

Eugen von Böhm-Bawerk’s “Value, Cost, and Marginal Utility”^{*}

Translated and with an Introduction^{}**

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George Reisman, Introduction to Böhm-Bawerk's "Value, Cost, and Marginal, Utility"

My paper is a translation of Böhm-Bawerk's essay "Value, Cost, and Marginal Utility." I first read this essay literally forty-four years ago, as part of my research for my MBA thesis, the subject and title of which was *The Classical Economists and the Austrians on Value and Costs*. I knew at the time that Böhm-Bawerk's essay very much deserved to be translated. And some twenty or more years later, seeing that no one else had yet made the translation, I decided that I would do it at some point. So, in 1980, on my first trip back to New York City after having moved to California, I visited the Columbia University Library, whose extensive collections included Conrad's *Jahrbücher für Nationalökonomie und Statistik*, the 1892 issue of which contained Böhm-Bawerk's essay. There, I made a xerox copy of the essay. With one thing and another, such as writing my book *Capitalism*, that copy remained quietly filed away in my possession until last year, when I finally got around to seriously working on the translation.

I did not complete the translation until last December. And even now, I do not consider it as absolutely final, because here and there a better choice of words is probably possible and there are still footnote references exclusively to the German original of Wieser's *Natural Value*. In order to facilitate the making of any necessary changes, I have continued to indicate the page numbers that appear in the original German text of Böhm-Bawerk's essay. Thus, for example, 321, shown in brackets at the very beginning of my translation, is the page in Conrad's Jahrbuch where Böhm-Bawerk's essay begins; 367, also shown in brackets is the last page in Conrad's Jahrbuch where Böhm-Bawerk's essay appears. The start of every intervening page of Conrad's Jahrbuch is likewise indicated in brackets, and the same procedure is followed within footnotes, in cases in which a footnote carries over to the next page.

I want to say as a broad proposition that in my opinion Böhm-Bawerk is the most important Austrian economist after von Mises. I say this on the basis of the fact that his writings provide by far the best and most comprehensive development of the law of diminishing marginal utility and its application to price theory that is to be found anywhere. And to this, of course, must be added his major contributions on the subjects of capital and interest, including his critiques of the Marxian exploitation theory.

I suspect that Mises might have disagreed with my characterization of Böhm-Bawerk's importance. Mises was sometimes quite modest about his own contributions and, in addition, he had the same kind of awe and admiration of Böhm-Bawerk that I and, I'm sure, all of you, feel toward him, Mises. I once heard him compare Böhm-Bawerk to the Sphinx, who never slept and saw everything, and, on another occasion, describe how Böhm-Bawerk worked constantly, with the sole exception of taking time out to attend concerts on Sunday afternoons. Thus, it's entirely conceivable to me that Mises might have described Böhm-Bawerk as *the most important* Austrian economist. I know that he considered the translation of the third German edition of *Capital and Interest* to be of the very greatest importance and was the driving force behind it.

I would like to use an important observation of Mises's as the transition to my discussion of the specific importance of "Value, Cost, and Marginal Utility." In a little-known essay titled "The Role of Doctrines in Human History," which appeared in print for the first time in 1990, seventeen years after his death, Mises observes that "All doctrines are taught and accepted at least in two different, nay, conflicting varieties."¹ As examples, he says: "Catholicism had a different meaning for Cardinal Newman and for

¹ Ludwig von Mises, *Money, Method, and the Market Process*, Richard Ebeling, ed. (Auburn, AL: Praxeology Press of the Ludwig von Mises Institute, 1990), p. 302.

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the hosts of the credulous. The Darwinian theory of evolution is something else than its popular version that man is a scion of apes. Freudian psychoanalysis is not identical with pansexualism, its version for the millions."² He adds: "The same dualism can be stated with all social, economic, and political doctrines."³ And he concludes: "An unbridgeable gulf separates the esoteric teaching from the exoteric one."⁴

In other words, Mises claims that it is common, indeed, universal, that doctrines circulate in two or more varieties. One is the genuine version, which is typically complicated and more or less difficult to understand and can therefore be characterized as "esoteric." And then there are one or more other, far more simplified versions of the same doctrine, which can thus be characterized as "exoteric." (I have to admit that I had never seen or heard the word "exoteric" before reading this essay. According to my dictionary, it means "suitable for or communicated to the general public.")

The title of the section of the article in which Mises makes these points is "Esoteric Doctrines and Popular Beliefs." He begins it with an explanation of the underlying cause that gives rise to the existence of two or more versions of the same doctrine, which he describes in the following words:

"Any attempt to study human conduct and historical changes has to make ample allowance for the fact of intellectual inequality of men. Between the philosophers and scholars who contrive new ideas and build up elaborate systems of thought and the narrow-minded dullards whose poor intellect cannot grasp but the simplest things there are many gradual transitions. . . .

² Idem.

³ Idem.

⁴ Idem.

“Only a small elite has the ability to absorb more refined chains of thought. Most people are simply helpless when faced with the more subtle problems of implication or valid inference. They cannot grasp but the primary propositions of reckoning; the avenue to mathematics is blocked to them. It is useless to try to make them familiar with thorny problems and with the theories thought out for their solution. They simplify and mend in a clumsy way what they hear or read. They garble and misrepresent propositions and conclusions. They transform every theory and doctrine in order to adapt it to their level of intelligence.”⁵

Now this duality or multiplicity of versions of the same doctrine, I have to say, applies to Austrian economics, at least to that aspect of Austrian economics that is most immediately relevant here and now, namely, the Austrian doctrine on the relationship between value, cost, and marginal utility. I want to say, however, that I am not prepared to believe that the cause in the present case is necessarily a problem of differences in intelligence. All versions of Austrian economics are still confined to relatively small and more or less scholarly audiences, comprised almost entirely of people with well-above-average intelligence. Thus, I cannot help but believe that the problem is more one of a failure to read and study the genuine Austrian doctrine than any actual inability to comprehend it by those involved.

However that may be, the genuine Austrian doctrine on the relationship between value, cost, and marginal utility is to be found first and foremost in the writings of Böhm-Bawerk. Böhm-Bawerk represents the “Real McCoy” of Austrian economics when it comes to the theory of value and price. The present essay is, of course, by no means the only place in which he presents it. One should give equal or even greater weight to his

⁵ Ibid., pp. 301 f.

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treatment of the whole subject of value and price in *Capital and Interest*, including the supplementary essays in Volume III of that work. The present essay serves to reinforce and amplify the treatment given there and to highlight the treatment of the relationship between value, cost, and marginal utility.

The simplified or exoteric version of the Austrian doctrine on the relationship between value, cost, and marginal utility is that the value of each and every product is determined by its marginal utility, which, in turn, reflects the demand for and supply of the product concerned. In no case do costs of production determine the value of products. Rather, costs of production, which represent the value of the means of production, are themselves determined by the marginal utility of the products they produce. The only way in which costs of production can possibly influence the value of products, if they do so at all, is, according to the exoteric version of Austrian economics, indirectly, by way of changes in supply.

Thus, for example, if the value of a product exceeds its cost of production by more than the going rate of return on capital, the supply of the product will be increased and its price will fall, bringing it closer to its cost of production, and its rate of return closer to the going rate. If, on the other hand, the value of a product does not exceed its cost of production, or does so only by an amount insufficient to yield the going rate of return on capital, then its supply will be decreased and its price will rise, until it equals its cost of production plus enough net return to yield the going rate of return. At all times, however, the immediate, direct determinant of the price of the product is its marginal utility, which is always determined by the demand for and supply of the product concerned.

This, I say, is the exoteric version of Austrian economics—the popular version, if you will, though, of course, not any kind of version of the masses, who have never even heard of Austrian economics.

Now let me turn to the more elaborate, more complicated—esoteric—version presented by Böhm-Bawerk and, incidentally, also by Wieser, who in the relevant respects agrees with Böhm-Bawerk. I will begin simply by reading the five points Böhm-Bawerk enumerates in reply to Heinrich Dietzel, a contemporary German economist who taught at the University of Bonn, and who had written a number of essays criticizing what Böhm-Bawerk describes as the “marginal-value theorists,” by which, of course, he means the Austrian economists. Based on my understanding of what most people understand by Austrian economics, I believe you should find the quotation to be downright startling, because most of Böhm-Bawerk's corrections of the misunderstandings of Dietzel apply with equal force precisely to what the great majority of today's Austrian economists believe about Austrian economics. The only difference is that what Dietzel held to be a shortcoming of Austrian economics, namely, its alleged denial of the role of cost of production in the determination of value and price, today's Austrian economists hold to be a virtue. Böhm-Bawerk writes:

“Whoever reads these passages, and numerous similar passages, in which Dietzel again and again puts forward the truth and expediency of cost valuation and criticizes us for ‘denying’ or ‘not seeing’ anything whatever that relates to cost valuation, must necessarily come to the conclusion that we marginal-value theorists really had overlooked the law of costs and, on the basis of doctrinaire whim, had ignored the

abundance of knowledge that can be obtained for the explanation of value from the relationship between costs and value.

"In fact, the very opposite is the case. Whoever has read our writings, even with halfway attention, knows this. However, in order to rule out every doubt and every misunderstanding, I want to make a few explicit declarations:

"1) We too fully recognize the sway of a 'law of costs' for goods that are reproducible at will. 'There is a law of costs'—I once wrote—'costs exercise an important influence on the value of goods.' 'That costs of production of goods exercise an important influence on their value is a fact so well verified by experience that it absolutely cannot be doubted.' 'One is in fact correct, when one says that costs govern value.'

"2) We too recognize the necessity of 'supplementing' the universal law of marginal utility by means of special provisions that relate to the value of goods reproducible at will and that the substance of these is precisely the law of costs. And we have accomplished this 'supplementing' in full detail, both for the field of subjective value and for that of objective value and prices.

"3) We too understand the law of costs in such a way that we ascribe to the height of the costs of production, that is to say, to the value of the means of production, the status of a cause—though, to be sure only an intermediate cause—in relation to the value of those products to which the law of costs generally applies. 'In our present case (that of goods reproducible at will and of higher direct marginal utility), the value of the product must accommodate itself' (to the value of the means of production). 'The value of

products of higher direct marginal utility . . . comes to them from the side of the means of production.'

"4) In connection with this, we too acknowledge that changes in the conditions of producing goods reproducible at will never fail to bring about a change in the value of those goods and, to be sure, even without a change in the supply of finished products necessarily having to take place. To be sure, Dietzel maintains, with special emphasis reinforced by numerous repetitions (Werttheorie, p. 593, 596), that 'according to the marginal-value theorists, no change in value can appear here' and in the case of the same supply but different costs of production 'valuation according to marginal utility [must] be absolutely the same.' And he also does not fail, with equally great emphasis and equally many [329] repetitions, to add the further assertion that 'valuation according to marginal utility is incapable of doing justice to influences on value that operate from the side of the conditions of production.' Both pronouncements are proof only of the fact that Dietzel has not made himself better acquainted with the text and spirit of the theory of marginal utility.

5) Finally, we too recognize the fact—on which Dietzel places such great stress—that in practice the value of goods reproducible at will is usually directly estimated by economizing subjects according to the costs, and we append to this recognition the one condition, which, indeed, Dietzel himself requires, and must require, that the height of the costs is already known to the valuing individuals or is settled for them. 'Countless times we already know the value of the cost goods . . . and in all these cases we measure . . . the value of products simply according to their costs.' We are a long way from having the

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intention of putting the use of costs as a standard out of 'circulation' or of allowing consideration of costs to take the stage only in 'exceptional cases.'

"In short, concerning everything that is true and essential in the law of costs—that costs 'govern' the value of goods reproducible at will, that we usually directly value these goods according to cost value, that changes that occur on the side of costs cause changes in value, and the like—we marginal-value theorists have not missed or denied an iota. The one difference—and I even believe that Dietzel would agree with us to a considerable extent, although he is by no means clear concerning how far he agrees with us—the one difference consists of the fact that we believe that with the statement of the law of costs we have not yet reached the end of the explanation (pp. 10-13, below)."

Those are Böhm-Bawerk's own words.

To understand them, one must realize that according to Böhm-Bawerk, the basic, primary relationship between the value of products and the value of means of production is that the former determines the latter, that is, the value of products determines the value of the means of production. However, it is not the value of *all* products that determines the value of the means of production. Rather, it is the value of *marginal* products that determines the value of the means of production. The value of means of production, determined by the value of their marginal products, then operates to reduce the value of supra-marginal products to the value of the marginal products. That is, in the case of supra-marginal products, *the value of the means of production is determinative* in reducing the value of the products below what it would be if they were not related by way of production to the marginal products and instead had to be governed by their own, direct utility or marginal utility. Because they are related by way of production to the

marginal products, the value of the supra-marginal products is reduced to that of the marginal products.

In saying that the value of the supra-marginal products is governed by the value of the means required to produce them, one says, of course, that the value of the supra-marginal products is determined by their cost of production, for that is precisely what the value of the means required to produce them is. However, the equally important further implication of the discussion is that while cost of production is a real and frequent direct determinant of the value of products, it is never an ultimate determinant but is merely the means whereby the marginal utility of some products determines the value of other products. Thus, the causal role of costs in determining the value of products reproducible at will is, in Böhm-Bawerk's view, both true and, at the same time, a major vehicle for the operation of the law of diminishing marginal utility.

Please note. Contrary to the prevailing neo-classical doctrine, according to Böhm-Bawerk the marginal product of a means of production need not exist in each and every industry that employs that means of production. It may exist in just one or a few of the industries that use one or more of the same means of production. Thus, for example, the marginal product of iron need not exist in all industries producing iron products. Conceivably, it might exist just in the production of bicycle bells or door-knockers made of iron. The value of iron determined with respect to its marginal products would then be determinative for the value of such supra-marginal products as iron and steel girders and surgical instruments made of iron and steel.

In Böhm-Bawerk's own words:

“All those goods and kinds of goods, which can be produced at will from one and the same means of production or cost good—following the practice of Wieser, we call them ‘production-related’—thereby, on that very basis, enter into a kind of community, within which value has the tendency everywhere to present itself on the same level. That is to say, just as several specimens of the same kind of good, for example, several sacks of the same grain or several hundred-weight of the same iron, must have the same value, when and because they can be drawn upon at our pleasure for the same useful services and can be mutually substituted for one another, just so, no difference in value between two goods of different kinds can persist, when and because they can be produced or replaced at our pleasure and in any quantity desired by means of one and the same third good—by means of their common producers’ good or cost good. And just as, furthermore, the value of each of several identical sacks of grain is determined according to the law of marginal utility by the utility of the ‘last,’ most easily dispensable sack, just so the value of all production-related goods together is determined by the utility of the ‘last,’ most easily dispensable product which is brought forth from the common production source, or, as we call it, by the marginal utility of the ‘marginal product.’ This provides the measure both for the value of the common cost good as well as, via this last, the value of all other products produced by means of same (pp. 20–21, below).”

Allow me to illustrate Böhm-Bawerk's point here by means of a modification of his famous example of the pioneer farmer with five sacks of grain. As you probably all recall, the five sacks serve wants in descending order of importance. One sack is necessary for the farmer to get through the winter without dying of starvation. The second enables him to survive in good health.

The third enables him to eat to the point of feeling contented. The fourth enables him to make a supply of brandy. The fifth enables him to feed pet parrots.

Imagine that the first sack actually bears a little tag, describing it as "Sack Required for Survival." Now imagine that rats or other vermin destroy the contents of this sack. What is the magnitude of the farmer's loss? Is the utility of the lost sack as great as the importance he attaches to his life? Is his life at stake? The answer to these questions is "not at all." Since he can easily replace that sack with any of the other four remaining sacks, his actual loss will be the least important of the wants provided for by those four sacks. That, of course, will be the feeding of the parrots. The principle is that the utility of any sack, more broadly, of any unit of a homogeneous supply whose units can be mutually substituted for one another, will equal the utility of the marginal unit of the supply, that is, the utility of the least important unit of the supply.

Now let us slightly modify the example. Let us imagine that the first sack of grain has been used to make a supply of flour, which in turn has been used to make a supply of biscuits, and that it is this resulting supply of biscuits by means of which the first sack of grain performs its service of preserving the farmer's life. Once more, we can imagine a little tag attached, this time saying, "Biscuits Required for Survival." As before, our farmer still has four remaining sacks of grain, any of which can be used to make a fresh supply of flour and then a fresh supply of biscuits. And now, just as before, we may imagine rats or other vermin destroying the supply of biscuits.

Will the answer to the question concerning the magnitude of the farmer's loss be materially different? Certainly, his life does not depend on the supply of biscuits any

more than it did on the sack of grain. For he can replace that supply of biscuits at the expense of the marginal employment of the remaining sacks of grain, which, of course, is the feeding of the pet parrots. To be sure, additional labor will have to be applied as well, but the magnitude of value lost here is that of the marginal product of that labor, which might be something such as the construction of a sun shade or an additional sun shade or even the feeding of the parrots. The point is that the value of the biscuits will not be determined by the importance of the wants directly served by the biscuits but by the importance of the marginal wants served by the means of production used to produce biscuits and from which a replacement supply of biscuits can be produced at will.

Those who have a good memory of Böhm-Bawerk's example of the pioneer farmer may come to the conclusion that to make my example closer to his in pattern, I should perhaps assume that three sacks of grain had been used to bake a tripled supply of biscuits, since it was three sacks that were intended to serve the food consumption of the farmer. I'm happy to make that modification, because it actually helps to bring out a further point.

If, as before, the supply of biscuits lost is still equal to the product of only one sack of grain and if there are still two sacks that remain, one set aside for making brandy and one for feeding the parrots, the loss will still reduce to that of the importance of feeding the parrots and to the importance of the marginal product of the labor needed to process that sack into a fresh supply of biscuits.

What this particular example helps to bring out is the fact that even though there is some significant gradation in the marginal utility of different portions of the supply of biscuits, the value of any part of the supply of biscuits is not determined by the marginal

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utility of biscuits but by the still lower marginal utility of the fifth sack of grain, whose employment lies outside of biscuit making. The value of the biscuits is governed by the lesser marginal value of the means of producing biscuits, which, in turn of course, is governed by the value of the true marginal product in this case, namely, the survival of the parrots.

And this opens up another insight, which Böhm-Bawerk and Wieser astutely drew, and which was clearly stated in one of the five enumerated points I quoted. We can see it merely by changing our assumption as to the supply and marginal utility of the remaining sacks of grain. If there were only one remaining sack of grain, the value of the lost supply of biscuits in question would be higher: it would reflect the value attached to the prospective supply of brandy rather than that of the pet parrots. And if, on the other hand, there were a third remaining sack of grain, to be used for some further, still less important purpose than the feeding of parrots, the value of the lost supply of biscuits in question would be lower.

These observations imply, as Böhm-Bawerk and Wieser saw, that the influence of cost of production on prices, in transmitting the value of marginal products to supra-marginal products, can exist in the face of *unchanged supplies* of the supra-marginal products. As Böhm-Bawerk wrote, and as I quoted him before: "In connection with this, we too acknowledge that changes in the conditions of producing goods reproducible at will never fail to bring about a change in the value of those goods and, to be sure, even without a change in the supply of finished products necessarily having to take place (p. 12, below)." I can say now that in an accompanying footnote, he quotes Wieser as saying in the latter's *Natural Value*: "Cases of the kind last discussed are conspicuous in that

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the effect of cost on the value of the products takes place without the quantity of products being affected'." (Italics in original. Translation mine.)

This point is highly significant. On the one side, it introduces a major line of opposition between Austrian economics and contemporary neo-classical economics, with the latter's endless concern for elasticity of demand, down to the point of alleging the need to construct four-firm and eight-firm concentration ratios, as measures of the alleged ability of firms to exploit the elasticity or inelasticity of demand. The implication of cases of the kind just discussed is that the demand may even be perfectly inelastic and, in the case of goods reproducible at will, it does not affect the price: the price will be determined by cost of production.¹ The result is that oligopoly theory, game theory, the doctrines of imperfect competition and pure and perfect competition—all either fall away completely or else are relegated to a modest, relatively obscure corner of economic theory, when it is realized that the prices of goods reproducible at will are generally determined by cost of production.

At the same time, on the other side, Austrian economics appears much less distant from old British classical economics, which, of course, also recognized the role of cost of production in determining the price of goods reproducible at will.² Unfortunately, of

¹ I believe that actual, real-world cases of perfectly or near perfectly inelastic demand curves abound in the realm of many kinds of spare parts. What depends on the presence or absence of many spare parts is all or most of the utility of the good for which the part is necessary. For example, probably the entire utility of many electrical goods depends on the presence or absence of a simple fuse, which can typically be purchased for less than a dollar, perhaps even for a matter of pennies. Even the most marginal electrical appliance in the entire economic system that depends on such a fuse probably has a utility that is far higher. The case is similar with respect to automobiles and the various spare parts they require. Buyers of such parts rarely pay prices that even remotely approach the value they attach to their automobiles, even though without the parts in question their automobiles would be largely or entirely useless.

² For example, Ricardo writes: "If the natural price of bread should fall 50 per cent from some great discovery in the science of agriculture, the demand would not greatly increase, for no man would desire more than would satisfy his wants, and as the demand would not increase, neither would the supply; for a commodity is not supplied merely because it can be produced, but because there is a demand for it. Here, then, we have a case where the supply and demand have scarcely varied, or if they have increased, they

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course, classical economics mistakenly held cost of production to be the *ultimate* explanation of the value and price of goods, which it is not, being in fact, as Böhm-Bawerk shows, merely the vehicle for the transmission of marginal utility from the value of marginal products to that of supra-marginal products.

However, with the meticulous precision that is so characteristic of him, Böhm-Bawerk suggests that even this difference might have vanished had the classical economists been in a position to see matters as he and Wieser did. Ricardo, he points out, saw clearly that "'corn is not high because a rent is paid' (that is, because the producers' good use-of-land has a value) but 'a rent is paid because corn is high (pp. 63–64, below).'" There is not such a great distance between that insight and the recognition that the value of means of production in general ultimately derives from the value of products and does so no less in all those numerous cases in which the value of the means of production is the immediate or direct determinant of the value of supra-marginal products.

Böhm-Bawerk's characteristic care and precision even leads him to acknowledge that the quantity of labor required to produce goods can be a causal determinant of their value, in fact, one that is more fundamental than marginal utility itself, because it (along with a variety of other causal determinants) helps to determine marginal utility. Thus, in the present essay, he says at one point, "If, however, we want to refer only to the technical facts of production, then it is entirely correct that these help to determine

have increased in the same proportion; and yet the price of bread will have fallen 50 per cent at a time, too, when the value of money had continued invariable." *Principles of Political Economy and Taxation*, 3rd ed. (London, 1823), chap. 30. It is not without wisdom that Lionel Robbins says, in his introduction to Wicksteed's *Common Sense of Political Economy*, "a very good case could be made out for the view that, with all their differences, the systems which seem to make the clearer break with the past are, in fact, nearer in spirit to the classical system than those which have preserved more closely the classical terminology and apparatus." The system making the clearer break, of course, is that of Austrian economics. The one more closely preserving the classical terminology is that of Alfred Marshall.

marginal utility. For example, the less the material and labor that the production of a jacket costs, the more jackets, of course, can one produce with the means of production available. Thus the more completely can the need for clothing be satisfied. And thus, other things being equal, the lower will be the marginal utility of a jacket. The technical conditions of production are, therefore, to be sure a cause of the value of goods lying further back, a 'more ultimate' cause, than marginal utility (pp. 52–53, below)."

Let me point out immediately that there is not an iota or scintilla of anything here that should be construed as giving any kind of aid or comfort to Marxism. Quite the contrary. By reducing the quantity of labor required to produce products, one increases the supply of products relative to the supply of labor and thereby reduces the marginal utility and price of products relative to the marginal utility and price of labor, i.e., one raises real wage rates. This is precisely what businessmen and capitalists continuously accomplish under laissez-faire capitalism by means of their continuous efforts to raise the productivity of labor. While this inference may not be found to be stated directly or very forcefully in Böhm-Bawerk, I consider it to be clearly present in his writings.

In conclusion, I want to say that I believe that the serious study of Böhm-Bawerk's writings is an essential aspect of the education of every true Austrian economist. I hope that if you have not already embarked upon such a study, you will make this essay of his your starting point.

GEORGE REISMAN

Value, Cost, and Marginal Utility* **

by

Eugen von Böhm-Bawerk

Translated by George Reisman, Ph.D.

I. Introduction

[321] Over a year ago, with his essay “die klassische Werttheorie und die Theorie vom Grenznützen [translation: “The Classical Value Theory and the Theory of Marginal Utility”],”¹ which appeared in this yearbook and in which he declared himself in favor of the rival, older value theory, which bases the value of goods on costs, Professor Dietzel inaugurated a polemic against the modern value theory of marginal utility. This attack was not an isolated case. Somewhat earlier it had been started by the eminent Danish scholar Sharling in his essay, well-known to the readers of this yearbook, concerning “Werttheorien und Wertgesetze.”² In Italy A. Loria³ conducts it an extraordinarily quarrelsome spirit. It is present even in France. Finally, it is right now carried on in America with particular interest and keen activity.

The outbreak and the rapid spread of this controversy is not in the least surprising. It is

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** The essay originally appeared in Conrad’s *Jahrbücher für Nationalökonomie und Statistik*, Dritter Folge, Dritter Band (Jena: Verlag von Gustav Fischer, 1892), pp. 321-367.

¹ New series. Vol. 20, pp. 561-606.

² New series. Vol. 16, pp. 417 ff. and 513 ff.

³ See my essay “Zur neuesten Litteratur über den Wert” [translation: “On the Most Recent Literature Concerning Value”], in these yearbooks, Third Series, vol. I, pp. 880 ff.

the completely natural consequence of the scientific situation in which the theory of value presently finds itself. So long as the theory of marginal utility had only a few supporters, it was only infrequently the subject of polemics. In the last years, however, it has gained so greatly in influence and prestige in most countries that it began seriously to threaten the dominance of the hitherto prevailing classical cost theory. Naturally, the supporters of the latter turned to its defense and so, unavoidably, as often happens in the history of science, the decisive battle between the old and new theory broke out all along the line.

[322] From the very first, I have regarded the polemics of the eminent scholars as an introduction to such a decisive battle, and not as a merely passing controversy. And I have wished to elevate the developing controversy as far as possible above the level of the usual polemic between two individual scholars. I have wished that it might be free of all useless squabbles over nonessentials, over inadvertent oversights, over careless or unclear casual remarks, which belong not to the account of the actual doctrines but only to the personal account of the authors. I have wished that accordingly the controversy might be regarded not as a contest of persons, but as a genuine contest of the doctrines themselves.

Guided by this wish, I permitted myself in a “Zwischenwort zur Werttheorie” [translation: “Byword on the Theory of Value”]⁴ to propose to Prof. Dietzel a series of preliminary questions aimed at the most precise possible clarification of the actual subject of dispute. A genial reply to these questions, which, to be sure, in both its tone and content, afforded me several surprises, followed before long in the extensive essay “Zur klassischen

Wert-und Preistheorie” [translation: “On Classical Value and Price Theory”]⁵

Urgent tasks within my official work allow me only now to present my rejoinder.⁶ It was unavoidable, based on the nature of the whole occasion, that it too wears a polemical garb. I could not address myself to a disembodied, depersonalized ghost of the cost theory, after Dietzel, one of the most competent representatives of German theory, had confronted me with a concrete embodiment of that theory. The polemic imposed a somewhat unpleasant element on me only insofar as I frequently had to correct Dietzel factually and, to be sure, to correct him in his statements concerning what the theory of marginal utility allegedly teaches and does not teach. In any case, I hope that these corrections, whose necessity was imposed upon me, however tiresome and unpleasant they were to me, will be of some benefit. For if even Dietzel, who has made the theory of marginal utility the special object of his studies and his attacks, has not acquired correct knowledge of its content, I must indeed assume that such knowledge may not be [323] present in the minds of many other colleagues, who had less cause to make themselves familiar with that theory. In that I therefore correct various factual errors of Dietzel’s, I will probably at the same time clear away much common prejudice against the theory of marginal utility and with it also much of the embarrassing misunderstanding that still prevails.

⁴ New series, vol. 21, pp. 519 ff

⁵ Loc. cit., pp. 685 ff. For the sake of brevity, in the following pages I will always cite the first polemic of Dietzel’s only as “Werttheorie” and the second as “Wert-und Preistheorie.”

⁶ My rejoinder, however, was almost fully complete a long time ago. Only the last revision, for which I could no longer find the time, remained to be completed. In order finally to complete it, I had to refuse to engage in extensive changes or additions and was therefore also not in a position to consider individual essays that had appeared in the interval, such as, in particular, the interesting essay of Patten’s concerning “Die Bedeutung der Lehre vom Grunznützen” [translation: “The Meaning of the Theory of Marginal Utility”], (Dritte Folge, Bd. 2 of these yearbooks, pp. 481 ff.)

And unfortunately, I must make an immediate correction. Among the surprises, which Dietzel's reply to my "Zwischenwort" brought, was above all a very strange comment that I cannot interpret otherwise than as an objection of a not entirely proper, indeed, somewhat evasive procedure on my part.

In clear language and in the tone of an objection,⁷ Dietzel attributed to me the intention, by means of my posing of questions, to again shift the discussion from the basis until now chosen by the marginal-value theorists themselves and "to transfer the controversy to another field." I allegedly move "the theme out of the sphere of the economy of the isolated individual, within the bounds of which Dietzel had demonstrated, into the field of the social economy." In my third question, I had asked of Dietzel a theory of prices; in my fourth, a theory of wages.

Dietzel is mistaken. I asked nothing of him other than a clearer explanation of his own statements. That in so doing, I stepped beyond the narrow bounds of Crusoe economics—though not so far as Dietzel assumes⁸—is entirely correct, but is only the simple consequence of the fact that Dietzel's own statements and assertions had gone beyond that realm. He himself had not only repeatedly discussed concrete cases of social-economic value formation in his first essay in an expressly critical and polemical way, but his whole approach, stated in the very title of his essays, aimed at nothing other than opposing the "classical theory of value" to the theory of marginal utility. In practically the same sentence in which he objects to my going beyond Crusoe economics, he stresses again that he holds to the "classical theory," formulates it more carefully

⁷ "Wert-und Priesttheorie," p. 685, 686, 706.

⁸ The subject of my fourth question, for example, was not at all the theory of wages, but merely the *subjective* value

and unassailably, and believes he has shown how it can be combined with the theory of marginal utility. Now, as far as I know, the classical theory has nothing whatever to do with internal, subjective economic value but only with social-economic exchange value. What is in contention under the heading classical value theory versus the theory of marginal utility is social-economic value formation, the value formation of the modern economy [324] not that of Crusoe economics. And in such a discussion, in which Dietzel himself goes beyond the bounds of the isolated economy whenever he wishes, shall only we marginal-value theorists carefully guard ourselves against speaking of anything but Robinson Crusoe and his value judgments?

Let us not play hide and seek! What concerns Dietzel, myself, and the public in our controversies are not in the least the imagined joys and sorrows, the reflections and valuations of a non-existent Robinson Crusoe, but the things that matter to us. What one wants from science is that it portrays the real world, and that is what we marginal-value theorists have always sought to do. For us, Robinson Crusoe is a first probe, a methodological tool, and nothing more. For good reasons, we practice our and our readers' eyes for a time on his peaceful figure before we attempt to step to the more complicated picture of full reality. However, the real showplace of our theory is full, social-economic reality. Our theory of value would be utterly worthless, and we would be unable to convert a single member of the public to it, if we were not able to show that it applied not merely to exercises in Crusoe economics but also to full, living reality.

Dietzel knows that as well as I do, and nevertheless he demands that I limit my rejoinder to exercises in Crusoe economics! Indeed, doesn't he know what objection—to be sure

unjustly—one usually makes against us marginal-value theorists? Has he forgotten what objection he himself made against us not very long ago? In this very yearbook, scarcely five years ago, Dietzel, criticizing a work of Wieser's⁹, totally dismissed the theory of subjective value, of the subjective experience of utility by the individual, from the realm of economic science. He declared the social problem of exchange value to be the sole problem of economic science. He doubted whether “we could, with any prospect of success, take subjective value as our starting point for the explanation of the complicated phenomena of social-economic life.” And he urged the marginal-value theorists to prove that their law of marginal utility shed light on the phenomena of social economy. Up to now, he could not find the bridge that led from the individual's subjective experience of utility to the workings of economic society. In short, Dietzel gave as clearly as possible to understand that he regarded the whole theory of internal, subjective economic value as nothing better than frivolous child's play, of no use for the real problem of economic value and incapable proving anything about it.

[325] Now I observe with pleasure that Dietzel for his part has completely given up his previous opinion. But what guarantee can I have that this will make any real difference? Should I, diligently and patiently, before impatient readers, refute nothing but the Robinson-Crusoe psychology of the Dr. Dietzel of 1890, only to find that, when that has been accomplished, one of the numerous intellectual compatriots of the Dr. Dietzel of 1885 again says that while that may be all well and good, it still means nothing for the real world—that while marginal utility

⁹ See Dietzel's review of Wieser's *Ursprung und Hauptgesetze des wirtschaftlichen Wertes* in this yearbook, new series, vol. 11, pp. 161 f.

may apply to Robinson Crusoe, for the real world the rule of costs remains unrefuted? My esteemed opponent must forgive me, but I had indeed directed my “Zwischenwort” to him only for the most expressly explained purpose of finally bringing the controversy to a really decisive conclusion. When, under these circumstances, Dietzel demands that in my discussions I carefully refrain from touching on precisely that area in which the substance of the problem lies and in which alone it is possible to convince the public, I can only take this demand, my esteemed opponent must forgive me once more, as a joke on his part, and, to be sure, as a somewhat Macchiavellian joke.

And now to come to the real point.

The unflattering overall judgment of Dietzel’s concerning the theory of marginal utility can be approximately summarized in the following two propositions: As far as it applies to goods not capable of being reproduced at will, the theory of marginal utility is true, but not new; and as far as it applies to goods which are capable of being reproduced at will, it is new, but not true.

I will not go into the first half of Dietzel’s view any further. Zuckerhandel¹⁰ has already so effectively said whatever can be said about it, that I am unable to compete with his discussion. At most, I want to express my pleasure that Dietzel now does acknowledge one half of the theory of marginal utility as “true, but not new.” That represents great progress.

A few years ago, the uniform judgment of the whole marginal value theory was the same as Dietzel’s judgment now is concerning only the second half of it, namely, “new, but not true.” (At the time, Dietzel too did not oppose that view, though, to be sure, as the reviewer of a major

work of Wieser's, he at least had a very easy opportunity to do so.) At that time, I was a voice in the wilderness, who espoused the truth of a theory that general opinion condemned as heretical and who, in order to soften as far as possible the impression of a foreign innovation, was at great pains [326] to search out and make the public aware of all connecting links and literary relationships which unite the new theory with the old, classical theory.¹¹

If now, today, half of the theory, which at that time was completely rejected, is recognized as banal, self-evident truth, then I and my associates can readily accept the reproach that is at most that we have convinced people all too well of its truth. We can certainly live with this reproach. Correctly understood, I would very much like to earn it for the second half of the marginal value theory, concerning which Dietzel today still makes the claim that it is "new, but not true." If one concedes the truth of our presently disputed theory, one can describe it as much as one likes as "old." Indeed, no one has more eagerly sought and shown the literary sources of this "age" than we ourselves have long done.

II. The Point of Controversy

What then is really in dispute between Dietzel and the marginal-value theorists?

Roughly speaking, it can be expressed in very few words: the difference of opinion concerns the explanation of the value of goods reproducible at will and, to be sure, insofar as Dietzel assigns a different position to the influence of costs in this explanation than do the

¹⁰ "Die classische Werttheorie und die Theorie des Grenznutzens" in this yearbook, new series, vol. 21, pp. 509 ff.

¹¹ For example, in my "Grundzüge der Theorie des wirtschaftlichen Güterwerts" in these yearbooks, new series, vol. 1, pp. 503 f, 534 etc.

marginal-value theorists.

To what extent a different position? Where does the difference begin and how far does it extend?

He who obtains his information only from Dietzel's polemics would frequently receive an unsatisfactory impression. For as I have already indicated, Dietzel frequently misinterprets the doctrine of the marginal-value theorists. He repeatedly attributes views to them, and to be sure even concerning important points, that are diametrically opposed to their actual and explicitly expressed views. But what is particularly confusing is Dietzel's predilection for running through open doors and, in a polemical tone, confronting the marginal-value theorists with doctrines with which they are not only in agreement but which have been taken precisely from their very own writings, and then challenging them to contradict those doctrines. Under these circumstances, the first and most pressing task is a corrective clarification of what the two sides agree on and what is really in dispute.

[327] One time Dietzel accuses us of being unaware "that for the category of reproducible goods the height of reproduction cost, of the quantity of labor, determines the measure of value."¹² Another time, he declares as our "error" "not to see that for reproducible goods the decisive matter of cost enters."¹³ A third time, Dietzel cites our proposition that the value of a good is determined by the importance of the want satisfaction that depends on its possession, and adds: "The marginal-value theorists stop with this conception, which in itself is

¹² "Werttheorie," p. 576.

¹³ *Ibid.*, p. 590.

unobjectionable. Their error is that they do not “add a further proposition for the category of reproducible goods,” namely, the proposition “that their being present spares definite quantities of labor power” and that therefore “the subjective value of replaceable goods conforms to the quantities of labor that are necessary to replace them.”¹⁴

He repeatedly refers, in a polemical tone, to the necessity of supplementing the law of marginal utility by means of a law of cost value.¹⁵ He asks, again in a polemical tone, whether in the drama of value a decisive roll should not be assigned to the factor quantity of labor, which, indeed, determines the size of the supply and thereby the “relationship of demand and supply.” And he suggests to us, the “new ones,” that we seek to reduce that factor to the most modest role, “which may enter upon the economic stage only in exceptional cases.”¹⁶ While for reproducible goods the exact and perfect method of measurement according to the height of reproduction cost is allegedly possible, it is supposedly our endeavor to put in circulation even for this category of goods the less exact, imperfect method of valuation according to utility or marginal utility.¹⁷

Whoever reads these passages, and numerous similar passages, in which Dietzel again and again puts forward the truth and expediency of cost valuation and criticizes us for “denying” or “not seeing” anything whatever that relates to cost valuation, must necessarily come to the conclusion that we marginal-value theorists really had overlooked the law of costs and, on the basis of doctrinaire whim, had ignored the abundance of knowledge that can be obtained for the

¹⁴ pp. 586-587.

¹⁵ pp. 572, 582.

¹⁶ p. 582.

¹⁷ p. 606.

explanation of value from the relationship between costs and value.

In fact, the very opposite is the case. Whoever has read our writings, even with halfway attention, knows this. [328] However, in order to rule out every doubt and every misunderstanding, I want to make a few explicit declarations:

1) We too fully recognize the sway of a “law of costs” for goods that are reproducible at will. “There is a law of costs”—I once wrote—“costs exercise an important influence on the value of goods.”¹⁸ “That costs of production of goods exercise an important influence on their value is a fact so well verified by experience that it absolutely cannot be doubted.”¹⁹ “One is in fact correct, when one says that costs govern value.”²⁰

2) We too recognize the necessity of “supplementing” the universal law of marginal utility by means of special provisions that relate to the value of goods reproducible at will and that the substance of these is precisely the law of costs. And we have accomplished this “supplementing” in full detail, both for the field of subjective value and for that of objective value and prices.²¹

3) We too understand the law of costs in such a way that we ascribe to the height of the costs of production, that is to say, to the value of the means of production, the status of a cause—though, to be sure only an intermediate cause—in relation to the value of those products to

¹⁸ “Grundzüge der Theorie des wirtschaftlichen Güterwerts,” new series, vol. 13, p. 73.

¹⁹ Ibid. p. 61.

²⁰ Ibid. p. 71.

²¹ “Grundzüge,” pp. 61 ff., 534 ff. *Positive Theorie des Kapitals* (Innsbruck 1889), pp. 189 ff. and especially pp. 234 ff. [The material referred to appears in English translation in Eugen von Böhm-Bawerk, *Capital and Interest*, 3 vols., trans. George D. Huncke and Hans F. Sennholz (South Holland, Ill.: Libertarian Press, 1959), 2: 168–176 and 248–256. 2:173–176 are on line at http://www.capitalism.net/excerpts/boehm_q.htm.]

which the law of costs generally applies. “In our present case (that of goods reproducible at will and of higher direct marginal utility), the value of the product must accommodate itself” (to the value of the means of production). “The value of products of higher direct marginal utility . . . comes to them from the side of the means of production.”²²

4) In connection with this, we too acknowledge that changes in the conditions of producing goods reproducible at will never fail to bring about a change in the value of those goods and, to be sure, even without a change in the supply of finished products necessarily having to take place.²³ To be sure, Dietzel maintains, with special emphasis reinforced by numerous repetitions (Werttheorie, p. 593, 596), that “according to the marginal-value theorists, no change in value can appear here” and in the case of the same supply but different costs of production “valuation according to marginal utility [must] be absolutely the same.” And he also does not fail, with equally great emphasis and equally many [329] repetitions, to add the further assertion that “valuation according to marginal utility is incapable of doing justice to influences on value that operate from the side of the conditions of production.”²⁴ Both pronouncements are proof only of the fact that Dietzel has not made himself better acquainted with the text and spirit of the theory of marginal utility.

5) Finally, we too recognize the fact—on which Dietzel places such great stress—that in practice the value of goods reproducible at will is usually directly estimated by economizing

²² “Grundzüge,” p. 70.

²³ Thus, for example, on one occasion, Wieser says: “Cases of the kind last discussed are conspicuous in that the effect of cost on the value of the products takes place without the quantity of products being affected.” *Der natürliche Wert* (Vienna, 1889), p. 171.

²⁴ For example, “Werttheorie,” p. 594.

subjects according to the costs, and we append to this recognition the one condition, which, indeed, Dietzel himself requires, and must require, that the height of the costs is already known to the valuing individuals or is settled for them. “Countless times we already know the value of the cost goods . . . and in all these cases we measure . . . the value of products simply according to their costs.”²⁵ We are a long way from having the intention of putting the use of costs as a standard out of “circulation” or of allowing consideration of costs to take the stage only in “exceptional cases.”

In short, concerning everything that is true and essential in the law of costs—that costs “govern” the value of goods reproducible at will, that we usually directly value these goods according to cost value, that changes that occur on the side of costs cause changes in value, and the like—we marginal-value theorists have not missed or denied an iota. The one difference—and I even believe that Dietzel would agree with us to a considerable extent, although he is by no means clear concerning how far he agrees with us—the one difference consists of the fact that we believe that with the statement of the law of costs we have not yet reached the end of the explanation.

The law of costs is no fulcrum on the basis of which the rest of the explanation can be supported, without it itself needing a support. Rather, it stands in the middle of the course of explanation: it explains certain phenomena, but must itself be first further explained on the basis

²⁵ “Grundzüge,” p. 71. That Dietzel too requires for the application of the cost measure that the costs are already known, lies in the nature of the subject and, moreover, is often explicitly stressed by him: “As soon as they know the cost of acquisition, they calculate according to cost value (‘Wert- und Preistheorie,’ p. 688).” “As soon as Robinson knows . . . (p. 688).” “However, as soon . . . [as] its objective cost value is known (p. 696).” “Before he knew the price,” “as soon as the price [is] known by X . . .” “Now they come to know . . . (p. 697),” and so on.

of certain other, more general phenomena. In order to provide the explanation with this necessary conclusion, we marginal-value theorists make an addition. Be it noted, not an addition which would run counter to or detract from the validity of the law of costs, but one which supports it and makes it intelligible. Namely, we supplement the theory of the value [330] of products with a theory of the value of the means of production, or cost goods, whereby we reach the conclusion that this value itself is ultimately once again grounded in marginal utility. As far as we are concerned, therefore, costs apply not as an ultimate cause, but only as an intermediate cause of the value of products—though a very important and widespread one. It is this addition that has brought on Dietzel's opposition and the accusation of "terrible detours" and of a scientific "regress." Dietzel insists, with firmness, that costs are the ultimate cause of the value of goods reproducible at will. I hope that the following investigation will be sufficient to show whether his view or our view is correct, whether our addition in this case was a vice or a virtue.

III. The Two Variants of the Cost Theory: Their Scylla and Charybdis

The theory that sees in costs the ultimate regulator of the value of goods is taught in two essentially different variants. The difference concerns the nature of that which one calls costs and to which one ascribes determining influence on the value of goods.

In the one variant—whose type is most clearly represented by the socialist labor theory of value—one refers for the explanation of value phenomena to quantities, all of which are given through external, purely technical relationships, and therefore are not in need of further explanation within the science of economics, or at least not within the theory of value. For

example, to the quantity of labor, to the number of hours of labor that the production of a good has cost or would cost. Such a theory can be true or it can be false. In any case, however, it is a self-contained theory, a complete theory. It carries the explanation to a point that lies outside of the phenomenon that is to be explained, which is a fulcrum for it. If, for the explanation of the value of a good, I can refer to the fact that its production has cost seven hours of labor, I have thereby referred to an independently given fact, which cannot be further complained about or argued with. If I allow myself at all to refer to it for the explanation of the value of goods, the explanation is complete with this reference.

The question is, to be sure, whether I can permit myself to refer to it. Here threatens, as the Scylla of the cost theory, the rocks constituted by the facts. The explanation based on quantities of labor, and every explanation related to it, founders on them. For it is simply factually incorrect that the value of goods reproducible at will is related merely to [331] the quantities of labor to be expended. For example, goods that require equally great quantities of labor but also require different expenditures of time or capital empirically have very unequal value. Or if, in the face of totally unchanged quantities of labor, the wage rates to be paid for that labor rise, so in practice will the value of the goods concerned not fail to rise. I have devoted a thoroughgoing exposition to the critique of this variant of the cost theory in another place²⁶ and need not dwell further on it here, especially since, happily, full agreement prevails between Dietzel and myself concerning this point.

To be sure, in his first polemic, Dietzel somewhat frequently used expressions and turns of phrase, which if taken literally could also be interpreted as emanations of the pure “labor theory.” However, other, opposing statements of Dietzel’s, and especially the whole spirit of his theory, led me even at that time to suspect that Dietzel did not intend to advocate the strict labor theory, which today indeed is hardly ever maintained outside of socialist circles. In order to put aside every doubt, I put to him the first of the four questions of my “Zwischenwort.” In his answer,²⁷ Dietzel dissociated himself from the pure labor theory with all desirable clarity, in that he explained that in his opinion it “depends on the height of all costs, which, besides expenditure of quantities of labor, can include other elements. And in determining the height of costs, labor comes into consideration not merely according to its quantity, but also according to its value.”

In this comment, the last words are decisive. By referring to the value of the cost goods, Dietzel dissociates himself not only from the labor theory, but from the whole first variant of the cost theory in general. Thus I need not combat this last any further and note only in passing, very briefly, that it embraces, besides the theory of labor quantities, a few other theoretical formulations. Thus, for example, the narrowly disseminated theory that the amount of pain or trouble of labor determines value, and the more widely disseminated, but just so little satisfying view that value is governed by the sum of the pain of labor and deprivation (abstinence) to be expended.

²⁶ *Geschichte und Kritik der Kapitalzinstheorien*, Innsbruck 1884, pp. 403 ff. and pp. 427 ff. [The material referred to appears in English translation in Eugen von Böhm-Bawerk, *Capital and Interest*, 3 vols., trans. George D. Huncke and Hans F. Sennholz (South Holland, Ill.: Libertarian Press, 1959), 1: 271 ff. and 286 ff.]

²⁷ “Wert-und Preistheorie,” p. 691.

That comment of Dietzel's directs us rather to the second main variant of the cost theory. This variant is distinguished by the fact that, to be succinct, it conceives costs, which determine the value of goods, as themselves being a value sum. The "height of costs" is the product of the quantity of cost goods expended multiplied by their value. Seven hours labor when an hour of labor [332] is worth 10 kreuzer represent "costs" that are only half as high as the same seven hours labor when an hour of labor is worth 20 kreuzer. One does not yet know the costs if one knows only the quantity or number of units of the cost goods consumed, such as the pounds of coal or days of labor used up. In addition, one must know and take into account the value of these things. "Costs" rise and fall in the face of an unchanged number and quantity of cost goods when the value of the cost goods rises or falls. Costs are high not only when and because a large quantity of cost goods must be used up, but also when and because the value of the cost goods is higher. In short, value returns as an element in the costs called upon in the explanation of value.

This variant of the cost theory is obviously at an advantage in one point in comparison with the variant first mentioned, and at a disadvantage in another. Its advantage is that with it one happily avoids the Scylla of the facts; one remains in accord with the facts. When iron rises in price, rails also rise in price, even if for the rest the technical production relationships of both goods have remained completely unchanged. The first variant, which cannot admit a rise in "real" costs here, collides with such facts, while the second, which indeed finds the value sum of the costs increased, encounters no difficulty.

In consequence, it is obviously just as much at a disadvantage in a second point: the explanation it offers cannot yet be a conclusive one. It explains the value of products on the basis

of the value of their means of production. However, how is the value of the means of production themselves to be explained?

Here threatens, as the Charybdis of the cost theory, the circularity in the explanation. Namely, so long as the means of production themselves are goods reproducible at will, it suffices to continue the explanation along the same lines and in the same direction peculiar to the cost theory, namely, in the direction from product to means of production. In this way, for example, one can explain the value of bread on the basis of the value of flour, the value of flour in turn on the basis of the value of grain, the value of grain in turn on the basis of the value of the producers' goods by means of which it was produced. However, when one has continued this explanation through a few stages, one sooner or later necessarily encounters a stage at which it can no longer be continued. Usually, one will very soon come upon a means of production that is not reproducible at will, for example, a raw material that is rare in nature, a patented tool, and the like.

However, if not sooner, then in any case at some point, one encounters the most original and most universal of all means of production, the means of production "labor." How shall one further explain its value? On the basis of the costs of production of the good labor? Thus, perhaps on the basis of the value and price of the worker's means of subsistence, bread, meat, clothing, and shoes? However, in that case, we would be in the middle of Charybdis, in the middle of a circular explanation. For according to our variant of the cost theory, one has indeed [333] explained the value of bread, meat, clothing, and shoes in the last analysis on the basis of the value of labor. If we explain the value of labor in turn on the basis of the value of means of

subsistence, we are obviously moving in a circle. Totally apart from this, even the supporters of the cost theory themselves will scarcely be inclined to assert that one values labor in the same way and just as directly on the basis of cost value as literal products! Inasmuch as Dietzel in particular has not made this assertion,²⁸ I can excuse myself from pursuing the cost theory further into this blind alley.

But how should one continue with the explanation otherwise? Here is a crucial turning point. There is no choice but either to completely break away from the path of explanation followed up to now or to continue with it, but to turn around in the opposite direction again.

To break away: in that, having arrived at labor, one no longer refers to its value but only to its quantity or to another aspect independent of value, for example, to the amount of trouble or pain of labor. However, following this course, one falls back into the first variant of the cost theory and founders, as we already know, on the Scylla of the facts.

Or to reverse course. That is, to recognize that the value of labor itself is determined from the side of its products, namely through the magnitude of the utility or marginal utility which its products establish, or what is only another means of expressing the same thing, through the value of its products. That way, however, he who began with the principle of explaining the value of products on the basis of the value of their means of production appears to plunge in his turn into the Charybdis of a circular explanation.

²⁸ I would gladly have provided an explicit statement from him concerning this. Unfortunately, however, he misunderstood my fourth question, which related to it, and, while I asked him about the subjective valuation of the good labor, he answered me with statements about the formation of wages. Inasmuch as he meanwhile repeated, with renewed emphasis, certain statements about the subjective valuation of the good labor from his earlier essay, I can regard my question as thereby indirectly answered, among other things, as answered in a sense to be discussed immediately.

What do we marginal-value theorists do now and what does Dietzel do?

We marginal-value theorists have first of all clearly and distinctly recognized that the explanation must turn around.²⁹ Therefore, we wisely take care not to express the law of costs in a way that would force us in the next moment to undo explanatory steps that we have just taken. We are careful not to maintain that costs are in principle a [334] final or ultimate regulator for any group of goods, because we know that for the allegedly ultimate regulator itself we must a moment later again appeal to an explanation based on marginal utility. But instead of placing the law of costs outside or against the law of marginal utility, with which, indeed, we cannot do without in our own explanation of the height of costs, we systematically incorporate it into the universal law of marginal utility. Here I need not elaborate in detail how we accomplish this. Whoever takes the substantial trouble of following the controversy between Dietzel and me, will indeed also take the considerably lesser trouble of looking up a few pages about it in one of the writings of the marginal-value theorists before forming a final judgment.³⁰

As a result, the basic idea is only briefly indicated here. All those goods and kinds of goods, which can be produced at will from one and the same means of production or cost good—following the practice of Wieser, we call them “production-related”—thereby, on that very basis, enter into a kind of community, within which value has the tendency everywhere to present itself

²⁹ In my “Grundzüge,” pp. 65 f., I have named a few not very clear predecessors in this recognition. Thus, if one wishes, one can also greet our conception of the cost theory, which today is still disputed, as “a good old friend” or as a “double.”

³⁰ For example, in my “Grundzüge,” pp. 61 ff. and 534 ff., and in the “Positive Theorie des Kapitals,” pp. 189 ff. and 234 ff. [The material referred to appears in English translation in Eugen von Böhm-Bawerk, *Capital and Interest*, 3 vols., trans. George D. Huncke and Hans F. Sennholz (South Holland, Ill.: Libertarian Press, 1959), 2: 168–176 and 248–256. 2:173–176 are on line at http://www.capitalism.net/excerpts/boehm_q.htm.]

on the same level. That is to say, just as several specimens of the same kind of good, for example, several sacks of the same grain or several hundred-weight of the same iron, must have the same value, when and because they can be drawn upon at our pleasure for the same useful services and can be mutually substituted for one another, just so, no difference in value between two goods of different kinds can persist, when and because they can be produced or replaced at our pleasure and in any quantity desired by means of one and the same third good—by means of their common producers' good or cost good. And just as, furthermore, the value of each of several identical sacks of grain is determined according to the law of marginal utility by the utility of the "last," most easily dispensable sack, just so the value of all production-related goods together is determined by the utility of the "last," most easily dispensable product which is brought forth from the common production source, or, as we call it, by the marginal utility of the "marginal product." This provides the measure both for the value of the common cost good as well as, via this last, the value of all other products produced by means of same.³¹

[335] Dietzel himself bears witness to the fact that with our interpretation of the law of costs we arrive neither at errors nor at contradictions of ourselves or of the facts, in that he repeatedly acknowledges that our derivation of the value of goods reproducible at will from the

³¹ Dietzel once ("Werttheorie," p. 590) objects to us marginal-value theorists that to us it "has frequently not become clear that the punctum saliens [leading point] of the valuation method lies in the creation of a value relation between products which belong to *different* kinds of goods. We allegedly bury ourselves in valuations of supplies of goods of the *same* kind and "are all too little concerned with the difficulty of applying this method to the measurement of the value of supplies which consist of goods of *different* kinds." — I confess that I can comprehend this objection only under the assumption that Dietzel has read neither the [335] theory of "production-related goods," which was so carefully worked out by Wieser, nor the discussions relating to the same subject in my writings. Pantaleoni found the expositions of Wieser concerning this point, which Dietzel overlooks, so striking that he formulated a special law, "la legge di Wieser" ["the law of Wieser"]! (*Principii di economia pura*, 1889, p. 221.)

marginal utility of production-related goods is just as correct as his derivation from costs. “For practical purposes, both valuations, if performed correctly, lead to the same result.”³² Whether I calculate according to cost value or use value, the result is the same.”³³ And Dietzel calls “unobjectionable” even with respect to goods reproducible at will our proposition that the value of a good “is determined by the importance of the want satisfaction which depends on the possession of it, which would be lost with the loss of it”; thus, is determined by our “marginal utility.”³⁴

However, what does Dietzel himself do and teach? Everyone who has read the cutting polemic of Dietzel against the marginal-value theorists will expect a correspondingly sharp contrast of his positive theory. Surprisingly, however, this expectation will be disappointed. Above all, Dietzel too realizes and acknowledges that for any ultimate means of production, for example, for labor, the explanation must turn around. It can be carried no further on the side of costs or sacrifice, but must suddenly change to the side of utility or wants. Labor, Dietzel points out,³⁵ is available only in limited quantity in comparison with demand. It is therefore an economic good and has value; and the height of this value is measured according to the — marginal utility which one can obtain with the unit of labor. Let us allow Dietzel to speak in his own words. He calls labor the “most original purchase money,” and continues: “This purchase money is available only in limited ‘supply.’ On the basis of this limited supply,

³² “Werttheorie,” p. 601.

³³ p. 588.

³⁴ Ibid., p. 586.

³⁵ Ibid., pp. 577 and repeatedly.

Robinson Crusoe must meet his unlimited demand for useful goods. As a consequence of this, every fraction of his labor has ‘value’ for him—for an addition to possible future want satisfaction depends on it. The greater his ‘supply’ of this ‘original purchase money,’ the less important the wants for which Robinson is able to provide. The smaller the supply, the more important the wants at which he must break off satisfaction. The greater the supply of labor, the smaller the ‘marginal utility’ of the fraction; the smaller, the greater.”³⁶

[336] Let us pause here a moment, in order to ask: How, in the spirit of this discussion, does the complete explanation of the height of the value of goods reproducible at will appear according to Dietzel? For reasons easy to understand, Dietzel himself does not provide a complete explanation in very great detail. However, by means of the preceding discussions, he has provided us with the material to construct it in his spirit, and once (p. 587) he provides it himself, if only in the most extremely concise manner.

According to what was said above, the complete explanation must read: One values goods reproducible at will according to the quantity *and the value*³⁷ of the labor by means of the application of which they can be replaced and whose application is spared precisely by the fact that they are already present as finished goods. And one estimates the value of the labor spared in turn according to the marginal utility which could otherwise be created by means of it, that is to say, by means of the useful goods producible by it, or, what is identical with this, according to the value of the products that one could produce with it. In this spirit, at the place in which he

³⁶ “Werttheorie,” p. 583; cf. also 587 and 594.

³⁷ Addendum according to the explanation which is explicitly present in Dietzel’s “Wert-und Priesttheorie,” p. 691;

describes valuation according to cost in the briefest but also most complete way, Dietzel has his Robinson Crusoe say “simply”: “This hut spares me 10 hours of labor, is of the same value as the products which I will need in the future and which I can buy from nature with this quantity of labor.”³⁸

In what then does Dietzel’s explanation materially differ from the explanation of the marginal-value theorists? Perhaps Dietzel knows; I do not know. Dietzel explains the value of goods reproducible at will initially on the basis of the quantity and the value of the cost good labor expended; so do we marginal-value theorists. Dietzel explains the value of the cost good labor on the basis of its marginal utility; so do we. According to Dietzel, this marginal utility expresses itself in the value of the most dispensable of the useful goods which one could otherwise have produced with the good labor; or, as we say, in the value of its marginal product. This is our opinion too.

In short, where Dietzel completely states his view, he explains the value of goods reproducible at will in exactly the same way, by means of the height of costs based on marginal utility, as we marginal-value theorists do. The difference is only that we marginal-value theorists see the whole necessary course of things from the first, all at once, and express ourselves accordingly, while Dietzel always sees only a portion at a time, and says, stop, after the first portion, which has led him to costs, as if he were already at the goal. He chides the people who travel further, “along a terrible detour.” But in the end he sees himself too forced to enter the

cf., above, p. 331.

³⁸ “Werttheorie,” p. 587.

“terrible detour” which leads from the costs of goods reproducible at will to the marginal utility of producers’ goods.

And now I ask: under these circumstances, has it been worthwhile [337] to raise a great hue and cry against the marginal-value theorists over the fact that they trace the law of costs back to the law of marginal utility? Was it proper to call it a “caprice” when the marginal-value theorists undertook to put forward in the law of marginal utility a unitary law, which subsumed the law of costs rather than merely stood beside it? And is it really the mark of a so much higher scientific standpoint, when one first, with all possible emphasis, declares not marginal utility but costs to be the ultimate cause of the value of goods, however then is forced to explain this alleged ultimate cause in turn on the basis of marginal utility, which is allegedly not ultimate?

If it were only a matter of pointing out some injustice to my esteemed opponent, I could confidently conclude my remarks. However, that would be a job only half done, and as a result, fruitless. One easily sees that Dietzel has become inconsistent. However, one sees this all too easily. Everyone must immediately say to himself that a man of Dietzel’s sagacity could certainly have avoided exposing himself to the very obvious reproaches of inconsistency and circularity if he had not had good, or at least strong, reasons for it.

These reasons for inconsistency are what one must overcome or clear up, if one wants to have accomplished something in the matter. They exist and operate not only in the case of Dietzel, but in a great part of the public opinion of our science, of which Dietzel is only an individual representative, who is particularly eloquent and combative. It is this public opinion which clings to the cost theory with undeniable power and tenacity, and as often as it has been

fought and conquered in the previous course of scientific development, has up to now helped the cost theory achieve a new resurrection every time. Under these circumstances, it would be of little use to show that the cost theory is inconsistent and contradictory in the concrete form in which Dietzel today preaches it, if it were not possible to thoroughly banish the misunderstandings contained in the cost theory, by shedding light on the very last corner of the trains of thought that yesterday drove the classical economists, and today Dietzel, to the construction of it, and tomorrow would again drive someone else to it.

To this end, I must therefore ask further: What reasons or impressions have led Dietzel to his antagonistic attitude toward the theory of marginal utility?

Without doubt, a share of this which is not at all modest, goes to the account of a purely external cause, of which I already had to make repeated mention: to the account of the incomplete knowledge which Dietzel possesses of the theory of marginal utility that he combats. Dietzel has apparently developed a certain schema of the theory of marginal utility following a cursory reading of a part—and perhaps even of a rather modest part—of the literature of marginal utility, and directs his polemics against this self-created schema, [338] unconcerned with whether or not his schema also represents the actual thinking of the marginal-value theorists.

Only in this way can it be explained that Dietzel so often reproaches us, in the most definite tone, for remarks which we in fact have never made, or that he reproaches us for omissions or oversights, while the matters allegedly overlooked or neglected are treated at length and in depth in our writings. Only in this way can a certain especially strange part of his polemic

be explained. Namely, Dietzel conspicuously believes he must prove against us precisely that part of his theory which turns into to the theory of marginal utility, and reproaches us with ignorance and ignoring truths that precisely we, long before him, developed in great concreteness, and which he has simply copied from us.

For example, on one occasion it is a matter of the derivation of the value of the original means of production, particularly labor. Dietzel begins with the “awful triviality” that labor is an economic good, inasmuch as it available to the economic subject only in limited quantity, that the labor which is expended for production of a consumers’ good is unavailable for the production of another good that would otherwise be possible, that for that reason one imputes “value” to labor, and so forth (“Werttheorie”, p. 578). And he makes the accusation against us (p. 578) that “these trivialities have escaped the new ones.” As though Wieser had not devoted a whole long chapter to the proof that, despite all appearance to the contrary, labor is always available in insufficient, limited quantity!³⁹

Another time (p. 580), Dietzel reproaches us with having “denied” the “necessary relationship between the value of products and the value of producers’ or cost goods”—us, we who, to say it once more, have devoted whole chapters to the proof of the necessary relationship between the value of products and the value of producers’ or cost goods! And Dietzel ends a long discussion (p. 594) concerning the fact that not only finished products but also labor is valued according to marginal utility, with the following polemical words against us: “Was it then

³⁹ *Ursprung und Hauptgesetze des wirtschaftlichen Wertes*, pp. 51 ff; for example, p. 62: “Labor is . . . because of its too small quantity an economic good.” Cf. further, Wieser, *Der natürliche Wert*, pp. 189 ff.

really so difficult to see that every word that the new ones say about the marginal utility of supplies of products, that is, the concrete effects of labor, can be carried over to the marginal utility of labor, that is, the abstract cause of all supplies of products”!

One would like not to trust one’s eyes! Can Dietzel really have totally overlooked or totally forgotten that we marginal-value theorists have carried over the theory of marginal utility in the most completely detailed and emphatic way precisely with respect to the valuation and value of the means of production and labor,⁴⁰ and that [339] everything whatever that Dietzel himself knows about the valuation of producers’ goods according to marginal utility he can know from no one else but from us? And yet another time (“Wert- und Preistheorie,” p. 706), Dietzel suggests to me in all seriousness that I had contradicted a series of propositions that in fact are borrowed from our own theory!

That Dietzel, based on such a fundamental misunderstanding of the mutual positions, found somewhat more material for polemics than anyone else had found is understandable. However, this explains only some of Dietzel’s polemics, not all, by far. A major part of Dietzel’s objections rests on reasons and impressions that arise from the matter itself. In what follows, I want to investigate and clarify these reasons and impressions as well as I can.

⁴⁰ See, for example, my “Grundzüge, pp. 63 ff.; *Positive Theorie des Kapitals*, pp. 234 ff., especially pp. 243 ff. “The original productive powers of the country also line up according to rank in the most rewarding employments and receive their value and price from the last of these employments” (p. 243). [A somewhat different translation of this sentence can be found in Eugen von Böhm-Bawerk, *Capital and Interest*, 3 vols., trans. George D. Huncke and Hans F. Sennholz (South Holland, Ill.: Libertarian Press, 1959), 2:253, where it appears as the second sentence of paragraph two. See also 2: 248–256.

IV.

Why, Admittedly, Practical Estimations of Value Can Often Stop With a Reference to Costs, Never, However, the Theoretical Explanation of Those Estimations

In practice, we stop innumerable times with a valuation based on costs. If one asks me how highly I value a winter coat, that I can buy at any moment at a cost of 40 florins, I will answer without hesitation and without further speculation: at 40 florins. If it were to cost only 35 florins, so I would decide just as quickly, and as just as decisively answer: at 35 florins. From this indisputable fact, Dietzel has apparently gotten the impression that the explanation of the marginal-value theorists, which even in these cases comes back to some marginal utility, is not natural or true to nature, but makes “terrible” detours by means of a truly superfluous “jeu d'esprit spirituel” [“game of intellectual solitaire”]. What justification does this impression have?

It has no justification. It stems from a confusion between that which individuals do or have to do, if they want to estimate the value of a good in practice, and that which science has to do if it wants to explain the practical valuations themselves.

The fact that under certain very frequently occurring conditions, in practice we value goods according to cost not only directly but also in a certain sense “definitively“ (that is to say, that we don't further extend our reflections concerning the matter) is completely right. As I already had occasion to mention once, above, we marginal-value theorists also have in no way allowed this fact to escape us, but have acknowledged it with all explicitness. [340]

“Innumerable times... we measure...the value of products simply according to their costs.”⁴¹

But when and why do we stop with costs in our practical estimations of value? When we already know the height of the costs on the basis of some cause or source or find them given for us through external circumstances. Then, precisely the height of costs forms as it were a fulcrum for our practical purposes, concerning whose underpinnings we need not investigate. I believe that no difference of opinion exists between Dietzel and me concerning the necessity of this actual prerequisite. “Countless times,” I wrote in the place cited above, “we already know the value of the cost goods, without first having to develop it from case to case on the basis of its foundations, and in all these cases”—I continued as above—“we measure the value of products simply according to their costs, in a shorthand as correct as it is expedient.” And Dietzel is full of statements in which the presence of valuation based on cost is explained by references to the fact that the costs of production or acquisition in question must be known to the valuer. I have already presented a whole collection of such remarks, above, to which I refer here.⁴²

Our practical reflections concerning the value of a good reproducible at will, therefore, end with “knowledge” of the height of cost, and to be sure, with full justification. However, can science be allowed to end its explanation of value here? Absolutely not! For the height of costs, which is synonymous with the sum of the values of the cost goods, is indeed itself a value phenomenon, thus a part, and, to be sure, certainly not the most unimportant part, of that which is to be explained. And this explanation appropriate to science cannot in the least be supplied by

⁴¹ “Grundzüge,” p. 71; compare, above, p. 329.

⁴² See above, p. 329, n. 2.

means of the “knowledge” of the people. An enormous difference exists in general between the knowledge of a fact as a fact, and between the explanation of the fact. Every farmer knows that on so-called “icemen-days” days in May, evening frost and relapses into cold frequently occur. However, hardly anybody will take this knowledge of farmers of the fact as a fact, as equivalent to the possession of a scientific explanation of this fact. And everyone would find it more than strange, if meteorologists, embarked on a scientific explanation of the icemen phenomenon were to announce that a further explanation was no longer necessary, because farmers already very well knew the fact without this!

Now a difference of exactly the same kind and just as enormous exists, for example, between the knowledge of horse dealers that a horse costs 150 florins in a certain market and a scientific [341] explanation of the height of this price. Or between the knowledge of a producer that the manufacture of a certain good costs 18 florins, namely, 12 days of labor at 1 florin 50 kr. each, and a scientific explanation of *why* a day’s labor is worth 1 florin 50 kr. and thus that the whole amount of cost has a value of 18 florins. The height of price or cost may at any rate have the power of an undoubted given fact for the practical valuations of the individual. However, for the explanatory tasks of science it is nothing but a fact that is not yet explained and therefore a fact that is first to be explained. It is not the solution of the value problem, but itself a part of this problem, and certainly not the easiest part.

The act of valuing and theoretically explaining valuations are, therefore, in every case, two different things. I certainly do not want to maintain that Dietzel has expressly confused these two different things, but he has just as little expressly made clear their difference in its full

significance. And as a result, he is continually misled by ideas and premises which belong to the one area, to suddenly and unawares jump to ideas and conclusions which belong to the other area. His polemics offer countless instances of this. The most frequent example is provided by his oft repeated polemics concerning the immediacy and “finality” of practical valuations based on cost versus the superfluousness and reprehensibility of “detours” in the *explanation* of those valuations. One time this thought is even clothed in the form of an explicit principle, when Dietzel⁴³ says, “that, because the practice necessarily imposes using calculation according to cost value as soon as possible, *theory* should as directly as possible lead to it.”

Especially characteristic in this regard, however, are the numerous remarks of Dietzel's which refer to the application of “costs” as the standard of valuation. Dietzel does not tire of praising the special advantages which costs display as the standard of valuation in comparison with marginal utility. The cost standard is “more convenient,” “more precise,” “more exact,” “more complete.” In comparison with vague fluctuating valuation according to marginal utility, valuation according to cost signifies an “enormous advance.” The concrete utilities which goods provide are commensurable only with difficulty; the quantities of labor or cost which will be necessary for their reproduction are easily commensurable,⁴⁴ and so forth.

There would be little or nothing to object against this if Dietzel would not always offer these glorifications of the cost standard in a polemical tone against the marginal-value theorists and combine them with the insinuation that the theory of [342] marginal utility

⁴³ “Wert- und Preistheorie,” p. 689.

⁴⁴ “Werttheorie,” p. 595; similarly, often.

somehow wished to depose that excellent standard, to “deny“ it its proper “domain,” and “place in competition” the “more unsatisfactory, inferior method” of valuation according to marginal utility even for the category of goods reproducible at will, for which the more satisfactory method of cost valuation has long been present (“Werttheorie”, p. 606). In other words, Dietzel presents the matter as though in the spirit of our theory, people would have to apply the unsatisfactory method of marginal valuation even in relation to goods reproducible at will, instead of the convenient and exact method of valuation according to cost.

That is a major misunderstanding of our view, which for its part in turn is rooted in the fact that Dietzel confuses two things that we marginal-value theorists take care precisely not to confuse: namely the the carrying out of practical valuation and the theoretical explanation of that valuation. We have no intention of claiming any lesser scope for the practical application of the exact cost standard than does Dietzel. Wherever people already “know” the amount of cost—and where they do not know it, they hardly continue to use cost valuation even according to Dietzel—then according to our view too, they simply apply the certainly more convenient and more exact cost standard, without racking their brains over the further derivation of the value of the cost goods themselves from any marginal utility. However, in order for the amount of cost to be known to them in terms of a definite value figure, it must previously be fixed at a definite height by means of other forces and events—which for the most part are of a social- economic nature. And, of course, it is no less incumbent on science to provide the explanation of that further branch of value formation which goes beyond the limited field of vision of the individual, as the explanation of the branch that lies within this field of vision. When theory continues the

explanation of the value of the cost goods themselves, then, to be sure, it comes in the last analysis to marginal utility as the cause.

The inadequacy of theoretical explanation on the basis of cost or the difficulty of acquisition appears especially great, I believe, when one—against which practice in itself I have no objection—conceives with Scharling⁴⁵ and Dietzel⁴⁶ not merely the actual costs of production but also the costs of acquisition by means of exchange as a cost phenomenon. These “purchase-costs” directly form the basis—as far as they are already known—for the subjective valuation of the article by the single individuals who have to do with this article, [343] and Dietzel⁴⁷ gives himself a very superfluous task, when he believes he first has to prove this against me.

However, it nevertheless seems to me crystal clear, first, that in this case the height of the cost of acquisition, that is, the height of the market price, itself requires a further explanation, and, second, that in this explanation of the height of the price, one may *not* call upon those cost valuations of individuals if one does not want to make oneself guilty of a totally enormous circularity. Why do people value a winter coat at 40 florins? Because it “costs” that much on the market. And why does it cost that much on the market? Whoever here wants to answer again simply: because people value the winter coat at 40 florins, and in so doing has in mind the same valuations which rest on the “acquisition cost” of 40 florins, would fundamentally say nothing

⁴⁵ “Werttheorie und Wertgesetz” in these yearbooks, new series vol. 16, pp. 417 ff., then 513 ff., *passim*.

⁴⁶ “In the case of merchandise purchasable at will, the cost that provides the standard for the subjective valuation of those ready to buy is based on the sum of money to be expended in the purchase.” “Wert- und Preistheorie,” p. 691.

⁴⁷ “Werttheorie,” pp. 602 f.

other than: the winter coat costs 40 florins because it costs 40 florins! Or he would explain the *development* of the price on the basis of *what the price had become*.

Dietzel himself, of course, is discerning enough to see that totally obvious circularity of reasoning for what it is, and to avoid it. He is able to do it, however, only at the price that precisely at the most decisive point he abstains from bringing his cost theory to bear.

It is worth the effort to follow somewhat more precisely Dietzel's line of thought here, which is not without strange twists and turns. Dietzel is in agreement with us marginal value theorists concerning the fact that one must first explain market prices on the basis of the subjective valuations of the goods by the parties in the market.⁴⁸ Now, one should expect that Dietzel, who otherwise always loves to present costs with such great emphasis as the decisive basis of valuations, would also declare here the subjective valuations of the parties in the market to be simply cost valuations. However, in no way does he do this. Rather, he first finds that one must make a distinction between the buyers and sellers. The decisive valuations of the first are in general directly based not on costs but on utility—are “utility valuations.”⁴⁹ The valuations of the sellers, however, are based, to be sure, “directly” on the costs of production. However, “once the good to be exchanged has been brought to market, the *utility valuation* takes the place of the cost valuation (even in their case) *for the duration of the market transaction*.”⁵⁰

One should note carefully what this means. It means, in other words: in the hour of

⁴⁸ “Wert- und Preistheorie,” p. 696

⁴⁹ “Only the subjective valuation of the seller rests directly on the costs of production, that of the buyer, on the other hand, on utility” . . . “this utility valuation (of the buyer) is the direct one.” “Wert- und Preistheorie,” p. 696.

⁵⁰ *Ibid*, p. 698.

decision, in the hour in which valuation is to have a really practical importance for action, all parties, buyers and sellers, even according to Dietzel, put their cost valuations, lauded as so endlessly practical, [344] out of sight and allow themselves to be guided exclusively by utility valuations, the valuations so very much scorned by Dietzel as inexact, unsatisfactory, and not at all capable of a real measurement! Only when everything has been decided, when the price that has emerged as the result of the interplay of utility valuations as a ready-made price that is already “known,” do people again dredge up cost valuation, which was carefully put aside earlier, and in connection with which, in some measure, they now can no longer be taken at their word, and allow it to “finally triumph.” “A number of buyers appear on the market with the desire for a definite exchangeable good. Each has a subjective utility valuation of the good that differs from that of all other buyers. This utility valuation is the direct valuation. *However, as soon the price at which the good is for sale, its objective cost value, is known, cost valuation finally triumphs.*”⁵¹ Who does not feel himself reminded in this of stout Falstaff, of how he carefully played dead during the battle, but after the battle boasted of his triumph over “Hotspur,” killed by someone else. [This appears to be a reference to Shakespeare’s play *Henry V, Part I, Act V, Scene iv*—trans.]

Now, however many abstruse phrases and embellishments Dietzel may add here, one fact still cannot be concealed: namely, that in the explanation of the formation of prices, Dietzel himself cannot use the cost valuations of the prospective buyers, which rest on “the sums of

⁵¹ “Wert- und Preistheorie,” p. 696

money to be laid out in purchase,” and is forced to fall back on utility valuations. However, that is precisely the point on which everything in our controversy depends, because, indeed, it was actually for its sake that the whole controversy was embarked upon by Dietzel. For what distinguishes our theory, the theory of marginal utility, from the customary cost theory is, indeed, at bottom, the single proposition, which, to be sure is decisive, that for us the explanation of value on the basis of costs is no final explanation, but that the “height of the costs”—be it actual “production costs” or “acquisition costs” presenting themselves in the market price—itsself constitutes a value phenomenon in need of explanation. And that explanation makes necessary going back to a primary valuation according to utility or marginal utility.

Our opinion, therefore, to go back to what was said previously, is in no way that those people who value goods reproducible at will always, or even most of the time, themselves value them according to marginal utility instead of according to cost. Rather our opinion is that the cost valuations actually taking place, in order to be possible, presuppose the existence of other, preceding valuations. These preceding valuations emanate either from the same or, more often, other people; refer for the most part to other goods (the cost goods); and are carried out according to the measure of marginal utility. And, finally, our opinion is that [345] these other valuations made according to marginal utility must be incorporated into the realm of scientific explanation, if science is to explain the whole phenomenon of value formation and not an out-of-context portion.

Usually, I say, these other valuations emanate from people other than those who directly value goods reproducible at will according to their costs. This is always the case, for example,

when our cost valuation is based on a purchase price. When an employer values his goods which have cost him 12 days of labor, at 18 fl., that is to say, 12 days' wages at 1½ fl. per day, a vast number of valuations by producers, and an even greater number of valuations by consumers, have played their part in the determination of the value of a day's labor at 1½ fl., as I have more precisely explained in my *Positive Theorie des Kapitaales*.⁵²

A Robinson Crusoe on the other hand will, of course, also always undertake valuation according to cost, which proceeds from the valuation of cost goods, which in turn finally leads to some marginal utility or other, that is to say, to a valuation he himself must have made on a previous occasion and which he still "knows." In any case, it appears to me that Dietzel has no entirely appropriate view concerning the way in which this "inner economic" completion of cost valuation takes place. Since Dietzel, at this point in his explanation of value formation,⁵³ lays special stress on the case of Robinson Crusoe and expressly asks me to apply my critique to it, I must say a few words about the matter.

V.

Remarks Concerning Robinson Crusoe and Concerning Caprices

Dietzel allows his Robinson ("Werttheorie", pp. 584 ff.) to project a scale of value of the

⁵² pp. 236 ff. [The material referred to appears in English translation in Eugen von Böhm-Bawerk, *Capital and Interest*, 3 vols., trans. George D. Huncke and Hans F. Sennholz (South Holland, Ill.: Libertarian Press, 1959), 2: 249 ff.]

⁵³ "Wert- und Preistheorie," pp. 685 f., 706.

goods in his possession reproducible at will by means of his labor. If his hut is reproducible in 10 hours, his net also in 10 hours, his bow in 8 hours, and his food supply in 5 hours, “so will Robinson, if he understands at all how to calculate economically, calculate the value of these goods with the numbers 10, 10, 8, 5.” I am completely in agreement!

How does Dietzel have Robinson arrive at this this estimation? Robinson must say to himself that, if he had not already had the hut, or if he were to lose it—for example, because of a fire—he would have to employ 10 hours of his working time on its construction and, of course, would have to withdraw those same 10 labor-hours from the production of other useful goods that he could otherwise produce. On the possession of his hut, therefore, actually depends “the total of the want satisfaction” which would be the effect of the [346] employment of 10 hours of labor directed to the production of other useful goods. On the other hand, of course, on the possession of the food supply, that is reproducible in 5 hours, depends in entirely the same way only the benefit of half the quantity of other useful goods, namely, of as many useful goods as Robinson could otherwise produce in 5 labor-hours. Robinson must therefore say to himself, “If I lose the former (the hut), I lose double the quantity of need-satisfaction as I do if I lose the latter (the food).”

This statement too is completely correct and also completely in the spirit of the theory of marginal utility. For the quantity of want satisfaction that depends on labor itself, through the agency of other useful goods to be produced by means of it, represents indeed—as Dietzel himself also repeatedly expresses it (for example, p. 594, 595)—nothing other than the marginal utility of labor.

Now, however, Dietzel posits an interesting nuance, through which he evidently means to avoid the last of the consequences of the theory of marginal utility that he finds disagreeable—valuation according to intensities of feeling. Namely, Robinson Crusoe to be sure can make clear to himself—Dietzel believes—which concrete wants he would satisfy through an alternative application of the 10 and 5 hours of labor in question. In this case a fully informed valuation according to utility or marginal utility would be present. He need not make this expressly clear, however. He can also calculate *abstractly*, “with quantities of the universal producers’ good, the original purchase-money, labor,” which is “the abstract cause of that (dependent) future want satisfaction.” He can casually reason as follows: if the hut is reproducible in 10 hours, and the food supply in 5 hours, the presence of the former spares me “double the quantity of abstract useful labor as the presence of the latter,” with the further result that double the quantity of need-satisfaction depends on the presence of the former as on the presence of the latter. Therefore the value of the hut must be exactly twice as great as the value of the food.

Here apparently is a very ingenious attempt to eliminate from the calculation of value, which cannot avoid *reference* to marginal utility, at least the *determination* of marginal utility. Marginal utility is, so to speak, brought into the calculation like an x that is not further calculated. Even if I don't know, or don't want to take the trouble, to determine how large x is, it is still certain that $2x$ is twice as much as x , and that $4x$ is again twice as much as $2x$. And everywhere that such knowledge suffices, the determination of x is in fact dispensable.

Everywhere, that such knowledge suffices. This is the point where the critique of Dietzel's construction has to start. Namely, one must not lose sight of the fact that by the method [347]

described by Dietzel, one does not at all arrive at a real valuation, namely at the formation of a judgment concerning the magnitude of the importance for well-being of the goods compared. One learns to be sure, that the hut counts twice as much as the food supply for well-being. But, one does not learn concerning any of these goods that are allegedly “valued” according to their value, whether they count absolutely for much or for little, and still less how they count for our well-being. It is exactly as if two pieces of cloth or canvas of unknown length were to be measured merely in comparison with one another, and the result thereby achieved that the one piece turns out to be precisely one and a half times as long as the other. In that case, if one really investigates no further and learns no more than this, the absolute length of the two pieces might just as well amount to $1/2$ and $3/4$ meters, or 4 and 6 meters, or 20 and 30 meters.

Now, there are certainly particular purposes, for which even knowledge so limited and imperfect can be sufficient. And among these purposes would belong the construction of the comparative scale, emphasized by Dietzel in his discussions, between all goods reproducible at will in Robinson Crusoe’s possession. However—and this, it seems to me, Dietzel has not made sufficiently clear to himself—such a scale itself is of very little use in economic practice. It can be applied only if the circumstances under which an economic decision is to be made are such that only the choice between two goods reproducible at will is involved and nothing else whatever. Seldom, however, are practical circumstances so constituted, especially for a Robinson Crusoe, who totally lacks the most frequent opportunity for a comparison of two goods—exchange. The scale fails as soon as, for example, Robinson Crusoe has to compare a good reproducible at will with a good that is not reproducible at will, say, his hut with the single,

European coat on his island that he managed to rescue. In such a case, Robinson Crusoe must value both goods according to marginal utility—not merely the coat, which is not reproducible, but also the hut, which is reproducible at will. This is something which Dietzel seems not to realize or not sufficiently to realize. For what is required for the comparison of the value of two goods, as Dietzel once very correctly observed, is a “common denominator.” Here labor can no longer be this common denominator. On the contrary, to be able to compare the hut with the coat, which latter must undoubtedly be valued according to marginal utility,⁵⁴ [348] Robinson Crusoe must obviously first value the hut too according to marginal utility. That is to say, he must go beyond valuation according to costs or abstract labor hours by means of calculation of the x , by means of enlisting the marginal utility of labor itself. This supplementation, be it noted, will be neither especially difficult nor especially complicated. On the contrary, Robinson will probably figure out his once and for all judgment concerning the absolute importance of what he

⁵⁴ Dietzel to be sure has expressly explained that he never for a moment doubted the correctness of the marginal utility theory for scarce goods. However, he nevertheless used the above occasion (“Werttheorie,” pp. 584 f.), in order to bring up a few somewhat derisive observations concerning the embarrassment in which Robinson would find himself if he, “swearing on the words of the masters of marginal utility,” wanted to value his coat according to marginal utility. For how, for example, should he imagine the last of the want satisfactions or the marginal utility otherwise secured by means of the coat? It’s not a question of the “last” want satisfaction or the marginal utility, but simply a question of the importance of the dependent want, namely, of the need for clothing or the “utility” of the coat. If Dietzel had made himself somewhat more familiar with the theory of marginal utility, [348] he might have spared himself this polemic too, as well as so many others. For the marginal-value theorists have explained with all desirable clarity and in full detail that in cases of *single* specimens, marginal utility is identical with the utility of these single specimens (“Grundzüge,” p. 31, p. 37), and that in the case of durable goods, such as the coat, the dependent utility or marginal utility embraces not merely a single want satisfaction but a whole series of them (“Grundzüge,” pp. 33 f.). According to our theory too, therefore, Robinson doesn’t have merely some single want satisfaction to consider, but rather the whole utility of the coat. After all—something which Dietzel seems to have completely overlooked, even though the marginal-value theorists have expressed it very clearly (for example, “Grundzüge,” pp. 20 ff., Wieser, *Ursprung und Hauptgesetze*, pp. 121 ff., pp. 126 ff., *Der natürliche Wert*, pp. 21, 23 ff.)—the primary proposition of their theory is that the value of goods is determined by the importance of the wants dependent on them. The concept and name marginal utility only appear in the more precise explanation in action of which among *several* wants under consideration is the sought after dependent want. Of course, this more precise explanation is not necessary when only a single want or a single a single series of wants is in question.

can accomplish for his well-being with the unit of *his* purchase money, the labor hour or the labor day, just as quickly as we social beings have long ago once and for all done this for the monetary unit—the guilder, the mark, the crown, the penny. On the individual, practical occasions, on which we then come to marks, pennys, or man-hours in our value-calculations, we already “know” the value of these units and no longer need first derive it from marginal utility from case to case. However, for that reason it remains no less true that all these valuations are rooted in a valuation actually consummated according to marginal utility today or long ago.

No less insufficient, furthermore, is unspecified valuation according to “abstract utility” in those numerous cases in which Robinson has to compare a good not with another good but with wants, for example, when it is a question of the economic decision to consume a good reproducible at will for a specific purpose. Let us imagine Robinson has made a number of arrows with an expenditure of two hours of labor and would gladly like to shoot them for his amusement or target practice or at small small birds flying by. Can he permit himself such use of them?

The answer to this question will obviously be very different depending on whether the marginal utility of two hours of labor ranks absolutely high or low. If it ranks high, if for example, in the first days after landing on his island, Robinson must first take care of the most necessary arrangements, which he would have to do without if he devoted his time to archery and target practice, [349] the answer of course will be in the negative. On the other hand, it will be in the affirmative, if Robinson has so far provided for all essential wants that he would otherwise have nothing to which to apply two available hours of labor that was more urgent or

important than resort to shooting practice.

It is obvious, therefore, that no useable guidance whatever has been gained with “abstract” cost valuation, with the judgment that the arrows cost two hours of labor. It will only become useable in the moment when Robinson, by means of a further judgment, makes clear to himself how much the two hours of labor themselves mean for him in the prevailing circumstances. In other words, when he supplements the cost valuation by means of a positive valuation of the marginal utility of the cost good labor.

That method of valuation that Dietzel believes he can present as typical is, therefore, as we see, not typical but can be applied only under very special, casuistic circumstances, and on a very limited number of occasions: namely, when it is a question of the comparison of the value of several goods reproducible at will *with one another*. On all other, vastly more numerous occasions in Robinson’s economic practice, even Robinson must go back to marginal utility.

No one knows better than the marginal-value theorists themselves⁵⁵ that, as Dietzel complains,⁵⁶ little objective arithmetical exactness and much caprice is present in the weighing of marginal utility. However, the theorist cannot make the practice better than it actually is. He can neither deny nor prevent the fact that in the last analysis people make what they consider to serve “their well-being” the guiding star of their economic actions. And he can just as little hinder or deny that people, according to their inclination and mood, often consider very strange things to serve “their well-being.” Such capricious aberrations of passion, of blind indulgence, of

⁵⁵ Cf., for example, my “Grundzüge,” pp. 50f.

⁵⁶ “Werttheorie,” p. 585.

thoughtlessness, of weakness of will, are indeed the source from which thousands upon thousands of foolish and uneconomic actions flow, which every time are set in motion by equally foolish and abortive valuations concerning means and ends. If, however, as is absolutely undeniable, the power of subjective impressions and often of caprices is an element of economic practice, so must it also be an element of a theory that is really true to the facts. As I once stated on another occasion: “A correct calculation, an inexact calculation, a false calculation, of a gain in well-being leads respectively to a correct, an inexact, or a false valuation, as indeed countless of them appear in economic life. The false calculation, however, serves just as much [350] in the correct explanation of the false valuation as correct calculations serve in the correct explanation of correct valuations.”

I ask, moreover—and here we will take leave of Robinson and return to our modern economy—where do the exact cost figures originate which provide the basis of our “perfect” and “exact” valuations according to cost? They themselves are nothing other than a result of “caparices”! Dietzel himself indeed understands his law of costs in such a way that the highest costs expended in providing for the given demand are decisive for value and price.⁵⁷ Now what decides which costs are the highest to be expended? Indeed, the state of demand! If, for example, 1 million hundredweight of a good can be produced at a cost of 10 fl. per hundredweight, an 11th hundred thousand only at 10 fl. 50 kr. per hundredweight, a 12th hundred thousand, however, only at 11 fl. per hundredweight, so the highest necessary cost will amount to 10 fl. if, to be sure, on the one hand a million buyers are found who are willing to pay 10 fl. for a hundredweight,

and on the other hand not still more than a million people are found who would be willing to pay 10 fl. 50 kr. If this last were the case, the decisive cost would not amount to 10 fl. but to 10 fl. 50 kr. The governing cost figure, therefore, depends—this is clear and admitted—on the state of demand. However, on what does this in turn depend? There is no doubt concerning this too, and Dietzel himself states that it depends on the “use valuation” that the buyer places on the good on the one hand, and on his money on the other.⁵⁸ On the same use valuation, therefore, on the same “marginal utility” which, as Dietzel in a different place says,⁵⁹ rises and falls according to “caprice” and opinion, which “has to pass through all the difficulties of feeling,” and which Dietzel considers to be such a badly useable standard that he exclaims with doubt and irony: “Is that really an economic proportioning of value?”

“Caprices,” therefore, cannot be eliminated from our valuations; nor from “exact” cost valuations. The difference is only this: Where we directly value according to marginal utility, we base our valuation on our own “caprices.” Where we value “exactly,” according to costs, we base it on other people’s caprices;⁶⁰ on the result of the caprices of those hundreds, thousands, or millions of buyers whose demand fixes a definite cost figure as the “highest necessary.” It is immediately to be admitted that such a result of caprices is much more stable than the individual caprice. According to the “law of large [351] numbers,” precisely here a number of opposite individual deviations can mutually compensate for one another, so that the overall outcome

⁵⁷ “Werttheorie,” p. 592, “Wert- and Preistheorie,” pp. 702 ff.

⁵⁸ “Wert- and Preistheorie,” p. 699.

⁵⁹ “Werttheorie,” p. 595.

⁶⁰ Except, of course, in the present-day rare cases of production in the home.

changes little or not at all, even though it has greatly changed for a single individual.⁶¹

However, I would like to stress something that Dietzel again seems to me not to have considered, or not sufficiently considered: this kind of relative fixing of our basis of valuation is not peculiar to goods reproducible at will, but takes place in a wide domain, even in the case of goods that are scarce. Namely, in the case of those scarce goods, which, to be sure, relatively, in relation to the demand, are scarce, but nevertheless, absolutely, are present in rather large quantity and accordingly possess a rather extensive market. Precious stones of a not unusual size and beauty, abundant old coins, stamps, books, and the like have a very definite and firm value in their respective “markets,” which provides the individual with precisely as firm and exact a support for his valuations as the market price and cost of production do, say, for a hat or coat reproducible at will. Indeed, even more!

Even in relation to goods reproducible at will in the long run, such as grain, alcohol, coffee, hops, and the like, we perform our valuations, all most exact and precise to the farthing or the penny, not on the basis of standard costs of production, but on the basis of financial-page quotations of momentary market prices, which last are themselves determined in turn by the momentary relationship of “want” and “coverage” or “supply,” whose determining power Dietzel estimates so lowly. When one sees, for example, how uniformly and precisely all people who deal with wheat—which in the interval between two harvests is a “good temporarily no longer reproducible at will”—value a hundredweight at 8 fl. 55 kr. in a definite week, no more and no less, so one will be inspired to a few doubts concerning Dietzel’s pronouncement that

⁶¹ Wieser, *Ursprung and Hauptgesetze*, p. 160.

valuation according to utility or marginal utility, that is to say, value determination by means of supply and demand based on it, which is the only method applicable for such goods, is in all cases “the far less exact method of estimation of economic value leading only to uncertain results.”⁶²

But what follows from all this? It follows that whatever opinion Dietzel should attach to his polemic against capricious valuations according to marginal utility, he in no way proves something against our theory or in favor of his theory. If he should be of the opinion that cost valuations are entirely free of influence by means of caprices, he is positively wrong. For in the determination of the “governing height of costs”—and, which I have not at all pointed out here, but easily could point out, in the valuation of the original cost goods themselves—caprices and subjective [352] feelings are decisive. If, however, Dietzel is content to point out that in the case of cost valuation the individual uses a different basis than his own subjective feeling, he is entirely right but firstly says nothing that the marginal-value theorists have not already said, and secondly says nothing that would be unique to goods reproducible at will and would justify a dualistic treatment of goods reproducible at will and goods not reproducible at will. For, as explained, such an intermediate basis of subjective valuations accessible to numerical determination frequently also exists in the case of goods that are scarce.

⁶² “Werttheorie,” p. 606.

VI.

Which Is “More Ultimate,” Costs or Marginal Utility?

I believe that in Dietzel’s case, still another idea, whose fundamental supportability we have to examine, has cooperated in the formation of the impression that costs are the ultimate grounds of the determination of value, more ultimate than marginal utility.

Namely, the height of marginal utility is in no way an ultimate, causeless fact, but, as we marginal-value theorists point out, is determined by means of the prevailing relationship of demand and supply. And the size of the supply is in turn, as the marginal-value theorists likewise point out with all requisite definiteness and emphasis, in very large part determined by the state of the conditions of production, by the difficulty of attainment, or, as one is accustomed to say in brief, by the costs of production.⁶³ Consequently—so it seems—since they do indeed help to determine marginal utility itself, costs are a more primary or more ultimate basis of value than marginal utility, which is influenced by them.

This argument, to which Dietzel repeatedly alludes,⁶⁴ is at first sight so striking that I fully understand that theorists who do not observe with full precision could consider and believe

⁶³ With all emphasis and systematic clarity, I have designated costs of production as an especially important determinant of the “quantity of disposable goods” or of supply. “Grundzüge,” pp. 521, 532 and repeatedly. This recognition has been never been “embarrassing” for me, as Dietzel imputes to us marginal-value theorists (“Werttheorie,” p. 598), nor have I attempted to once again “quickly free myself of it!

⁶⁴ For example, “Werttheorie,” p. 597, where Dietzel quotes a sentence from Jevons according to which labor influences the supply and the supply in turn influences the degree of utility and thus value, and then adds the remark: “I can only read out of these sentences that labor, as far as it determines the size of the supply, is the primary cause of the magnitude of value.” Similarly, *ibid.*, p. 598 and repeatedly.

the matter fully decided on this basis alone. That they could do so despite all the difficulties—admittedly also not clearly seen by them—which [353] arise against the conception of costs as the “ultimate regulator of value” yet still are easier to combat than the flagrant fact that costs are a basis of marginal utility and therefore a deeper determinant of value than marginal utility.

If, nevertheless, the reader has the kindness to apply a somewhat more subtle attentiveness to the matter, the argument will soon lose its remarkable power.

Above all, one must become clear in which sense it is appropriate at all to name *one* single circumstance—whether it be “marginal utility” or “costs”—as the “ultimate” or “final regulator” of value. Such a pronouncement can never mean that one literally would name the very last link in the chain of causes and effects that led to the value of goods. Rather it is obvious that “marginal utility” as well as “costs” are and can be only intermediate members of that causal chain; intermediate members which themselves are determined by means of various circumstances lying still further back. Marginal utility, for example, as just said, is determined by the relationship between demand and supply. Demand in turn is determined by a variety of factors of physiological, moral, cultural, historical nature. Supply is determined by facts of nature, of technology, intellectual development, social organization, legal and property relationships, and so forth.

Entirely analogously, however, “costs” too are in no way an ultimate fact, but are for their part further determined by, for example, among other things, natural richness in the conditions of production, the fruitfulness of the land and so forth, and by the state of technology. These in turn are determined by the degree of intellectual development, the magnitude of the

producers' capacity for work and desire for work. These in their turn are determined partly by natural ability, partly by education and training. These in their still further turn are determined by social and managerial organization, by the state of the general and professional educational system, and so forth, almost without end.

When, in contrast, by means of a so-called law of value, one designates *one* circumstance as the basis of value, that can only mean that one chooses an especially important intermediate member of the almost endless causal chain that leads to the value of goods as the final effect. Namely, that intermediate member in which the effect of all the manifold actual determining causes lying still further back finally combine as in the focal point of a lens. Applied to the case of marginal utility, this means that the magnitude of the value of a good is determined—if our view is correct—first by the importance of the “dependent want,” which in turn is determined as the “last still covered want,” or as the “marginal utility.” In this we have the effect of all of the complex circumstances that indirectly influence value—taste, fashion, conditions of production, and so on and so forth—finally all together in unison: all these and a thousand other [354] circumstances influence value in that they they first influence marginal utility. If, however, we go another step back, we can no longer designate *one* cause of value but must designate at least *two*—demand and supply—and if go still further back, perhaps ten, twenty, or a hundred cooperating causes.

Therefore, from the fact that marginal utility itself, after all, has causes that lie further back, nothing whatever follows against the justification of explaining marginal utility as the governing cause of the value of goods, in the way we do. Rather, the question that lies in dispute

between Dietzel and me concerns merely the following point. In the chain of explanation, which leads from a thousand concrete, indirect causes to the value of goods, do “costs” lie on this side or the other side of the intermediate member “marginal utility”?

In asking this question, we must avoid an ambiguity that easily attaches to the word “costs” and which Dietzel seems to me not entirely to have avoided. Namely, what do we want to understand here by “costs”? Merely *the technical conditions of production* or rather *the value sum* which the producers goods to be expended represent? The production of a jacket costs, for example, 2 meters of material and 7 hours of labor, and a meter of material is worth 5 fl. and an hour of labor is worth 20 kreuzer. Now do we want in that question concerning the explanation of the value of the jacket to refer merely to the technical fact that its production costs 2 meters of material and 7 hours of labor, or also to the further fact a meter of material is worth 5 fl., and an hour of labor, 20 kreuzer, and thus the whole production expenditure is worth 11 fl. 40 kr.?

The answer will come out precisely the opposite according to whether we pose the question in the one sense or in the other. If we refer to the *value* of the cost goods, this, of course, will admittedly be determined by the marginal utility of the cost goods. “Costs” in this sense, therefore, on principle, cannot be used in the explanation of marginal utility, for they themselves must first be explained on the basis of the latter. In the whole chain of explanation, their place is between the value of products and marginal utility, not before the latter. They are less “ultimate” than it.

If, however, we want to refer only to the technical facts of production, then it is entirely correct that these help to determine marginal utility. For example, the less the material and labor

that the production of a jacket costs, the more jackets, of course, can one produce with the means of production available. Thus the more completely can the need for clothing be satisfied. And thus, other things being equal, the lower will be the marginal utility of a jacket. The technical conditions of production are, therefore, to be sure a cause of the value of goods lying further back, a “more ultimate” cause, than marginal utility.

[355] However, one may not ignore the fact that these technical conditions of production are simply not the “costs” that function as a regulator of value. As we already know and as Dietzel himself expressly admitted concerning my inquiry, the value of goods is simply not regulated by means of technical production relationships or by means of technical production expenditure—for example, by means of the quantities of labor or raw material to be expended—but depends on the *value sum* of the production expense.⁶⁵ The technical side of production is in and of itself by no means a complete, self-sufficient regulator of value but only a single, secondary determinant of value, requiring other cooperating determinants to complete the determination of value, for example, the state of demand. In the face of the same technical outlay the value of a product can indeed be extraordinarily different, depending on the demand for the product and also for the cost goods to be expended, for the marginal utility and value of the latter is accordingly different.

What follows from this for our question? — If one applies it to costs in the sense in which they could constitute a complete regulator of value, that is, in the sense of costs as a value sum, they appear as less ultimate than marginal utility. If, on the other hand, one applies the

question to the technical production outlay alone—which, to be sure, lies further back in the chain of explanation than marginal utility—then this is again not the “regulator of value” to which one refers in the law of costs. Therefore, in no case are those costs that Dietzel has governing value in his law of costs more ultimate than marginal utility.

However, where does the so alluring contrary appearance, of which I spoke at the beginning of the section, come from? After the discussions that have been given, that is very easy to get to the bottom of. It comes simply from a very seductive dialectical confusion of the two meanings of the word “costs.” Namely, first in connection with this term one thinks only of the technical conditions of production and gains for it the entirely correct impression that it is an elementary fact, a more ultimate fact than marginal utility. And then, unobserved, one slips in the other meaning—costs as a value sum—and erroneously claims the ultimateness certainly due the technical conditions of production for costs the “regulator of value.”

I believe that Dietzel too has succumbed to this, as I have said, very seductive dialectical illusion. He repeatedly reproaches us marginal-value theorists with the “peccatum originis” [original sin] (“Wert- und Preistheorie,” p. 686, note 4) that in the development of our theory we “always think only of finished products, never of the conditions of production,” and that we calculate with *given supplies* of products. [356] For one really knowledgeable in our theory, I do not first need to refute this reproach, which, incidentally, Zuckerhandl has already rejected.⁶⁶ For my part, I want merely to append an observation to it. Namely, is not, on the contrary, a fatal

⁶⁵ See above, p. 331.

⁶⁶ “Die klassische Werttheorie und die Theorie vom Grenznutzen,” in these yearbooks, new series, vol. 21, pp. 514 f.

“peccatum originis” present in Dietzel? The older dogma was fond of conceiving of “costs” as a given magnitude fixed by the prevailing conditions of production technology and the like and therefore not to be explained further. In other words, it adhered to what we have designated above as the first variant of the cost theory.⁶⁷ Dietzel too apparently grew up in this conception. Later, to be sure, he learned the theory of marginal utility, and took over from it, among other things, the recognition that the value of producers’ goods is also an element of the height of costs and of course, an element that is in no way given but is first itself to be explained on the basis of marginal utility. However, he professed this recognition more with his lips than he actually took it over in flesh and blood. It is scarcely a mere accident that in his first polemical treatise the influence of the *value* of producers’ goods on the height of costs was passed over in silence in the overwhelmingly most numerous passages and merely the quantity of labor and the like presented as determining value. In answer to my explicit question, Dietzel to be sure, in his second treatise, has now conceded the decisive role of the value of the cost goods, an admission that is incompatible with regarding costs as an already given magnitude. However, inwardly he has hardly entirely freed himself from that accustomed conception and gladly falls back into it, and especially, I believe, on the basis of it the impression has remained with him—as a real peccatum originis—that in the relationship between marginal utility and costs, costs must be the more solid, more ultimate element.

⁶⁷ See above, pp. 380 f.

VII.***The Relationship Between the Value of Producers' Goods
and the Value of Products***

As already often noted, facts are not really in dispute between Dietzel and me. Indeed, we both equally teach what are matters of fact in the law of costs. Rather the dispute turns on the course of the causal connection: where in the relationship between costs and marginal utility to seek the cause and where the effect? With this question stands another in such a close relationship that it is almost only a different form of the same question. Namely, the question, which causal relationship exists between the value of [357] producers' goods (which is identical with the height of costs) and the value of their products (in which, according to our theory, the influence of marginal utility is initially reflected)?

Concerning this subject, which he treated less explicitly in his first polemical treatise, Dietzel now brings in reply to the second question of my "Zwischenwort" a series of positive statements which are extraordinarily characteristic for his conception. To begin with, he polemically turns against the assumption ("Wert- und Preistheorie," p. 693) that in the reciprocal relationship between the value of producers' goods and that of products the position of cause must be assigned to one definite element and the position of consequence to the other. Rather both reciprocally cause one another. Each is the cause of the other. "No producers' good has economic value whose products (consumers' goods) would be worthless—objects (forces or materials) useless and present in superabundance. Thus the value of the product appears as the

cause of the value of the producers' good. No product (consumers' good) has economic value whose producers' good (or whose producers' goods) would be valueless—objects (forces or materials) useless and present in superabundance. Thus the value of the producers' good appears as the cause of the value of the product.”

And, indeed, this relationship of reciprocal causation allegedly exists everywhere, not merely in the case of goods subject to competition and reproducible at will, but also in the case of goods that are scarce or monopolized. The producers' good “Johannisberg” vineyards too, for example, derives its value from the value of the product “Johannisberg” wine. No less, however, does the product “Johannisberg” allegedly derive its value from the producers' good “Johannisberg” vineyards. Actually, the law of the *formation of value* is allegedly the same for all categories of goods. The difference between goods subject to competition and goods that are monopolized allegedly comes into play only in the question of the *measurement of value*.

First, from the content of these comments, I take with pleasure the knowledge that Dietzel assumes an identical course of the causation of value for goods reproducible at will and for goods that are scarce, and acknowledges a uniform law of the formation of value for both categories of goods. This is entirely our view too. However, the question is indeed allowed of why Dietzel makes such a different application of the identical facts? If the causal relationship between the value of cost goods and of products is professedly identical for both categories of goods, how does Dietzel come to describe costs as the ultimate cause and ultimate regulator of the value of products in the case of goods reproducible at will, but not also in the case of goods that are scarce? That he has not done this in the case of the latter is indeed very understandable,

for the facts of economic life here do not allow even an appearance of this kind to come up. If, however, costs notoriously do not exercise a determining power over the value of goods that are scarce, and Dietzel himself explicitly concedes that in the case of goods reproducible at will, too, no [358] other causal relationship exists between the value of cost goods and their products than in the case of scarce goods, would he then not logically have also had to refrain from ascribing to costs an ultimate regulating influence on the value of products in the case of goods subject to competition?

Dietzel to be sure seeks to help himself by means of a subtle distinction between the formation of value and the measurement of value. The causes of the law of value formation are the same for both groups. The measure or the height of value, however, is determined for them by different causes. In the case of goods that are scarce, by means of subjective perceptions of utility; in the case of goods subject to competition, by means of costs.

Isn't it, however, a dubious theory which calls upon other causes for the measure of a phenomenon than the ones to which the phenomenon owes its existence? There is indeed no causation of a phenomenon in the abstract, but the same cause or the same complex of cooperating partial causes⁶⁸ which bring a phenomenon into existence at all always bring it into existence also with a definite strength corresponding to the efficacy of the cause. There are not two separate causes for the fact that a phenomenon occurs in general and for the fact that it occurs *as it does*, no more than there are phenomena without strength or qualities. But just as a

⁶⁸ Under which, factors that obstruct find their place as much as factors that facilitate.

force or cause never operates in the abstract but always with a definite, concrete strength, the phenomenon caused also immediately receives at the same time its measure corresponding to the strength of the cause. The power of attraction of stone and earth causes (in conjunction with air-resistance, which, indeed, could also very much hinder the occurrence of the phenomenon of falling, for example, in the case of a balloon or a feather!) not merely the fact that the stone falls in general but that it falls with a very definite velocity. The mixing together of moist and cold airflows never causes it to rain merely in the abstract, but it always causes a rain corresponding in strength to the set of facts that causes the rain. Coloring a material with a blue dye never causes merely that the colored material becomes blue in the abstract, but that it necessarily becomes blue in a definite shade, and so on.

In exactly the same way, the causes to which value owes its origin at all never bring about a value without magnitude, but also always a value of definite strength or height. Utility and scarcity, which, indeed, according to Dietzel too are the causes of the existence of value, are always effective in definite degree. And to that degree it is also already determined that their product, value, comes into existence with a definite height. One may not be content with saying that Johannisberger wine has value because it is good tasting and scarce, but it is obvious that it also owes the degree [359] of its value to the degree to which the causes of its existence are present and operate. Its value is higher because the Johannisberg is very good tasting and very scarce, and without question it would be lower if the Johannisberg were, with the same good taste, less scarce or with the same scarcity were less good tasting. If Dietzel now concedes that the causes of the formation of value in the case of goods reproducible at will are exactly the

same as those in the case of the scarce good *Johannisberg*, then, on the basis of what has been said, it is astonishing in the highest degree when he nevertheless introduces heterogeneous bases of explanation for the measure of the value of the two, which measure rests on the same causes!

However, his statements that have just been outlined contain things that are still much more astonishing. Namely, concerning the causal relationship existing between the value of producers' goods and that of their products, Dietzel teaches in substance that both reciprocally determine each other—which in a certain sense to be explained later is not incorrect—then, however, also *that each is the cause of the other*. According to Dietzel, the value of the product is the cause of the value of the producers' good and the value of the producers' good in turn is the cause of the value of the product.

If it is meant literally, I consider this proposition to be a mortal sin against all scientific logic. Blatant circularity in explanation is elevated to nothing short of a principle of explanation. We inquire, for example, into the causes of the value of the good "corks." What is Dietzel's answer to us? Corks have value because the cork wood from which they are made has value. Now, however, the value of cork wood is by far not an obvious ultimate fact. Therefore, we must ask further: And why does the cork wood have value? To that question Dietzel answers: because the corks which are made from it have a value! Will anyone regard that as a real explanation of the value of both goods? Or will anyone want to agree to the proposition that one and the same phenomenon⁶⁹ can at the same time both precede and follow another—precede as its cause, and

⁶⁹ For the attentive reader, I need hardly observe that one must indeed distinguish between a reciprocal causation that allegedly takes place literally between two definite concrete phenomena and one which occurs only between

follow as its effect?

[360] Thus, it is obvious that the causal relationship between the value of products and their producers' goods cannot be that which Dietzel states with the formula of mutual causation. However, where does the error lie which leads Dietzel to his logically impossible result?

That can be discovered very quickly, if we consider the arguments that Dietzel gives for his above claim. "No product (consumers' good) has economic value whose producers' good (or whose producers' goods) would be valueless—objects (forces or materials) useless and present in superabundance. Thus the value of the producers' good appears as the cause of the value of the product." What would Dietzel say to the following conclusion: "No summer occurs that was not preceded by a spring; thus spring appears as the cause of summer"? This conclusion is obviously premature: the premise that there is no summer without a preceding spring justifies only the pronouncement that both stand in some necessary causal relationship, but by absolutely no means that precisely the preceding phenomenon, spring, must be the cause of summer. Rather it can just as well be the case that the two inseparably connected phenomena are the common consequence of a third cause.

Now precisely this is the case with the value of products and producers' goods. The

two types of phenomena. The latter form of "reciprocal causation"—which strictly speaking to be sure cannot be so named—is entirely conceivable; the former, never. For example, acorn and oak can very well reciprocally cause one another in the sense that an oak tree comes from an acorn and an acorn in turn comes from it. Let it be noted, however, a *different* acorn than the first. Or poverty and drunkenness can reciprocally cause each other in the sense that, for example, someone takes to drink because due to his poverty more noble gratifications were not accessible to him, and in return remains poor because the inebriety impairs his economic ability. Of course, however, here the poverty caused by the inebriety is the poverty of a different period, therefore, in conclusion, a different concrete phenomenon than the poverty which caused the inebriety. Dietzel's claim to the contrary would find its replica in the claim that an oak is the cause of the same acorn from which it grew!

effective cause of the value of the products is not the value of the producers' good, but the technical fact standing behind this, namely, that the producers' good is not present in superabundance (to which Dietzel alludes with the addendum "objects useless and present in superabundance"). This fact—in connection with the further fact, which is by no means to be overlooked, that a certain want for the products concerned is present—causes the phenomenon for both goods, product and means of production, that the satisfaction of some set of wants depends on them, that they acquire value. One may not say, the product has value because the means of production have value, but only: the product has value on the same factual basis on which the means of production have value. Moreover, beyond this the further fact proves true that the transmission of value to the means of production from the facts that ultimately cause value takes place only through the value of the products. It cannot reach the former if it has not first reached the latter. The position of the two in the causal connection is not one of parity. Rather the value of the product constitutes an indispensable causal link in the emergence of the value of the means of production.

That this is the true course of causation can be simply and decisively shown by means of a practical test. Such a test shows, namely, that products can indeed retain their value even though the means of production lose it. However, it is not possible that the means of production retain their value [361] when their products have lost it. Let us imagine for a moment that people forgot how to make iron from iron ore. Without doubt the ore would thereby be degraded into a useless and valueless substance. However, would the value of the existing iron implements previously produced from iron ore disappear with it? Far from it! They would probably

experience a considerable increase in their value.

Now let us reverse the assumption. Let us imagine for a moment that we would forget the use of all iron implements, which therewith would no longer be useful to us. It is obvious that in the same moment not merely all iron implements but also all ores from which one can produce iron would lose their value. Or a different example. No practical man will doubt the fact that, for example, by means of forced purchases of bricks a rise in the price of bricks can be caused and thereby, as a further consequence, a rise in the price of the shares of brickworks. However, every practical man would laugh at anyone who, the other way around, would regard the forced purchase of shares in brick works to be an effective means of driving up the price of bricks. And yet these means would have to be effective, if in reality, as Dietzel maintains, the value of brickworks were the cause of the value of bricks, just as much on a par as the value of bricks is the cause of the value of brickworks!

I think these examples, which could easily be multiplied, sufficiently show that the new Dietzelian theory of the parity of mutual causation of the value of the means of production and products contradicts not only logic but also all factual experience. And there will indeed be only very few readers who would be inclined to repeat after Dietzel the proposition that the value of the Johannisberg vineyards is the cause of the fact that the Johannisberg wine has a value. Dietzel, incidentally, has also widely separated himself by means of this claim from the classical theory, which he undertakes to defend. For precisely the classical economists taught with the greatest emphasis the proposition that “corn is not high because a rent is paid” (that is, because the

producers' good use of land has a value) but "a rent is paid because corn is high."⁷⁰

VIII.

An Analogy

In itself it is a thankless task to argue about subtleties. It becomes doubly thankless when the subtle discussion must split up into many heterogeneous details. Now about Robinson Crusoe's scale of values; now about the different meanings of the [362] word cost; now about the differences between practical valuations and the theoretical explanations of these valuations; now about the relationship between the formation of value and the measurement of value; now about the true course of the causal connection within a group of phenomena standing in a most highly complicated association; and so forth.

For my part, I would gladly have avoided both the subtleties and the splitting up. However, it did not lie within my discretion to avoid them. I had to follow my esteemed opponent where he led me. All the more do I have the sincere wish, at least at the end, to return the subject from splitting up to unity and from abstract subtlety to graphic clarity. I want to try to do this by means of an analogy.

A locomotive pulls a number of cars, let us say four cars. What is the cause of the movement of the first of these cars, and what is the cause of the magnitude of its speed? I believe every reader will answer without hesitation: the cause is the locomotive and its speed. The car

⁷⁰ Ricardo, *Principles of Political Economy*, Ch. II.

moves because the locomotive moves, and it moves rapidly or slowly when and because the locomotive moves rapidly or slowly. And why does the second car move? Directly, because the first car, with which it is coupled, pulls it; indirectly, because the locomotive pulls it. And the third and the last car move as well, directly, because in each case the next preceding car pulls it; indirectly, because the locomotive pulls it. I think that is clear and simple.

Now, however, somebody comes and tells us that nevertheless the matter actually behaves differently. Namely, if the second car were to stop, the first car, with which, indeed, it is firmly coupled, could not move from the place. Only when and because the second car moves, therefore, can the first car move and, to be sure, also not faster than the former. Consequently, the true cause of the movement and speed of the first car is to be sought in the movement and speed—of the second car. In same manner, the second car finds the cause and the measure of its speed in the movement of the third car. The latter, in the movement of the last car. And the last car? For this one, to be sure, it must be conceded that it in its turn is set in motion by the locomotive.

What will we reply to this somebody? I think we will very curtly refer him to logic and the facts. To logic: for if it is conceded to us that the last car is set in motion by the locomotive, and if it is further conceded that it is brought into connection with the locomotive and its power to induce motion only through the cars stretched out in front of it, then it is indeed clear as day that the car coming after cannot pull the car coming before, but that the opposite course of causation is the actual one. To the facts: he should, indeed, make the test. If he uncouples the last car, the other [363] cars will continue moving nonetheless. However, if he uncouples the

locomotive, all will immediately stop.

Now, I believe that in this analogy I have given a completely accurate representation of the views of the marginal-value theorists on the one hand and of Dietzel's on the other. The locomotive symbolizes wants, that is to say, marginal utility. The first car symbolizes the final product ready for consumption. The second, its producers' or cost goods. The ones following, the producers' or cost goods lying further back. The coupling, the fact of being reproducible at will. The movement, the value. The speed, the size of the value. *We* have the locomotive marginal utility put everything in motion, the first and the last cars; and, to be sure, the last always by means of the first. Concerning the movement of the third car, for example, we say that the locomotive pulls it through the intermediary of the first and second cars. And this conception Dietzel calls an unnatural, artificial one, a superfluous "jeu d'esprit spirituel" ["game of intellectual solitaire"], a "terrible detour"!

He himself in contrast means to represent the natural way of conceiving the matter, when he has the value of the product governed by the value of the cost goods; these in turn, governed by the value of *their* cost goods, and so on; but the value of the final cost goods, governed by wants or marginal utility. In terms of the analogy: when he has the first car moved by the second; the second, by the third; the third, by the last car; but the last car moved by the locomotive! And to this, moreover, is now added the further claim that the cars mutually move one another—that is, not merely that the fourth car moves the third, but also that the the third car moves the fourth—and now, to be sure with special emphasis, the still further claim that the "ultimate" regulator of the entire movement of value is not the locomotive marginal utility, but the last

car—the costs!

We can carry the analogy with utility still further, however. Undeniably, the weight of the cars attached behind, even the last of them, for example, has a causal influence on the speed and movement of the locomotive itself. If the weight is great, the speed of the locomotive—and with it that of the cars—will be slow. If the weight is excessively great, no movement at all will be able to occur. Thus, we have to note a relevant factor with respect to the *cars* which really does causally influence the speed of the whole train—of the locomotive and of every car. However, does this fact give us a right to state that the *speed* of the last car is a causal factor in the speed of the locomotive and of the cars in front? That the locomotive travels quickly or slowly, because the last car travels quickly or slowly? Obviously not! We must not confuse the weight of the car with its speed. The *weight* is a true causal factor. However, even as such it by no means operates as the sole, ultimate regulator of the speed, but only as *one* factor alongside the at least equally important factor “power of the locomotive.” [364] But the *speed* of the last car is not at all cause, but effect.

Now what in the illustration is the weight of the last car in distinction to its speed, are in the economic world the technical or factual conditions of the cost goods in distinction to their value. If the supply of producers’ goods is so large that in the existing degree of production technique a large quantity of products can be obtained from them, then, in the face of a given state of wants, the marginal utility and with it the value of the first and of all following stages in the process of production will turn out to be relatively small. If the supply in relationship to wants is superabundant, then the marginal utility will stand at zero and no value whatever will

appear. But this set of circumstances—perfectly analogously—suffices to justify naming as cause of value only relevant *factual conditions* pertaining to production and the means of production, and, to be sure, never as sole cause or as self-sufficient ultimate regulator of value, but always only as partial cause of value, along side of the state of wants. The *value* of the cost goods, on the other hand, is, in the whole situation, as far as we have surveyed it up to now, not at all cause but effect.

However, let us finally go a step further. Our railroad train of locomotive and four cars does not move by itself. Rather, its last car is coupled to another railroad train traveling in the opposite direction. And thus it is moved backwards by the locomotive of the latter train attached at the opposite end. Now what is the causal relationship of the movement and speed of the four cars of our first train? Now, indeed, the previously “first” car moves because “the second” pulls it. This one, because the “third” pulls it. And the third car, because the “last” one pulls it. However, it is again just as clear that the last car by no means ultimately or by its own power determines the movement of the preceding cars, but rather that, acting merely as a mediate cause, it transmits the movement imparted to it by the locomotive of the second train that is coupled to it.

Here we have the full symbolization of the case, so frequent in practice, in which the “law of costs” really applies—of course, applies only in the sense that we attach to it, and not in Dietzel’s sense.

Namely, we have the image of the case in which a cost good serves not merely in the production of a single definite kind of product, but possesses multiple employments and derives

its marginal utility and value from one of these other employments. Then, as we marginal-value theorists have expressly shown and explained, the value of each of the types of “production-related” products, for example, iron rails, iron nails, iron pots, iron weapons, etc., is no longer determined independently, by the marginal utility which the type of product concerned [365] would have if one did not allow for its being able to be reproduced at will from a common cost good. Rather the marginal utility of the least valuable of the related products, the “marginal product,” sets its stamp upon all members of the production community, on the cost goods as on the final products ready for consumption, and, to be sure, on the last through the intermediary of the first.

The locomotive of the second connected train—the marginal utility of the marginal product—in completely normal fashion puts in motion the first car of this train. The first car, the second. The second car, the third; and so forth, until movement comes to the car which mediates the connection of the two trains coupled together in opposite position, to the last car of the first train, to the common cost good. From here on, the movement is backwards in its course. It is passed on through the last car to the next-to-last car; through the next-to-last car to the third-from-last car, and so on, to the locomotive itself—the marginal utility of the production-related end product—which likewise must conform in its movement and speed to the locomotive of the other train, which leads. What leads and moves here is always a locomotive, always a marginal utility. And the much discussed last car, costs, can pull or move something only when it in fact is not the last car, but is in the middle between two trains, which it serves to connect. Make it in fact the last car, disconnect the coupling, eliminate the multi-sided employment of the cost good,

and in the same moment its role in leading is at an end—in the analogy and in reality!

Here lies what is overlooked by Dietzel and all of his predecessors in the cost theory. They see only one part of the phenomenon—that the half of the train moving backward is pulled by its “last” car—and in premature generalization they ascribe to costs the power derived in truth from the other half of the train, as though that power belonged to the costs themselves. Dietzel's predecessors here deserve no other reproach than that they simply make no allowance for a certain fact they did not see. Dietzel's error, however, is a qualified one. For Dietzel already knows and occasionally even explicitly acknowledges that “costs,” that is, the value-sum of the cost goods, are themselves governed by the marginal utility of the marginal product. In order to be able nevertheless to maintain his thesis of the ultimate value-governing power of costs, he must then more than merely overlook facts. He must contradict acknowledged facts and his own statements. Or else, in order at least not to openly contradict them, he must have recourse to dialectical sleight-of-hand and tortured, artificial constructions.

These are the symbol, as it were, of the whole of Dietzel's doctrine. We encounter the same spirit by turns in different forms. Now, when Robinson Crusoe in his value scale bases his judgment of value “in concreto,” to be sure, on the marginal utility of the cost goods, but [366] “in abstracto” again gets around it. Now, when Dietzel, in his description of price formation has not merely the different persons coming to the market but also one and the same person momentarily employ opposite principles of valuation.⁷¹ Now, when different causes and laws are

⁷¹ “Wert- und Preistheorie,” pp. 696 ff. “Only the subjective valuation of the sellers rests directly on the costs of production; that of the buyers, on the other hand, on utility” . . . “Once the good to be exchanged has been brought to market, the utility

called upon for the “formation of value” and the “measurement of value.” Now, when—last not least—in the same breath, the value of products is explained as a cause of the value of cost goods, and the value of the cost goods in turn, as the cause of the value of the products.

Precisely this last pronouncement is significant in the highest degree. Not without good reason, in my “Zwischenwort” I had invited Dietzel to explain himself more clearly concerning the causal relationship between cost value and product value—which, indeed, is a touchstone for the whole conception of the subject of disagreement. And I confess that I was very eager for Dietzel’s answer. Would he explain the value of the cost goods on principle as the causally prior member? Then he would have been in contradiction with the proposition already admitted by him, that the value of the cost goods themselves is determined by means of their marginal utility. Or would he explain the value of the products as causally prior? Then he would have to retract his proposition of the “ultimateness” of costs and with it his whole polemic against us. Well, Dietzel has managed to retract nothing, neither the governing of costs by means of marginal utility nor the ultimateness of costs. However, in order to have to retract nothing, he has had to make no less a fabrication than that of two trees each is the taller, of two runners each is the faster, of two hours each is the earlier, and of two causally connected magnitudes each can be the cause.

Dietzel once admitted with commendable impartiality that all the numerous attacks that had been directed against the theory of marginal utility until now, by Neumann, by Scharling, by

valuation takes the place of the cost valuation *for the duration of the market transaction* (even for the sellers)”. . . “With rising and falling prices the utility valuation of the sellers rises and falls.” Compare, above, pp. 343 f.

Schäffle, among others, remained ineffective.⁷² I hope to have awakened the impression that in his attempt to lead the rival cost theory to victory against the theory of marginal utility, Dietzel too has been just as unsuccessful. Will perhaps a future advocate of the cost theory be more successful?

[367] I dare to prophesy the opposite with certainty. The times are past in which one could naively teach the cost theory without getting involved in more precise explanations concerning in particular the origin of the value of the cost goods itself and the laws determining its magnitude. Whoever begins, however, really to explain, instead of merely assert, will find all of the logical and factual rocks in his way on which Dietzel's explanation has run aground. And may he employ the art of navigation and steering as much as he likes, he will find the way out from the labyrinth of rocks under no other sign than we marginal-value theorists have sought and found it. The simple truth remains, indeed, that it is ultimately a locomotive which pulls the last car and not a last car that pulls the locomotive!

⁷² "Werttheorie," p. 572, 578.