THE AUSTRIAN SCHOOL AND THE THEORY OF VALUE

I

THE historical school of political economists in Germany, and the Austrian, or as it is frequently termed, the abstract, school are more nearly related than is at first sight apparent. Both follow the spirit of the age in rejecting speculative theory and in seeking their highest laurels on the field of observation. In art, as in science, naturalism must be distinguished from truth to nature, and we Austrians, while we have certainly no wish to be disciples of naturalism, are wholly set on being experientialists. This is what I would remark in the first place to the readers of this Journal, in complying with the Editor's kind invitation to give some account of our theories. And on this point the method we employ must not be suffered to mislead. M. Léon Walras says very happily of this method, which he himself employs, that it idealizes. It does not copy nature, but gives us a simplified representation of it, which is no misrepresentation, but such as sharpens our vision in view of the complexities of reality,—like the ideal picture which the geographer draws in his map, as a means not to deception but to more effective guidance, he meanwhile assuming, that they who are to profit by the map will know how to read it, *i.e.*, to interpret it in accordance with nature.

The investigations of the Austrian school have not been restricted to the subject of value, but embrace the most comprehensive theories on economy in general. Accordingly I must confine myself to as brief a survey as may be of our views on value. I could not do justice even to this task in the space kindly allotted to me, were it not that I can find resource in referring English readers to Jevons. Thus I can omit a good deal from Prof. Menger's theories, which, while to us they are fundamental principles, are in England known in substance through Jevons's 'theory of utility' and 'theory of exchange.' I can further refer my readers to Dr. Bonar's excellent essay on 'The Austrian Economists' in the *Quarterly Journal of Economics*, October, 1888. An account of the Austrian school by Dr. Böhm-Bawerk has appeared in the *Annals of the American Academy*. I regret that I have no space for the numerous comparisons which might be drawn between our views and the remarkable developments of the theory of value in England since Jevons.

The works to which I shall chiefly refer in what follows are Professor Menger's *Grundsätze der Volkswirthschaftslehre*, 1871, Dr. Böhm-Bawerk's *Capital und Capitalzins*, vol. i. 1884, vol. ii. 1889 (of which the first volume has been recently translated by Mr. Smart and the second volume is about to follow); also by the same author, 'Grundzüge der Theorie des wirthschaftlichen Güterwerths' in the *Conrad'sche Jahrbücher*, 1886; and Professor Sax's *Grundlegung der theoretischen Staatswirthschaft*, 1887. Besides these my own works, *Ueber den Ursprung und die Hauptgesetze des wirthschaftlichen Werthes*, 1884, and *Der natürliche Werth*, 1889. The *Untersuchungen über die Theorie des Preises* by MM. Auspitz and Lieben is on Jevonian lines.

II

The value of commodities is derived wholly from their utility, but the utility they afford is not wholly convertible into value. Commodities which may be had freely in abundance are of no value, however much utility they may afford. But those commodities too, which, because they are not to be had in sufficient quantity, are valuable for the sake of their utility, acquire a value which as a rule is less than their utility. The harvest, to which a nation owes the maintenance of so many millions of lives during a whole year, has a value which is no approximate expression of the service rendered. Nor ought it to be; the value should express, not the total utility, but only a part of it, 'the final degree of utility,' as Jevons said, the 'marginal utility' (*Grenznutzen*) as we say. The value of the harvest is reckoned by multiplying the supply, the quantity of in-gathered harvest-units, by the marginal utility. All the utility above the margin, all 'surplus utility' (*Uebernutzen*), including precisely that which relieves necessity in the highest degree, is neglected and finds no place in value at all.

I will tarry no longer over these propositions familiar to every English student of Jevons. The Austrian school, it is true, assigns to the propositions a slightly different meaning and a slightly different basis; to this point I shall revert later. For the present I will examine by the light of this principle of value a few of its intricacies.

The agents of production, land, capital, and labour, derive their value from the value of their products, ultimately, therefore, from the utility of those products. As stock is valued by the expected dividend, so is the field by the expected crop. A simple idea; yet thereby hangs one of the weightiest problems. Land, capital, and labour yield a return only by their combined agency. Now what is the clue to the distribution amongst the separate effective factors of this joint return? The comparison with stocks and dividends is of no further use to us here, for one share in an investment is like another, while land, capital and labour are diverse. Even if labour alone be considered, the difficulty still confronts us. How are we to divide a machine, constructed by a number of labourers according to the instructions and under the direction of the inventor, so as to refer every part to its true originator?

Theorists have hitherto set down this problem as insoluble, and insoluble it is as commonly stated. It is impossible, to put it briefly, to give a reply to the question as to which part of the child is derived from the father and which from the mother. The question in itself is an absurdity. But it is just in this sense that the problem does not admit of statement, if it is to be correctly stated in the light of practical economy. What is required in economy is, not physical division of the product amongst all its creative factors, but the practical *imputation* of it, imputation in the sense used by a magistrate in speaking of a legal 'charge.' A sophist might maintain the impossibility of determining, amongst the thousand conditions, without the conjunction of which a murder could not have been effected, what share in the deed fell on the murderer; the judge, unperplexed by such scruples, sifts those thousand causes solely to get at the responsible author, and charges him with the whole of the deed. Who would accuse him of offending nature and logic thereby? And as he is concerned with the responsible author, so in economy, it is always amongst the thousand implicated causes with the practically determining factor that we have to do.

A field cultivated with the same expenditure of capital and labour as another field of greater fertility yields a larger return. This surplus crop is by no means produced by the field alone, capital and labour as well are wrought into it; nevertheless every agriculturist will rightly charge not the capital nor the labour with the crop, but, simply and solely, the better field, the value of which is raised by just the amount of the surplus. Such a judgment, so far from being illogical, embodies a great practical truth. In imputing the return by this method, I am enabled to find the correct adjustment of the economic measurement, which has to be carried out in the case of the commodities of production. It would, for example, be impossible for me to decide whether to purchase a machine and what price to consent to give for it, if I did not know how to calculate the work it would do for me, *i.e.*, what share in the total return to my undertaking should be imputed to it in particular. Without the art of imputation there would be no business calculations, no economic method, no economy, just as without the system of criminal charge, there could be no society. Fortunately the practice of it is universal, everyone, be he never so stupid and inexperienced, applying it though with varying degrees of acuteness.

These rules of economic imputation as used in practical life the Austrian school has endeavoured to connect by way of theory. The principle under which it formulates them points back to its general principle for estimating value. If I say 'free commodities have no value for me,' this means that I do not 'charge' them with the utility which they afford. The reason for this is, that I do not feel myself to be dependent upon them; if that supply which happens to be next to hand were for some reason or other to be withdrawn from my possession, I could take any other quantity from the abundance everywhere about me and use it. I impute utility only to those commodities which are not to be had in profusion, and on which I feel myself dependent in consequence, I meanwhile reflecting, that with every portion lost from my possession I lose a definite utility not to be had without it. Now the agriculturist, in losing a cow from his yard, does not forfeit with her the whole return on his farming, but suffers only a certain diminution in it, just as in the opposite event of his introducing some improved machinery he gains a certain increase. In these diminishing and increasing returns, varying with the variations in productive combinations, the principle of imputed returns finds its simplest elucidation, notwithstanding the many difficulties arising by the way. Space fails me to explain my meaning more precisely. I will only specify further, that in the particular instance account must be taken of supply, demand, circumstances of allied products, technical progress, &c., in short of all the well-known conditions, from which experts are able with so much success to infer what importance to attach now to this, now to that, element in production.

The most momentous consequence of the theory of imputation is, I take it, that it is false, with the Socialists, to impute to labour alone the entire productive return. Land and Capital as well must find recognition as collaborating factors in production, from the point of view of practical economy; excepting the case of their being available in superabundant quantities, which, however, can only be true of Land. The fact of fertility alone does not constitute an adequate condition for imputing rent to land, any more than utility as such makes a commodity valuable. Productive imputation requires the conjunction of utility and scarcity. But in the case of land, if scarcity be assumed, the charge of rent arises, whatever the form of land-tenure, and whether the produce is sold in the market or not. Even in a socialistic state a surplus reaped from better soil must be taken into account as soon as inferior soils are cultivated; the occupier farming the better land will be made responsible for a larger yield in view of the nature of the soil.

A further complication of value is afforded by the cost of production. Experience shows, that in very many cases the value of products is less than equivalent to the utility they bestow, because it is adjusted to the measure of the expense required for their production. Hence a great many theorists have concluded that value is not derived from utility, but is governed by another principle, viz., cost of production. But what is the cost, and how is it measured? The readiest way of expressing in figures the expenditure of materials and labour required to produce any article is to give the supplies to be consumed, the number of working days, the number of tons of coal, the time during which machinery is at work, the figure of each of the infinite number of items used in the production, and so on. This runs up a long list, but the items are incapable of being added up; these magnitudes are as mere bulk incomparable, incommensurable, and cannot be concentrated in one term. To sum them, every item must be put down in terms of value—but how is this to be determined? We can tell at once. The value of the productive elements is determined on the ground of utility as afforded by the products, and this holds good of the labour no less than of the coals, the machinery, and all the other means of production. To insist then on cost of production is ultimately to insist on some utility. There is no new principle to be discovered, none save utility.

Estimation of cost shows us in each particular case what utility the productive elements would confer if they were consumed otherwise than in turning out the produce desired. It shows us, for example, that the utility of the materials and labour, by the aid of which an important telegraphic communication is set up, would have amounted to very much less in those other uses, from which they have been withdrawn in order to this. From this however it follows, that it is impossible to estimate the value of the communication as highly as its own high utility would absolutely warrant, since it can only be,—and precisely if it can be,—set up at the much smaller sacrifice of that utility which is involved in the cost of production. This extraneous utility is in this case the 'marginal utility' which affords a measure for the value. To value a product by its cost means then to impute as much utility to it as is to be *imputed to all its productive elements taken together.* Taken thus, products present themselves not merely according to their sources, but according to their value as well, as *the syntheses of their productive elements.* That product which requires them in greater quantity has the greater value. Consequently cost of production determines the *relative* value of produce, while the *absolute* value of the commodities consumed in the cost is determined by the value of the forthcoming produce.

Labour, like land and capital, owes the reward imputed to it not only to its productiveness, but also to its scarcity, *i.e.*, to the fact that it is not to be had in free abundance. Labour, however, has yet another motive force in itself, by which it can influence the estimation of value. Everyone is personally concerned to evade the toils and perils of labour. Value may accrue to products from this consideration, inasmuch as the man who possesses them is spared the toils and dangers of acquiring them. This is Ricardo's fundamental idea, and on its development he lavished all the keenness of his intellect. The Austrian school has not passed carelessly over this motive force and its theoretic expositions, but has devoted a very thorough-going attention to them. On this occasion I shall limit myself to a single comment. If Ricardo's idea were correct, and commodities were, in the strict sense of the word, of no importance to us, except that the possession of them saved us labour, which we should otherwise have to apply elsewhere, then the difference between rich and poor would perforce be quite other than what it unfortunately is. The rich man's privileges would consist only in possessing those things which the poor man will also possess, but which he must first give himself the trouble of acquiring; his prerogative would lie, not in greater enjoyment or a more secure existence, but in greater ease. What nation would not eagerly exchange the facts of life for this Utopia!

Finally there are further complications involved in the nature of land and capital. The first problem confronting us here is that of the rent of the soil, and it is not the most difficult. Ricardo's theory of rent is nothing else than an application of the theory of imputation, and that to the simplest conceivable case. Ricardo discloses the reasons why certain differences occurring in the returns from the cultivation of land must be imputed to just those portions of the soil in relation to which they arise, as constituting *their* share of reward, as rent. The value of the soil presents a much harder problem; the same is true of interest and the value of capital. Concerning these I shall say nothing, for special reasons, till the next section.

By our investing a certain amount of capital during a certain time in a certain product, we deprive ourselves of the interest which some other investment of our capital would fetch. The sacrifice of utility which we make in production consists therefore not only in the consumption of capital, but also in the sacrifice of interest, which is larger in proportion as the capital is larger and the period of investment longer. Accordingly, the current interest for the given interval of time is to be reckoned in the cost of production, and determines, together with the other elements of cost, the value of the products. I will not touch now on the knotty question, whether rent, too, is to be reckoned in the cost of production.

It has been objected that interest is a surplus of profit over expenditure, that it is conditioned by the value of the products and cannot, therefore, itself determine the value of the products. But is not the value of the productive commodities also conditioned by the value of the produce? And yet we say that it, as cost value, itself jointly determines the same. Equally are we entitled to say the same of interest. The value of iron depends on the value of iron products, but the relative value of the iron products is determined by the mass of iron required. The rate of interest depends upon the value of the goods, but the relative value of the goods is determined by the quantity of capital required and by the length of time during which it is invested.

III

We have asserted that the value of capital is based on the value of the produce into which capital is transposed. Experience does not wholly verify this theory. The sum of 105 gulden, which I am entitled to demand after a year's interval, constitutes the base on which its capital value is reckoned, but that value is not an equivalent amount. It is reckoned as somewhat less, deduction being made for interest. How is this deduction justified? In this way does the Austrian school state the problem of interest, the solution of which is essential to the complete solution of the problem of the value of capital.

The problem of the value of land moreover stands in connection with it. A piece of land contains for its owner the promise of rent for an indefinite number of years, and therefore its value ought to be equal to the sum of this whole series of years, which might even be taken as infinite. Actually, however, the value of land is rated much lower, viz., as the product of the annual rent multiplied by twenty, thirty, or some such shorter term of years.

The Austrian school does not maintain its unanimity over the theory of interest. As it is impossible for me to set forth here all our attempts to explain it, the reader will forgive me if I merely set forth my own. I can the more readily venture on such a course in that our several theories, although they do not thoroughly harmonize, are nevertheless mutually related like variations on the same, or similar themes; while the theory of Dr. Böhm-Bawerk and that of his opponent Prof. Menger are accessible to the English public in the translation of 'Capital and Interest,' by Mr. Smart.

I start from the notion of imputation. A portion of the product must be assigned to capital. But of this share we must first replace as much of the capital as was consumed. Now experience shows that this being done, the reward of capital as a rule is not exhausted, a surplus of clear profit remaining over. That capital is in this sense productive is just as truly a fact of experience as that the soil always brings forth fresh produce.

I ask the reader to note that hitherto I have spoken only of produce in kind, and not yet of its value. The aggregate gross income of capital, considered in kind, contains in itself the replacement of capital in kind, besides a surplus produce, viz. net profit. If the total capital $= x$, and the net profit $= 5$, then, assuming that all the capital is consumed, the total gross produce is $x + 5$. But if this is so, if the total produce is greater than was the total capital, then its *value* must also be greater, and that by just the amount of net profit. The value of 100 items must be less than that of 105, just as that of the field cleared of its harvest must be less than the value of field *plus* crop. The difference between the value of capital and the value of gross profits can only disappear if capital ceases to be productive and yield profit.[1]

From these considerations the following conclusions emerge :—

1.—The value of circulating capital is found by *discounting*, *i.e.*, by deduction of interest from gross income.

2.—If a capital of 100 can after a year be converted into 105, then is a sum of 100, which can only be claimed after a year, of less value than 100. Future goods have, therefore, less value than present goods.

3.—The capital value of a perpetual rental may be found by summing the several instalments, but only after their future value has been reduced to present value by continuous discounting. An abbreviated method for arriving at the same result is that of *capitalization*, *i.e.*, the multiplication of the yearly rental by a figure, the key to which is derived from the current rate of interest, *e.g.*, if this be 5 per cent., multiply by 20. This abbreviated procedure yields mathematically the same result as the longer method of discounting interest and compound interest.

This gives us, besides, the rule for reckoning the value of land.

4.—The value of fixed capital is reckoned by corresponding combinations, either through discounting or capitalizing, attention being given to the principle of amortization or sinking fund.

IV

Value is, in the first instance, estimated by every one from a personal standpoint as 'value in use.' In the exchange of commodities, however, these individual estimates join issue, and thence arises price or 'value in exchange.' Prof. Sax explains price as the average of individual estimates of value; in the opinion of the other Austrian economists it obeys another law.

The maximum price which the consumer can ever afford to give does not exceed what he, according to his own estimate of money, looks upon as the full equivalent of the value in use which the commodities he is buying will have for him. And if he wishes to buy several items of the same commodity he measures

[1] This explanation of interest is valid only in the case of 'producer's capital.' Interest on emergency-loans or on principal lent to the spendthrift require to be otherwise explained. Here we have the debtor, by reason of distress or carelessness, setting more store by the goods of the present than by those of the future, and utterly regardless of any expected net profit; hence his promising for a certain supply of present, a larger supply of future, cash.

the value of an item by marginal utility. A wealthier purchaser therefore, whose need is equally insistent, will be able to afford a higher price, since he in his pecuniary estimates will equate with the same value in use a larger sum of money. In practice, however, even the wealthiest of purchasers will consent to this higher price only if he must do so in order to keep off less wealthy bidders, who else could take the goods out of the market. Yet if so much of the commodity is offered, that even for lower bidders something is left over, the price must be adjusted to their estimates, in order that everything may find a sale; and then, since the price in the same market is the same for all buyers, the bidders of greater purchasing power pay less than what they by their estimates of money and goods were ready to give. The more goods there are, the deeper must be the strata of population having lower money-estimates of goods, who are thereby admitted to purchase. That money-equivalent, which obtains with the last group of buyers thus admitted for the last item bought (viz., of a commodity of which a number is always bought), and which determines the price, we may call the marginal equivalent.

Thus we see exchange value and price following the law of margins like value in use, with this qualification, that they are determined directly, not by marginal utility but by marginal equivalence, in which, not only supply and demand, but also the wealth of the purchasers is taken into account. Rare articles of luxury, *e.g.*, precious stones, fetch very high prices, because the rich contend for them with the poor and the richest with the rich. Stock goods supplied for imperative needs command very low prices, corresponding to the purchasing power of the lowest strata of the population. According to the economic stratification of any given nation, we may reproduce in terms of money the marginal utility of stock commodities by a very low equivalent, and that of articles of luxury by a very high equivalent. Hence from prices as such we can draw no inference whatever as to the national economic significance implied by commodities, in virtue of the relation of their supply to need as such; the picture they reveal is distorted, because it is unequally projected. Prices cannot be taken without qualification as the social expression of the valuation of commodities; they are the results of a conflict waged over those commodities, in which power besides need, and more than need, has decided the issue.

Production follows prices. That which can be sold dear is produced more eagerly at greater cost in larger quantities. To this extent is our production diverted from its purely economic aim, to minister to wants as such and allay them as far as possible. Those misshapen prices which are engendered by monopolies may be abolished by the suppression of monopolies, and those which, especially in the matter of wages, arise from the distress in the position of the labourer, may be removed by a general coalition of labourers; but those which result from inequality in the means of purchasers are, I take it, inextricably bound up with our economic *régime*.

V

Value in use and value in exchange, understood in the sense we have employed hitherto, are to be distinguished not only in extension but also in intension. Value in use is not only particular but also subjective; value in exchange is not only general but also objective. There is no doubt a subjective exchange-value as well, which plays an extremely important part in economy, but for brevity's sake there shall be no mention of that here.

If value is understood as subjective, then the question, why commodities are valuable, becomes equivalent to, why do men prize commodities? The phenomenon requiring explanation is, the love of men for material goods, *auri sacra fames*, side by side with the love of men for men, and their love for moral goods. The Austrian school, while indicating utility as the root and measure of that love, seeks to establish this principle in the sphere of material objects, as the utilitarians do in estimating moral values. And yet how complicated even in the material world is the calculus of self-interest! We value commodities for the sake of their utility, yet we do not value utility when it is coupled with abundance; in other commodities we value as a rule not the total, but only the marginal, utility; in the cost of production we value, instead of the utility of the product itself, the utility of other extraneous products; and finally through it all runs the difficulty of imputing the reward of production.

What on the other hand is the nature of value in exchange as objective? It informs us respecting the ratio of the prices of commodities, telling us that such a commodity has such a price, while it brings it into comparison with the prices other commodities are commanding at the same time. It is concerned only with the relations between commodities, nowhere with those between men. There is no definition under which we may combine both conceptions of value, the subjective and the objective. We must be content with showing their mutual relation.

In economy both find application. Every decision arrived at by any one respecting a commodity is based upon his subjective judgment of value. Price and exchange-value on the other hand furnish the general principles of exchange and of the calculus of production.

Theory has to examine both phenomena. I will restrict myself to showing why it may not neglect subjective values. The reason is, that it would thereby leave unexplained all individual decisions in economic matters, *e.g.* it would not even explain why any one buys. For by objective standards wares and prices have the same value; by objective standards we give equals for equals, for which we should have no motive. But further, exchange-value itself, considered objectively, can only find its explanation in the laws of subjective value, obeyed by buyer and seller in concluding a bargain. If commodities which are to be had in abundance fetch no price, this can only be owing to the fact that they have subjectively no value for anyone. The law, that in the same market equal portions of the same commodity are equal in price, could not hold, did not every owner always assign equal value to equal portions. Price follows marginal equivalent because subjective value follows marginal utility; it only adjusts itself to cost of production, because every producer subjectively for himself assigns a value to products as syntheses of their productive elements. Rent is paid for land, interest for capital, wages for labour, because in subjective valuation a share of the aggregate return is imputed to land, a share to capital, a share to labour; nor could any more precisely quantitative expression be found for price, were it not that subjective value, by its bearing on supply, number, and cost of production, already admitted of computation. Motives it is true are ever coming into play through the conflict of price, which are wanting in the personal calculus; on the other hand monopoly suppresses the effect of the influence of cost, and other such differences: nevertheless without the subjective influences of the estimation of values, no dealings in price would ultimately be conceivable, nor could the law of price be maintained.

I must abstain from any complete demonstration of this governing idea, and will pursue it a little further in one direction only. In reply to a passage in my book on *Natural Value*, Prof. Edgeworth[1] has said that the difference between the valuations under an Economic and those under a Socialistic *régime* is most briefly and appropriately expressed by the statement that in the

[1] Address to the Economic Science and Statistics Section of the British Association, Newcastle-upon-Tyne, 1889, p. 26.

former case the tendency to maximum utility is, while in the latter case it is not, subject to the condition 'that there should be only one rate of exchange in a market.' With the same request as he then made, that my forced brevity may not be taken for want of courtesy, I remark that in my judgment, of course, not 'one rate of exchange,' but nevertheless 'one rate of value' would still obtain under socialism. If a million tons of grain are lying ready for distribution among the citizens, each ton, assuming it is of equal quality, will have to be held equal in value to any other. In consumption the several tons will not afford equal degrees of utility, but equal utility will be imputed to them as their value. I admit that, when goods are not sold to citizens, but distributed among them, equal prices will not come to be paid for equal items, nevertheless equality in judgments on value would manifest itself in many other directions, chiefly in the calculus of production. Thus, to take as example a simple though comparatively unimportant case, the effective capacity of two machines would be judged by the quantity of products they yielded, in which it would not occur to any one to assume the value of those products, equal quality being assumed, as other than equal. If it were not essentially required in economic procedure, that we should regard a number of commodities, similar in quality but affording different degrees of utility, as economically equal, the fact of their being held as equal in price would be an offence against economic procedure, detrimental to either buyer, or seller, or both. If there were no better explanation of this fact than competition, if its foundation did not lie deep in the nature of each individual economic subject, economy would go astray wherever and whenever it proceeded on the principle of prices reckoned in this manner.

I touch at this point on the difference, alluded to at the outset, which exists between Jevons and the Austrian school respecting the conception of value and the principle of the law of value. For us, Jevons holds too closely to the narrower view, which sees in price the only manifestation of value. We conform to an idea always firmly maintained in Germany, when we say that in economy value decides everything, not only the price of the bargain, but also what amount of consumption, productive employment, and outlay entering into it is permissible. But while the older German school suffers this general function of value to depend ultimately on bare usefulness, to which it gives the empty name of value-in-use (*Gebrauchswerth*), we explain the determining cause as value in its true, complete meaning, value with all the principal laws revealing themselves in price; value as following the law of margins and the cost of production; value as demanding productive imputation, rent and interest. But precisely on this ground do we hold the view that the current mode of reckoning in economy by exchange-value is not a dictum of the market, but, in spite of many peculiarities conditioned by the market, a dictum of economy itself.

The exposition I have given here has permitted but scanty recognition of these more intimate lines of thought in the Austrian school. I have not been without fear, that our special language might, in so condensed an exposition, sound strange overmuch.

VI

The guiding principle in devoting commodities to public purposes, as in consumption generally, should be the consideration of their value. The scale of state-consumption and state-mechanism, which each citizen will wish to see, must vary in proportion to his own valuation of commodities. It is only reasonable that the rich man, who retains, after covering his most pressing personal outgoings, a surplus of goods for any other purposes, should desire a more expanded public expenditure than the poor man. A just system of taxation will take account of these variations in the valuations made by different classes of people, and adjust the fiscal burdens to the citizens by covering the costs of state-administration with contributions graduated accordingly.

It would take me too far were I to show how Prof. Sax, starting from this idea, has carried out the theory of value in a system of progressive taxation. I should only like to point out a remarkable political phenomenon. The state, in taxing citizens unequally, suffers itself to be paid unequally for its equal services,—and we find this equitable. In the market every purchaser, from the richest to the poorest, pays the same price for the same service, the millionaire paying for what he buys in common with the beggar by the beggar's standard,—and this we find natural. How shall we interpret these inconsistencies?

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