

Wicksell versus Brisman: A Dispute on Capital between Generations

(Forthcoming in *Scandinavian Economic History Review*)

Bo Sandelin (Bo.Sandelin@economics.gu.se)

Abstract: After Wicksell in 1911 had published the second Swedish edition of his *Lectures on Political Economy*, a debate began in the *Ekonomisk Tidskrift* between Wicksell and his opponent Sven Brisman. The controversy was mainly about the concept of capital and the rate of interest, but the circumstances around the debate are at least as interesting as the theoretical issues. Wicksell was since long an internationally famous professor, his opponent a young and impetuous *docent*. Wicksell was a theorist, Brisman was an empiricist. Those facts determined the character of the debate, in which an echo of the conflict between Wicksell and Cassel is also present. On the theoretical level Wicksell now got another opportunity to clarify his concept of capital as saved-up labour and land, while his view on the casual relationship in the theory of interest is not so clear, taking into account his earlier writings.

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Wicksell versus Brisman: A Dispute on Capital between Generations
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Bo Sandelin¹

In 1911 Knut Wicksell (1851-1926) published the second edition of the first volume of the Swedish version of his *Lectures on Political Economy*. As a reaction to this event, the young docent Sven Brisman (1881-1953) published a long essay in *Ekonomisk Tidskrift* in which he complained about the state of capital theory in general and about its Austrian variant in particular. The latter was the variant that Wicksell found most fruitful, and in the section on capital theory in *Lectures* he states that his purpose is "to present here Böhm-Bawerk's principal ideas in an abridged and, if possible, clearer and more comprehensible form" (p. 147; 153).²

In a second essay Brisman gave a specific critique of Wicksell's book. Wicksell answered with the essay "Kapital und kein Ende", which has recently been translated, and Brisman concluded the controversy with his third contribution. Considering Wicksell's eminent position in the history of economics, this episode in his intellectual life deserves to be investigated.

The controversy was mainly about the concept of capital and the rate of interest. However, in the background we discern features which may not be general but are nevertheless not unique, and therefore may be of broader interest. These concern the young Brisman's tone against old Wicksell, the conflict between Cassel and Wicksell, the duality of the time between theorists and empiricists, and the fact that polemics may lead to clarification of points that were earlier obscure. We shall give some examples that illustrate these aspects. They are more interesting than the theoretical contents of Brisman's critique, which largely are based on misunderstandings.

1. The young versus the established

When Brisman published his opening paper in 1912, he was a 31-year-old *docent* with no established reputation. Originally he was a historian with a leaning towards economic history. His doctoral dissertation *Realisationsfrågan 1808-1834* (The debasement issue 1808-1834) from 1908 dealt with the last debasement of the coinage

¹ Department of Economics, University of Gothenburg, Box 640, SE-405 30 Gothenburg, Sweden.
Bo.Sandelin@economics.gu.se.

² The first page number refers to the English translation of *Lectures on Political Economy*, the second refers to the (second) Swedish edition. The same principle applies to references to "Kapital und kein Ende" and *Value, Capital and Rent*.

in Sweden. In 1909 Brisman became a *docent* of history and in 1910 he received the same appointment in economics and statistics. He became a professor of economics and bank science at the Stockholm School of Economics in 1917. Brisman became an expert on banking questions and he served in a number of Government committees, *inter alia* a committee appointed in 1918 on the regulation of the value of money of which Wicksell was a member, too.

Brisman's 1912 papers were his first in *Ekonomisk Tidskrift*. Wicksell, on the other hand, was 30 years older and internationally well-known, at least among those who read German, which most distinguished economists did at the time. Wicksell had all his renowned books behind him when the debate with Brisman took place.

Taking into consideration also the substantial social differences in those days between a famous professor and a young docent, it is clear that there must have been a problem for Brisman concerning what tone he should adopt. The result was a strange mixture of loud-voiced presumptuousness and fawning subservience.

Thus, in Brisman's opinion, the whole theory of capital and interest suffered from a "tremendous confusion and obscurity" (p. 89). Böhm-Bawerk was Wicksell's principal source of inspiration, and although Brisman found Böhm-Bawerk's *Capital and Interest* far superior to most works, he nevertheless says that it seems to have "had the effect of confusing the discussion, and it has hardly been fruitful for the discussion to centre around it, as to a certain degree has been the case" (p. 90).

Where the problem of interest was concerned, Brisman concluded that Böhm-Bawerk's rate of interest law³ was incorrect or at best completely meaningless. In sum: "Both concerning the cause of the existence of interest and with regard to the laws governing its level, Böhm-Bawerk has led the discussion astray, and it has undoubtedly been of little benefit to science that his work, because of its quantity and occasional good ideas, has been pushed so much to the fore, at least within German economics" (p. 121).

Wicksell is said to have created a capital concept of his own, but "if Professor Wicksell thinks there is any call to add yet another specimen to the extremely ample collection of capital concepts that already exists, that is his own business" (p. 400).

On the other hand, it is also possible to find examples of cringing obsequiousness. Thus, Brisman says that Wicksell's presentation is characterized by "an acuteness of thought which at any rate is unsurpassed by any scholar now living" (p. 170). Therefore, he says that his comments are intended more in the way of question marks. Furthermore, Wicksell's book must "undoubtedly be regarded as the foremost

³That is, the principle that the level of the rate of interest is determined by the incremental product of the last lengthening of the production process ["bestimmt wird durch das Mehrerträgnis der letzten noch gestatteten Produktionsverlängerung"].

attempt in the international literature to build up the theory of price and distribution on the principle of marginal utility" (p. 170).

Brisman's subservience is hard to reconcile with other parts of his essays, and Wicksell's comment that some of Brisman's critical utterances about Böhm-Bawerk "resemble exclamation points more than question marks" (p. 16; 310) is apposite.

The final demonstration of Brisman's uncertainty comes in his third paper, where he admits that some of his statements about Böhm-Bawerk were too sharp. He justifies his original reaction by referring to Böhm-Bawerk's forbidding behaviour. Böhm-Bawerk belongs to a common but unappealing type of scholar in the German-language literature, who censures his precursors in an unfair manner so that his own contributions seem more important than they deserve, says Brisman.

How did Wicksell - the old iconoclast - react to Brisman's attacks? He adopted a rather avuncular attitude. In the introduction of his answer he regretted that the younger generation of economists wasted time and energy on rather futile attempts to overthrow the very foundations of economics instead of elaborating on the grounds already established. "For every *single* upholder of Böhm-Bawerk's foundations, there are readily ten subversives" (p. 15; 301). Here he was alluding not only to Brisman but also to Schumpeter and others.⁴

Wicksell's counter criticism did not prevent him from thanking Brisman, and at the end of the article he says that his anti-critique "is by no means intended to discourage Brisman from further visits to the theoretical realm, where I rather bid him welcome". Considering Wicksell's objectively devastating criticism of essential points in Brisman's comments on theory, one may wonder whether this welcome was merely an expression of politeness.⁵

⁴ The publication by Schumpeter that Wicksell had in mind was evidently the book *The Theory of Economic Development*, which had recently been published in German.

⁵ Wicksell found reason to be annoyed with Brisman later, too. In 1915-1916 Brisman had published a couple of articles on the high cost of living. Wicksell responded with a merciless comment, starting with a general characterisation of Brisman:

"Docent Brisman presents a curious figure in our economic literature... In his writings, an ardent passion for research, great diligence and no little acuity and literary talent are wedded to a nervous urgency that prompts him time and again to launch, with the utmost confidence, claims whose lack of foundation, not to say absurdity, a moment's reflection would have revealed to him, if he had but taken the time to reflect." In the last article, says Wicksell, Brisman's statements are so absurd that they "break the bounds of what a man of science can allow himself".

Wicksell's comment was, however, published only recently in a collection of Wicksell's unpublished manuscripts edited by Jonung, Hedlund-Nyström and Jonung (2001). Was the harsh tone the reason why the manuscript was not originally published?

Was Brisman affected by the controversy and Wicksell's reputation so as to become permanently less presumptuous on matters of capital theory after 1912? Though he may have been affected, he did not become more humble. On the contrary, he sharpened his tone. In a small textbook in two parts published in 1911, *Nationalekonomi*, he had still dispassionately explained that "by *capital*, as this word is used in the strict economic sense, we do not understand, as in everyday usage, wealth, but *external things*" (p. 36). These things were "produced means of production", and Brisman gave a clear explanation in the spirit of the traditional Robinson Crusoe model of how they are related to savings. Next, he introduced the distinction between *saved capital* and *real capital*.

In 1916, i.e. after the debate with Wicksell, when the book was out of print, Brisman published a new one with the same title but predominantly new text. Here, the tone is quite different. He starts the chapter on capital by saying that economists disagree about the concept of capital. "At least a dozen definitions are current, and it is not unusual for quite new ones to be advanced." (p. 49), but textbooks in economics usually first state that capital is produced means of production. "This whole concept of capital is, however, rather meaningless if only for the reason that it is not directly related to the interest on capital" (p. 50), nor is it consistent with practical, common parlance. Therefore, he concludes: "We will thus leave this artificially created and rather meaningless concept of capital to its fate and will instead examine how the word capital is actually used." It seems probable that the more aggressive and contemptuous tone now is a consequence and remnant of the dispute with Wicksell in 1912. That dispute did not make Brisman more humble; it made him desperately defend his position.

2. Echo of the Cassel-Wicksell controversy

It is a well-known fact that relations between Gustav Cassel and Knut Wicksell were strained. The origin of the strained relations was their competition for the professorship in Lund that Wicksell obtained in 1901. Wicksell had sent a letter in which he advised Cassel to withdraw his application and pointed out weaknesses in Cassel's only book, *Das Recht auf den vollen Arbeitsertrag*. Among other things Wicksell had told Cassel that he found Cassel's capital theory "thoroughly amateurish" (Gårdlund 1996, p. 322). Cassel, in his turn, seems to have hoped that the experts to whom the applications were referred should reject the Austrian theory of capital that Wicksell embraced (Cassel, 1940, p. 35-36). A complete break came in 1919, when, in the form of a review of Cassel's *Theoretische Sozialökonomie* in *Ekonomisk Tidskrift*, Wicksell had published a

comprehensive criticism of Cassel's scientific achievements, not forgetting his presumptuous attitude.⁶ After that Cassel ceased to write in *Ekonomisk Tidskrift*

Brisman was probably not unaware of Wicksell's aversion to Cassel. At least, he certainly knew that they disagreed on theoretical matters, as this had been documented in various publications.⁷ Nevertheless, he repeatedly finds occasion for presenting Cassel as the most ingenious capital theorist, as if he wanted to mark his position in the Cassel-Wicksell animosity, and at the same time provoke Wicksell. Thus, in the introduction to the first article, having deplored the miserable state of capital theory in general, Brisman says that there are exceptions, "above all Cassel's brilliant work *Nature and Necessity of Interest*". This book "may probably be ranked first among all works in every respect, as far as method and presentation are concerned" (p. 90). Unfortunately, authors who confuse have attracted more attention; Brisman mentions Fisher, Clark and especially Böhm-Bawerk. Böhm-Bawerk, for example, had failed to understand that the rate of interest is determined by supply of and demand for savings, says Brisman. "It is Cassel that should be credited for clearly having advanced the problem to this point, and he is also the first to accomplish a systematic investigation of this kind" (p. 121).

Wicksell himself is, however, not only criticized. Concerning demand for and supply of capital, Brisman says that Cassel's fundamental presentation is corrected and completed by Wicksell.

In Brisman's third article, approving references to Cassel abound (which does not imply that criticism on details is totally absent). For instance, in the last sentence of the paper Brisman concludes that "Cassel's work should still be considered the best

⁶ An English translation of Wicksell's review is included as an appendix in the first volume of the English edition of *Lectures on Political Economy*. A German translation, "Professor Cassels nationalökonomisches System", was published in Schmoller's Jahrbuch 1928.

⁷ Thus, in his article "Grundriss einer elementaren Preislehre", Cassel (1899) criticises Wicksell's and others' treatment of the theory of marginal utility. As Wicksell found that "Cassel's essay includes a substantial number of arguments whose correctness must be challenged", and that he was himself "directly attacked by Cassel", he published a rebuttal, "Zur Verteidigung der Grenznutzenlehre" (1900), which has recently been translated. In *The Nature and Necessity of Interest* (1903), Cassel succeeded in writing a whole book on capital theory - including its historical development - without mentioning Wicksell (strange behaviour that reappeared, though perhaps for another reason, in the well-known case when Cassel avoided mentioning Walras in his treatment of the formation of prices in *Theoretische Sozialökonomie* (1918)). In the second and following editions of *Lectures on Political Economy*, Wicksell had several comments on elements of Cassel's theory of capital.

investigation of capital in the sense of saved exchange values, as the very problem has there been presented in the most clear and most fruitful way"(p. 416).⁸

How did Wicksell respond to Brisman's praise of Cassel? In Wicksell's article, which was published between Brisman's second and third article, a few gibes are found. Thus, Wicksell writes, concerning Brisman's opinion about the origin of the rate of interest: "Here, as in a couple of other matters, Brisman refers to Cassel's authority and appears to have a very high opinion of his work, *Nature and Necessity of Interest*. For my part, however, I am unable to grant that Cassel's presentation of any problem either critically or positively surpasses Böhm-Bawerk's; in most cases it probably lags far behind. The relatively most original idea which can be attributed to Cassel is his attempt to show that a reduction in interest to between 2 and 1.5 per cent would cause all further capital accumulation to come to a standstill. But here, Brisman wholly disagrees with Cassel and maintains instead that almost all savings would be saved even if there were no interest - which is probably a contradictory exaggeration" (p. 21; 318).

Brisman seems to have been hurt, and could not refrain from responding in a footnote in his third article: "Professor W. says that I here and elsewhere invoke Cassel's 'authority'. That is, however, a misunderstanding. It has never been my intention to invoke any authority other than common sense. When I have quoted Cassel, I have done so only in order to give a reference to his presentation in those cases where I completely agreed, in order to avoid the necessity of repeating approximately the same reasoning myself" (p. 407).

Even if Brisman's ostentatious praising of Cassel may give the impression of pinpricks inflicted in the context of a debate, it is evident that his preference for Cassel over Wicksell was authentic and not restricted to capital theory. In his first little textbook *Nationalekonomi* (1911), Brisman does not mention any work by Wicksell, but finds that "Cassel's *Socialpolitik* gives an exceptionally absorbing and fascinating account of the most important social problems" (p. 129). In the larger *Nationalekonomi* (1916), he opens the chapter on capital and interest by commenting on some works. Having found Böhm-Bawerk abstract and difficult, he says: "By far the clearest insight into the question of interest on capital is instead given by Cassel in his book *The Nature and Necessity of Interest*... This book is distinguished as much by its clear presentation of the problem as by its precise, laconic and yet accessible style" (p. 49). Wicksell's *Lectures on Political Economy* is not even mentioned; the only indication that Wicksell had published anything worth reading on capital is a reference to "articles by Brisman and Wicksell in *Ekonomisk Tidskrift* 1912"!

⁸ Prior to this sentence Brisman talks about "Fisher's excellent works", although he had mentioned them among those that were confusing in the first article. He says now in a footnote: "I very much regret my opinion on those works in my first essay" (p. 416).

At the end of the book, Brisman devotes a good page to "general literature". Works by Gide, Nicholson, Marshall, Aschehoug, Philippowich, Conrad and Heckscher are mentioned, as well as, indeed, Wicksell's *Lectures on Political Economy*. The latter is, in Brisman's opinion, "characterized by great acuteness of thought but, because of the extremely abstract and complicated mode of presentation, can be of profit only to experts in the field" (p. 268).

When the third edition of Brisman's *Nationalekonomi* (1920) was published, Cassel's *Theoretische Sozialökonomie* (1918) was available. Brisman now begins his concluding comments on "general literature" by stating that "for anyone who desires a broader insight into economic problems than could be given here, Cassel's substantial work *Theoretische Sozialökonomie...* is definitely the most appropriate. It is distinguished as much by its stylistic clarity as by its fruitful approach to the big problems" (p. 289). This description resembles the one that Brisman gave of Cassel's *The Nature and Necessity of Interest*. Wicksell is treated as in the first edition.

Was Brisman's admiration for Cassel reciprocated? No; Cassel seems to have regarded Brisman as a popular writer of some merit but a rather weak thinker. In his memoir *I förnuftets tjänst* (1940) (In the service of reason) Cassel mentions Brisman in two paragraphs where he recounts what he had written in 1917 in a report on the applicants for a professorship in economics and banking: "I had several nice things to say about Brisman's scholarly works but also some critical remarks. Concerning his book on currency policy, I wrote: 'He has, I admit, seen through some of the most common popular conceptions, but he has not attained to a coherent and tenable explanation of the problem; for this reason several of his statements on the topic are in error and his report on the whole is rather unclear.' To my very appreciative comments on his book *Nationalekonomi*, I added the remark that 'the presentation in the section on "the value of money and changes in the price level" suffers from a superficiality that can hardly be excused by its popular character'. Subsequent experience of Brisman's writings has hardly led to any substantial change in the analysis that I made on this occasion" (pp. 249-250).

3. The theorist versus the empiricist

In 1912 economic theory had not yet won the central position within the discipline of economics that it has today, at any rate not at the Swedish universities. Theory, as it is apprehended today, was just one part of the discipline. Empirical research with no link to neoclassical theory was an equally respected part. This was a residue of the historical school and manifested itself in various ways. When, for instance, Heckscher in 1909 became a professor of economics and statistics at the Business School in Stockholm, he had not yet published anything on economic theory as we conceive it, but that was not

regarded as a serious shortcoming (Henriksson 1991, 147). He came to economics from history, as did Brisman.

Brisman did not regard himself as a theorist, and in the last section of his second article in the Wicksell controversy he says that it is therefore, with hesitation that he approaches questions such as those treated in these essays of his.

Wicksell, on the other hand, was a theorist, and his *Lectures* "move on the highest level of theoretical economics", as Brisman puts it (p. 169-170). Usually it was men of the older generation who were representatives of the empirical, historical tradition and the younger economists who stood for abstract and generalizing theory. In this case, however, the tables are turned.

Brisman, although 30 years younger than Wicksell, was evidently not very familiar with the modern theory of the time; at any rate, he was unable to grasp important parts of Wicksell's books. One important result in the second edition of Wicksell's *Lectures* is that the theorem of von Thünen about the equality between the marginal product of capital and the equilibrium rate of interest "is *not* correct, if by 'the last portion of capital' is meant an increase in *social* capital" (180; 184 2nd ed.). Here Wicksell alludes to what posterity has called the Wicksell effect, but Brisman does not understand this and makes a long, completely irrelevant comment.

On the whole, Brisman does not discuss fundamental theoretical questions, although the texts which he comments on are of theoretical nature. Instead, like a bookkeeper, he devotes a lot of effort to discussing whether different kinds of things should be reckoned as capital or not. He evinces an Aristotelian zeal for classification and seems to be more interested in the concepts as such than in the relationships between them.

4. Elucidation of earlier writings

One general reason to be interested in polemical exchanges is that a debate often deals with points that have been unclear in earlier presentations. A debate may elucidate such points. In the Brisman-Wicksell exchange, a number of points came into focus. The concept of capital, including the meaning of saved-up labour and land, the significance of an extension of the length of the production process, and Böhm-Bawerk's third ground are examples. Let us look at the essential cases.

4.1 The concept of capital

Wicksell gradually changed his concept of capital. (Details of this process are provided in Sandelin (1994) and (1998).) However, the version presented in *Lectures* is certainly the most well-known one.

Brisman was unwilling to use the term capital in the Böhm-Bawerkian sense to denote intermediary goods. For Brisman, the predominant use of the word capital in reality was, and should be, to mean savings, i.e. saved-up exchange values.

Brisman was critical of Wicksell because Wicksell gave "6 or 7 different, in part barely consistent definitions of the concept of capital". Furthermore, he said that in his book, Wicksell used the word capital "to denote at least four economically quite different phenomena" (p. 158). In making this latter charge, Brisman has in mind what he calls productive capital, which consists of produced production means or intermediary goods; gainful capital, which consists of things that yield income; savings, which is "capital in its original and still today predominant meaning" (p. 111); and, finally, capital in the sense of "*all* durable and also all other consumption goods which are not consumed by capitalists" (p. 160).

Brisman is, no doubt, right when he says that Wicksell uses the word capital in different senses. Wicksell says in his answer that in some instances this occurs intentionally, and should seldom give rise to misunderstandings (p. 17; 312). Sometimes a distinction is unpractical, while in other cases different capital concepts coincide.

Brisman has missed the most important distinction, says Wicksell, "i.e. the distinction between that which comprises *capital in the context of the national economy* and that which is merely capital in a *private economic* sense" (p. 16; 310). In an individual's private capital, net claims and money should also be included. On a national or, at any rate, universal level this would be unnecessary. Claims and liabilities would cancel each other out. Nor does money need to be included: "If the world supply of coins and banknotes were reduced by half, then apart from some disturbances during a transitional period as well as in the technical use of precious metals, this would not cause the slightest change in real economic life or the welfare of nations. Admittedly, an individual would again be much poorer if half his money were taken from him" (p. 16; 311). Wicksell's conclusion is that it is most important to distinguish between real capital and money, as the physiocrats, Smith and Ricardo did, but he realizes that most later economists (even a Mill or a Jevons) were not always able to maintain this distinction. Not even Wicksell himself is always clear on this point.⁹

⁹ In his well-known wine example in *Lectures*, he says that the "whole of the circulating capital of that society will consist of stored wine, though it can at any time be wholly or partially converted into money" (p. 173). When he subsequently discusses for how long a storage period the capital "suffices", the reader may wonder what capital really is.

Another point of dispute is Wicksell's definition in *Lectures*: capital is saved-up "labour force" and saved-up "land force"¹⁰ (154; 160 2nd ed.). Brisman interprets this as if Wicksell meant by this definition to make capital goods and savings appear identical concepts. "It is, however", says Brisman, "at least for me, completely mysterious, how one can say that an *external thing* is a *force*. A definition that declares a railway or a house to be a force can hardly be accepted". Instead, in Brisman's opinion, it would be correct to say that "capital goods are *products* of, among other things, savings (saved labour force and land force)" (p. 164).

Wicksell answers that Brisman's proposal hardly entails any improvement. A dwelling house is perhaps the result of two years work, "but many decades will elapse before this labour as a whole can be said to have been used consumptively or consumed, and in *this* sense, of course, it remains saved" (p. 19; 315).

Even if Wicksell here makes clear what he meant, it is evident that his way of expressing himself may confuse someone who has taken him at his word, especially as he writes in the *Lectures* that "capital itself is almost always a product, a fruit of the co-operation of the two original factors: labour and land" (149; 155 2nd ed.). When capital on the one hand is said to *be* (saved-up) labour force and land force, on the other is said to be a *product* of labour and land, it is not surprising that Brisman becomes bewildered, although the real difference between the two definitions seems to be small. In Brisman's opinion, the first definition especially is poor, and one might be inclined to agree with him when he says that "capital is saved-up labour force and land force" is the same kind of definition as "an ox is grass" (p. 164).

However, the significance of the original labour force and land force can be regarded at more than one step of the production process, which allows both of Wicksell's statements to be meaningful. Both Brisman and Wicksell agree that capital goods, for instance machines, can be regarded as a product of labour force and land force. But these machines constitute neither the beginning nor the end of the production process. They, in their turn, are used in the production of consumption goods. Therefore, it is possible to regard the original labour and land force *as if* it is accumulated - saved - in the machines, and is liberated (or, rather, moves to another "dwelling": consumption goods) when consumption goods are produced while the machines are being worn (used up).

Of course, Wicksell did not mean that capital is literally some kind of labour and land force. This is evidently the reason why he inserts an elucidating parenthesis in his

¹⁰ In the original Swedish text Wicksell talks about "arbetskraft" (labour force) and "jordkraft" (land force) where "kraft" means force. "Kraft" confuses Brisman. In the English translation of *Lectures* "kraft" is excluded; there "sparad arbetskraft" and "sparad jordkraft" are simply translated with "saved-up labour" and "saved-up land", respectively.

reply to Brisman: "capital *is* (in the perspective of economic theory) saved labour and saved land..." (p. 19; 315). In the same perspective Brisman's example "an ox is grass" could also be regarded as meaningful.

How food and other immediately non-durable means of consumption should be treated was a disputed subject among capital theorists of the time, and it was discussed also in the exchange between Brisman and Wicksell. They seem to agree that provisions should be regarded as capital as long as they are in the hands of the producer or merchant. "But", says Wicksell, "once they are in the hands of the consumer, their remaining visible existence - at least as regards the consumption of the urban population - is usually reduced to a few hours, and when dining at an inn no more than a few minutes. Whether or not they continue to be thought of as capital during this short period of time is altogether trivial." Wicksell concludes: "For these reasons, I have always been of the opinion that the question of whether or not workers' basic necessities in particular should be treated as capital fundamentally amounts to nothing more than quibbling and could easily be deleted from the agenda" (p. 18; 313. Cf. the less sharp wording in *Lectures*, p. 187.).

The last sentence is hardly consistent with the impression Wicksell gives in his earlier works, especially *Value, Capital and Rent* ([1893] 1954). There, no little space is devoted to discussing just how the subsistence of the workers should be treated, and the section begins with the sentence: "But more important is the question of what is to be done with the 'means of subsistence of the workers'" (p. 101; 75). And one page later, he emphasizes: "From the economic point of view, the means of subsistence, *as soon as they have passed into the possession of the workers*, are no longer means of production at all and no longer capital (either 'social' or 'private'), because *their productive equivalent* has in this case already been parted with and has entered *into the possession of the capitalist*" (p. 102). Here Wicksell definitely does not regard the question of whether the workers' subsistence means are capital or not as unimportant.

4.2 Interest

Brisman directed fundamental criticism against Böhm-Bawerk's and Wicksell's view and held that interest is quite another matter than the yield of real capital; it is the same as the price of savings. Furthermore, "interest is consequently - as Cassel has shown - a common phenomenon of price formation. The reason why savings have a price is exactly the same as why wood, iron, meat or any other good have a price" (p. 119).

To Wicksell, such a line of reasoning was rubbish. If it were this simple, then it would be difficult to comprehend how ancient and medieval thinkers could have been so totally unsympathetic towards this "'common phenomenon of price formation'. It is

no doubt somewhat easier to understand that wood and meat cost money, than that money costs *more* money" (p. 21; 318).

Against Böhm-Bawerk's conclusion that the last prolongation of the production process determines the rate of interest, Brisman holds that one could rather say that it is the rate of interest that determines which prolongation of the production process will be the last. Wicksell does not agree. To him, it is difficult to oppose the view that the rate of interest is determined by the last economically necessary prolongation of the production process. It surprises him that "someone could object that it is instead 'the prevailing interest rate' which determines the duration of roundabout methods of production" (p. 22; 319).

If one makes a comparison with Wicksell's mathematical presentation of the famous wine example in *Lectures*, his position does not appear equally clear. There, after some vacillation, he finally regards the value of capital as an exogenous variable, while the rate of interest and the length of the production process (the duration of the roundaboutness) are determined simultaneously within the system of equations. (And for each length of the production process there is a corresponding "last prolongation".) The general equilibrium character of the wine example, where everything (with a few exceptions) depends on everything else seems to have been forgotten or abandoned in the discussion with Brisman.

In the exchange with Brisman, Wicksell not only rejects Brisman's opinion but seems to hold to the other extreme, i.e. that there is a one-way causality such that "the marginal return on the last prolongation of production will determine the interest-rate level". True, he agrees with Böhm-Bawerk "that the size of the interest rate thus determined in turn affects capital formation and *thereby* the duration of roundabout methods of production", but this is a statement independent of his mathematical capital model, as capital is given there, and he considers it to be "another matter" (p. 22; 319). Wicksell's arguments are not always clear. In the mathematical wine model neither one of the rate of interest and the length of the production process comes before the other as none is dated differently from the other. However, the length of the production process is chosen in such a way that the rate of interest is maximized. Thus, in that sense there is a one-way relationship.

5. Conclusions

The dispute between Brisman and Wicksell is an unusually clear illustration of the fact that even in scholarly debates, human feelings and relations may play a role.

We have pointed out elements of the sociology, or perhaps psychology, of science as well as issues of capital theory in the dispute. The first of the former elements relates to the fact Wicksell was a well-established and internationally

esteemed economist in his early sixties while Brisman was half as old and without any established position. This may explain the immature and labile character of Brisman's way of discussing, with presumptuous vociferousness mixed with submissive obsequiousness. It may also explain Wicksell's fatherly reaction.

The second element is connected with the first. Being conscious of the animosity between Wicksell and Cassel, Brisman accentuates Cassel's brilliance in a demonstrative way so that Wicksell could not refrain from reacting.

The difference between the theorist and the empiricist is the third element. Brisman, although the younger scholar, represented the older empirical-historical tradition within Swedish economics while Wicksell, the older man, represented the new theoretical economics.

It is evident that Brisman had difficulties in understanding the theoretical content of Wicksell's book. This forced Wicksell to throw additional light on some points in his capital theory. This pertains, *inter alia*, to the concept of capital, especially to the meaning of the view that capital is saved-up labour and land force. Wicksell had also to clarify his opinion on the character of the rate of interest and on the causal relationship between a prolongation of the production process and the level of the rate of interest. On the latter point, he hardly makes the issue any clearer.

References

- Brisman, Sven. 1911. *Nationalekonomi*. Stockholm: P. A. Norstedt & Söners Förlag.
- Brisman, Sven. 1912. Kapitalet och kapitalräntan. *Ekonomisk Tidskrift* 14:89-121.
- Brisman, Sven. 1912. Prof. Wicksells framställning af kapitalet och kapitalräntan. *Ekonomisk Tidskrift* 14:157-170.
- Brisman, Sven. 1912. Ännu några ord om kapitalet och kapitalräntan. *Ekonomisk Tidskrift* 14:399-416.
- Brisman, Sven. 1916. *Nationalekonomi*. 1st edition. P. A. Norstedt & Söners Förlag.
- Cassel, Gustav. 1899. "Grundriss einer Elementaren Preislehre". *Zeitschrift für die gesamte Staatswissenschaft* 3:395-458.
- Cassel, Gustav. 1903. *The Nature and Necessity of Interest*. London: MacMillan.
- Cassel, Gustav. 1940. *I förnuftets tjänst*. Stockholm: Natur och Kultur
- Gårdlund, Torsten. [1958] 1996. *The Life of Knut Wicksell*. Cheltenham: Edward Elgar.
- Henriksson, Rolf G.H. 1991. Eli F. Heckscher: the Economic Historian as Economist. In *The History of Swedish Economic Thought*, edited by Bo Sandelin. London: Routledge.

Sandelin, Bo. 1994. The Evolution of Wicksell's concept of Capital. In *Method, Competition, Conflict and Measurement in the Twentieth Century: Selected Papers from the History of Economics Society Conference, 1992. (Perspectives on the History of Economic Thought, Vol. 10)*, edited by Karen I. Vaughn. Aldershot: Edward Elgar.

Sandelin, Bo. 1998. Three Features of Wicksell's Theory of Capital. In *Schriften des Vereins für Socialpolitik, Neue Folge Band 115/XVIII, Studien zur Entwicklung der ökonomischen Theorie XVIII - Knut Wicksell als Ökonom*, edited by Erich W. Streissler. Berlin: Duncker & Humblot.

Schumpeter, Joseph A. [1912] 1961. *The Theory of Economic Development*. New York: Oxford University Press.

Wicksell, Knut. [1893] 1954. *Value, Capital and Rent*. London: Allen & Unwin.

Wicksell, Knut. 1900. Zur Verteidigung der Grenznutzenlehre. *Zeitschrift für die gesamte Staatswissenschaft* 56:577-91. Translated as In Defence of the Theory of Marginal Utility, in Wicksell, Knut. 1997. *Selected Essays in Economics I*, edited by Bo Sandelin. London: Routledge.

Wicksell, Knut. 1911. *Föreläsningar i nationalekonomi*. Vol. 1. Second edition. Lund: Berlingska Boktryckeriet.

Wicksell, Knut. 1912. Kapital—und kein Ende. *Ökonomisk Tidskrift* 14:309-22. Translation with unchanged title published in Wicksell, Knut. 1997. *Selected Essays in Economics I*, edited by Bo Sandelin. London: Routledge.

Wicksell, Knut. [1901] 1934. *Lectures on Political Economy*. Vol. 1. London: Routledge.

Wicksell, Knut. 1919. Professor Cassels nationalekonomiska system. *Ökonomisk Tidskrift* 21:195-226.

Wicksell, Knut. 1928. Professor Cassels nationalökonomisches System. *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im deutschen Reich* 52:771-808.

Wicksell, Knut. 2001. Brismans "rationella" lösning av dyrtidsproblemet. In *Att uppfostra det svenska folket. Knut Wicksells opublicerade manuskript*, edited by Lars Jonung, Torun Hedlund-Nyström and Christina Jonung. Stockholm: SNS Förlag