Economics*, edited by Edwin G. Dolan, 145-151. Kansas City: Sheed & Ward.

——. 1977. “History of the Austrian School of Economics.” Lecture given to Department of Economics at the University of Colorado. October 25, 1977. Available online at https://mises.org/library/history-austrian-school-economics

——. 1978. *Capital and Its Structure*. Kansas City: Sheed Andrews and McMeel.

Menger, Carl. 1888. *Zur Theorie des Kapitals.* Jena: Gustav Fischer.

——. 1915. “Nachruf auf Eugen von Böhm-Bawerk.” In *Almanach der Kaiserlichen Akademie der Wissenschaften zu Wien*, Bd. 65. Wien: K.K. Hof- und Staatsdruckerei.

——. 1923. *Grundsätze der Volkswirtschaftslehre*, zweite Auflage. Wien: Höller-Pichler-Tempsky.

——. 1994. *Principles of Economics*. Grove City, PA: Libertarian Press.

Menger, Karl. 1923. “Einleitung zu *Grundsätze der Volkswirtschaftslehre* by Carl Menger,V-XXII. Wien: Höller-Pichler-Tempsky.

von Mises, Ludwig. 1949. *Human Action. A Treatise on Economics*. Yale University Press.

Rau, Karl Heinrich. 1863. *Grundsätze der Volkswirthschaftslehre.* Heidelberg: Winter’sche Verlagshandlung.

Ravix, Jacques-Laurent. “L’opposition entre Menger et Böhm-Bawerk sur la théorie du Capital et la Production." *Cahiers d’Economie Politique*, 51: 157-176.

Rothbard, Murray N. 2009. *Man, Economy, and State with Power and Market*. Auburn, AL: Ludwig von Mises Institute.

Salerno, Joseph T. 1999. “Carl Menger. The Founding of the Austrian School.” In *15 Great Austrian Economists,* edited by Randall Holcombe, 71-100. Auburn, AL: Ludwig von Mises Institute.

Schulak, Eugen Maria, and Unterköfler, Herbert. 2011. *The Austrian School of Economics. A History of its Ideas, Ambassadors, and Institutions*. Auburn, AL: Ludwig von Mises Institute.

Schumpeter, Joseph A. 1954. *History of Economic Analysis.* Oxford University Press.

Stigler, George. “The Economics of Carl Menger.” *Journal of Political Economy* 45, No. 2: 229-250.

Streissler, Erich. *Carl Menger's Lectures to Crown Prince Rudolf of Austria.* Cheltenham: Edward Elgar.

von Strigl, Richard. 2000. *Capital and Production*. Auburn, AL: Ludwig von Mises Institue.

Hentschel, Volker. 2003. "Rau, Carl." In *Neue Deutsche Biographie* 21, 193. Online-Version: www.deutsche-biographie.de/pnd118787942.html#ndbcontent