

Aristotelian Economic Analysis and the Medieval Schoolmen

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Aristotle's discussions of economic issues are located predominantly, although not exclusively, in the *Ethics* and the *Politics*. These discussions occur in two types of context. One of the contexts is investigation of issues concerning the formation of social life. Here, one finds treatments of the nature of the economic problem, the role of money, the division of resources, and the division of labour. The other context is provision for the correct ordering of social life. Aristotle is concerned with justice in the exchange of goods and services, and this gives rise to an attempt at a theory of exchange value. He is also concerned with justice in lending, which leads to observations on interest-taking and money.

At the outset, it should be emphasised that Aristotle's economics, like that of Plato, is not the economics of growth. He has a peripheral interest in growth only as a prelude to the achievement of a certain modest standard of material well-being which remains a constant. This outlook is allied to a particular attitude to man in relation to natural resources. His emphasis is on sound management of what is given man by nature, rather than on entrepreneurship and innovation which transform what is given. Aristotle's attitude, it can be noted, is in marked contrast with that evident in certain other Greek writings. Some of the dramatists, for example, show a keen interest in progressive improvement in the arts, transportation, exploitation of resources, and foreign trade. Economics, as taught by the Sophists, seems to have been concerned directly with increasing affluence for households and the state. The work supposedly written by Xenophon, *Ways and Means to Increase the Revenues of Athens*, is the best extant example of non-Socratic growth economics. The policies advocated in this treatise are strikingly similar to those of the European mercantilist writers many centuries later.

Aristotle's economics is the economics of the stationary state. Hence, he puts strict limits on the degree to which the heads of households should involve themselves in acquisitive activity. Beyond those limits, the manager of the

household is engaging in the irrational pursuit of accumulation for its own sake. In practice, this latter generally means adoption of money-making as an end in itself. Aristotle illustrates the absurdity of this course by reference to the Midas story (*Politics*, 1257b). Given a static economy (as well as fixed status relationships in society) the amount of capital required is a fixed quantity which merely calls for replacement, not augmentation.

THE ECONOMIC PROBLEM

For most modern economists, the economic problem is the problem of scarcity. The wants of humankind are always and everywhere well in excess of the means available to satisfy those wants. Economics, as a discipline, is concerned with the ways in which scarce means are allocated to satisfy ends, the ends being taken as given. This conception of the human condition, and of Economics, is highly compatible with the vision and the analysis of the poet Hesiod in his *Works and Days* (eighth century B.C.). However, Aristotle's approach is rather different. His emphasis is on ends, not means.

For Aristotle, Economics is concerned chiefly with the ordering of human purpose and function within the household and the state. Economics is an exercise in administration, and the primary responsibility of the administrator is the choice of goals to be pursued. The economic problem is first and foremost a problem of selection among competing ends rather than the ordering of means to achieve a set of aims which the economist takes as given. He writes:

"... household management attends more to men than to the acquisition of inanimate things, and to human excellence more than to the excellence of property which we call wealth." (*Politics*, 1259b).

Aristotle distinguishes between *oikonomike* (economics) and *chrematistike* (wealth-making, or, the science of supply). "The art of household management", he affirms, "is not identical with the art of getting wealth, for the one uses the material which the other provides." (*Politics*, 1256a).

In contrast to most modern economists, Aristotle's perception is that the pressures imposed by scarcity can be relieved as readily by readjustment of human attitudes and ends, as by reallocation or multiplication of means. Further, the question of ends is by far the more important, since quality of life depends mainly on the ends to which acquired possessions are put (see, e.g., *Politics*, 1332a).

The question of means is not to be neglected entirely. It has a marginal role to play. Aristotle allows that, "Of the art of acquisition then, there is one kind which by nature is part of the management of a household, in so far as the art of household management must either find ready to hand, or itself provide, such things necessary to life, and useful for the community of the family or state, as can be stored." (*Politics*, 1256b). Nevertheless, as we have seen, such acquisition or accumulation can proceed rationally only to a certain point. Accumulation achieves no good purpose if it does not serve the end-use requirements of the household or state.

DIVISION OF RESOURCES AND LABOUR

In his *Republic*, Plato's ruling class is to hold property in common. This dictum is modified somewhat in the *Laws*, although there is no doubt that Plato regards communal ownership as the ideal. Aristotle, in contrast, advocates private ownership of resources. Plato's type of communism is criticised on a variety of grounds, one of which is a supposed lack of economic incentive when resources are pooled. In a fashion that recalls the reasoning of Democritus (c.460-370 B.C.), Aristotle argues that better use will be made of available resources under a system where private possession is the rule. In the second book of the *Politics* he writes:

"That which is common to the greatest number has the least care bestowed upon it. Everyone thinks chiefly of his own, hardly at all of the common interest; and only when he is himself concerned as an individual."

A division of resources makes for greater efficiency in a community.

There appears to be no such fundamental difference of opinion between the two philosophers on the subject of the division of labour. In the second book of the *Republic*, Plato observes that in the course of social evolution, a key feature of the movement into state organisation is the benefit derived from the scope given for extensions of the division of labour. Plato's main ground for advocacy of the division is that the quality of an individual's life is improved by his being able to perform that function for which he is best fitted by his natural endowments. However, another advantage is that a greater social product of better quality, and involving less work-effort, will result if individual's eschew the attempt at economic self-sufficiency.

This line of reasoning is acceptable to Aristotle, and he also appears to share Plato's reservations concerning the extent to which the division of labour should be taken. Whereas in the *Suppliants*, Euripides extols the principle of the international division of labour, the Socratics are wary of the idea. National self-sufficiency is the safer course. Again, they do not advocate the segmentation of particular productive processes, each segment being repeatedly performed by the one person. Xenophon in his *Cyropaedia* (c.362B.C.) notes the productivity gains involved in the latter, but Plato and Aristotle are worried about the dehumanisation and alienation that might accompany such fractionalisation of tasks (see, e.g. *Apology*, 21, 3).

EXCHANGE

In Aristotle's city-state there is both division of resources and division of labour amongst its constituent households. Hence, if the economic life of the community is to afford the citizens adequate means of subsistence there must be exchange of goods and services between the households. Further, if the exchange process is to avoid becoming a source of social disruption it must be conducted according to the rules of justice. What are the criteria for just exchange?

The key passage bearing on this question is located in the *Ethics* where Aristotle attempts to explain the workings of "reciprocity in accordance with a proportion." He states:

"Now proportionate return is secured by cross-conjunction. Let A be a builder, B a shoemaker, C a house, D a shoe. The builder then must get from the shoemaker the latter's work, and must himself give him in return, his own. If then, first there is proportionate equality of goods and then reciprocal action takes place, the result we mention will be effected. If not, the bargain is not equal, and does not hold; for there is nothing to prevent the work of one being better than that of the other; they must therefore be equated... For it is not two doctors that associate for exchange, but a doctor and a farmer, or in general people who are different and unequal; but these must be equated... The number of shoes exchanged for a house must therefore correspond to the ratio of builder to shoemaker. For if this be not so, there will be no exchange and no intercourse." (*Ethics*, 1133a).

Aristotle also introduces the factor of satisfaction of human need as relevant to the establishment of just terms of trade between the parties to an exchange. He continues:

"This proportion will not be effected unless the goods are somehow equal. All goods must therefore be measured by some one thing... Now this unit is in truth demand [i.e., need] which holds all things together (for if men did not need one another's goods at all, or did not need them equally, there would be either no exchange or not the same exchange)..." (*Ethics*, 1133a).

From the foregoing, it would seem that both need and inequality of persons must be taken into account if exchanges are to be effected in an orderly manner compatible with continuity of existing social and economic relationships. If these two factors are not present, the pattern of exchange breaks down into a chaos of exploitation and social unrest.

The presence of the need element in Aristotle's reasoning points in the direction of a utility theory of exchange value, i.e. goods will exchange in a ratio which corresponds to their respective abilities to satisfy wants. However, the inequality of persons element points in another direction. Over the centuries, many commentators have taken "inequality" to mean difference in cost of production. Hence, Aristotle is contending that goods will exchange in a ratio which reflects the latter difference. This cost-of-production interpretation is almost certainly incorrect. What does Aristotle mean by "people who are different and unequal"? What kind of inequality must have a bearing on the establishment of exchange value?

Another feature of the Aristotelian analysis of exchange which should be remarked is its introduction of the category of reciprocal justice. This category is distinguished from distributive justice, which works in accord with the inequality of persons, and from corrective justice which assumes that persons are equal for purposes of the law. Aristotle is explicit on this point (*Ethics* 1132b). Secondly, it should be noted that Aristotle's schema of commodity exchange is not one in which many potential buyers of a particular commodity face a number of potential sellers of the same commodity. In this sense, he is not dealing with market exchange.

Rather, his focus is inter-household trade, i.e., where two agents who are simultaneously both buyer and seller exchange two commodities. Thirdly, there is the problem of the precise nature of the formula of proportional reciprocity which informs his model of pricing. There is good reason to believe that the formula refers to some aspect of Greek mathematics, but its source has not been located.

MONEY AND INTEREST

If the life of the *polis* is to include inter-household trade then it is desirable that the state adopts a currency. Money is a useful social institution especially in that it precludes reliance on the clumsy mechanisms of barter arrangements. For Aristotle, the primary function of money, its basic social rationale, is to act as a medium of exchange. He also recognises that in fulfilling this primary function it comes to act as a unit of account, and as a means of deferring consumption (*Ethics* 1133a-b).

Whilst there is this emphasis on money as a medium of exchange, it is important to appreciate how this fits with his inter-household model of the exchange transaction. Money is something which facilitates exchange by making good "the excess and the defect" when one buyer/seller is offering less or demanding more in actual commodity-value than the other. The "balance of payments" between the two households is brought into equilibrium by a transfer of currency. "Money", he states, "becomes in a sense an intermediate; for it measures all things, and therefore the excess and the defect - how many shoes are equal to a house or to a given amount of food." (*Ethics*, 1133a). Here, the role of money is being treated rather in the way a modern economist would perceive it in international trade, as against domestic market exchanges.

Aristotle's emphasis on the primary social role of money as a medium also provides him with his basic argument against the taking of interest on money loans. He reasons:

"The trade of the petty usurer is hated most and with most reason: it makes a profit from currency itself, instead of making it from the process which currency was meant to serve. Currency came into existence merely as a means of exchange; usury tries to make it increase." (*Politics*, 1258b)

In other words, lending at interest involves the distortion of the role of money as a social institution, and hence it is to be condemned. Aristotle appears to be the only thinker in antiquity who explicitly relates his condemnation of usury to a theory of money.

Over the centuries, Aristotle's argument against interest-taking has not been well understood, and neither has his position on the substantive content of the object (or objects) which can pass for money. Broadly, there are three positions on this matter. At one extreme, there is the metallist view which contends that money to function effectively as money must consist of a material that has a value independent of its role as money. The other extreme denies this. The intermediate position (bullionism) affirms that a currency can be viable without its objects having an independent value, provided that those objects have some statutorily guaranteed relationship to other objects which have an independent value. Put simply, can a viable medium of exchange consist of paper tokens?

Plato was in no doubt that in a well regulated state, the currency did not have to consist of coinage fashioned from "precious metals". In fact, he is thoroughly opposed to such a local currency (*Laws*, V, 742). Aristotle is of the same mind. As for Plato, money is a creature of the law of the state. He writes:

"... money has become by convention a sort of representative of demand; and this is why it has the name 'money' - because it exists not by nature but by law as it is in our power to change it and make it useless" (*Ethics*, 1133a).

It is obvious that if the currency had some value apart from its role as money it would be impossible to render it useless. For Aristotle, money is what it is because it has a state-backed acceptance for the performance of certain social functions. Money is not what it is because of "intrinsic" or "natural" properties it might possess. The subsequent misinterpretations of Aristotle's non-metallism passed over his agreement with Plato on this point, and refashioned his pseudo-historical account of the replacement of barter by employment of precious metals (*Politics*, 1257a) into an analytical statement. Aristotle, like Plato, it can be contended, was a non-metallist.

SCHOLASTIC ECONOMICS

General over-views of the history of economic thought frequently give the impression that the economics of the medieval schoolmen is derived almost exclusively from the analytical insights of Aristotle. In fact, the latter is just one of three main influences, the other two being Roman Law, on the one hand, and the Bible and the Fathers on the other. Also significant are Canon law, and the *Sentences* of Peter Lombard.

The impact of Aristotle on debate was greatly enhanced when Latin translations of the *Politics* and the *Ethics* became available in the mid-thirteenth century. Very considerable controversy ensued, since Aristotle's observations did not always appear to coincide with the prescriptions on economic matters derived from more traditional sources. Most prominent among those who succeeded in establishing Aristotelian economic principles and modes of analysis in theological circles were Albert the Great, who wrote the first full-length Latin commentaries on the *Ethics* and the *Politics*, and Thomas Aquinas. Another important figure in this respect is Henry of Ghent.

In what follows, we are concerned mainly with the issues of what Albert and Thomas got from Aristotle on the subjects of property ownership, value, and money, and the respects in which their emphases differ from that of the Philosopher. It must be stressed that this is just a partial treatment of the early reception of Aristotelian economics. Important as they are, Albert and Thomas do not exhaust the dimensions of scholastic economic debate even in their own era. The following treatment is indicative, but by no means definitive.

THE CASE FOR PRIVATE OWNERSHIP

The scholastic analysis of the bases for property ownership has been surveyed extensively in an outstanding recent work by Odd Langholm, *Economics in the*

Medieval Schools (1992). From this analysis it is evident that the Schoolmen's main argument in favour of private ownership can be termed, "the argument from peace". According to this line of reasoning, communality was the rule before the Fall of Mankind. However, given the present corruption of human nature, society would fall apart if all things were to be held in common. Private ownership serves the common good because it wards off dissension and disruption of social exchanges. A system of common possession cannot ensure peaceful association. Under common possession, there will be continual strife about the shares to be taken by individuals from the common pool. Individuals will tend to claim more than their just shares in the use of common possessions. A society which recognises the right of private ownership will be a more peaceful society. The doctrine of Original Sin underlies this outlook, and the outlook was reinforced when the Schoolmen discovered the ideas of Aristotle. In his *Politics*, the Philosopher also argued for private ownership on the grounds of the greater degree of social harmony it offered as compared with communalism.

A second scholastic argument associated with the foregoing may be termed, "the argument from labour." This variant is associated, in particular with St. Albert the Great (1193-1280). He contended that strife will arise among common owners since some of them will be rewarded with a lesser share of output than their contribution in labouring to produce that output justifies. St. Albert's reasoning entered the scholastic mainstream.

Apart from the argument from peace, the most prominent scholastic ground for the rejection of communism was the argument from efficiency and/or incentive. This was their main economic argument, and it was heavily conditioned by what they found in Aristotle. In the *Politics*, Aristotle contends that private property will be taken better care of than common property since each person will apply himself more readily to what is his own. St. Albert takes this up, affirming that where there is private ownership there will be increased productivity. St. Thomas Aquinas (1225-74) adds the observation that a private owner will be more solicitous in providing for himself than common owners are in providing for each other.

The view became firmly established in the scholastic tradition that men do not work with and cultivate common possessions with the same care as they do with their own. Again, men have less incentive to care for what they own in common than for what each owns privately.

These major arguments in favour of an economic system based on private ownership were bolstered by some subsidiary considerations. Aquinas introduced the idea that order in society was better ensured if there was private ownership. In his view, human affairs are conducted in a more orderly fashion if each individual is charged with taking care of some particular thing himself. There is confusion in society if everyone has to look after any one thing indeterminately. A system of private ownership immediately allocates productive tasks, and thus avoids confusion as to who should do what.

Another subsidiary argument for private property was that such ownership opened up the possibility for virtuous action by the possessors of resources. The Schoolmen could refer to both Aristotle and the Christian Fathers in support of this

contention. Aristotle reasoned that it is necessary to possess personal property in order to exercise the virtue of liberality. The truly free man is the liberal man who looks to his neighbour's needs in all his dealings. Only if property is private is it possible to exercise such liberty and such liberality. If "liberality" can be understood as "Christian Charity", the Fathers were of the same mind. One of the supposedly providential grounds for the division between rich and poor was to enable the rich to find salvation through generous and unremitting almsgiving.

From the foregoing, it is abundantly clear that the Schoolmen had no truck with the communistic ideal as appropriate for application in the wider Christian society. However, it should be emphasised that they did not promote the principle of private ownership as an absolute. Rather, they argued that there could be circumstances in which that principle must give way to more fundamental considerations. The Schoolmen cannot be identified with eighteenth and nineteenth century views concerning the inviolable nature of personal property. For them, anyone in extreme need may justly use property regardless of ownership. In necessity, everything is common.

EXCHANGE VALUE

In scholastic economic analysis the question of the just price is a central, if not the central, issue. Hence, Albert and Thomas, like numerous other scholars, wrestled with the problem of understanding Aristotle's treatment of exchange value in *Ethics*, V, 5, since it is explicitly about justice in pricing. Each of the Dominican doctors made contributions which were highly influential in setting the agenda for subsequent debate.

Albert's contribution to the problem, "consisted in rejecting, implicitly or explicitly, two possible solutions, and to launch two different lines of tradition. Those which he rejected are the *status interpretation* and the *intrinsic value interpretation*, both of which have been attributed to the medieval scholastics, without much real basis in the texts. Those which he set on foot are the *demand interpretation* and the *labour interpretation*" (O. Langholm, *Economics in the Medieval Schools*, p. 183). According to the status interpretation the ratio of exchange between two commodities should express the relative social worth or status of the exchangers. This, as we have seen, could well have been Aristotle's idea, but Albert treats exchange as a matter of commutative justice, and this latter does not take into account the worth or status of individuals.

Rather than the status of the exchanger as a seller, Albert frequently refers to the relevance of the labour and expenses of the seller-exchanger. For example, he writes:

"Equal amounts of labour and expenses must be exchanged for each other if each productive effort is to receive its equivalent. If the carpenter does not receive as much in quantity and quality as corresponds to his own effort then he will discontinue to produce beds; thus the profession of the carpenter will be destroyed." (*Ethicorum lib. V, II, 7, 28*).

In other words, relative prices should reflect relative costs of production. In all probability, this was not what Aristotle meant to convey, but it was the way in which Albert made sense of the status element in the Philosopher's reasoning.

Turning from the exchanger-as-seller to the-exchanger-as-buyer, Albert's emphasis is on the relevance of relative need to the determination of exchange value. For example, in his second commentary on the *Ethics* he states:

"Moreover, in such exchanges one cannot exchange thing for thing, such as a house for a bed or a peck of corn for a pair of shoes, which are neither equivalent nor always equally needed... In fact, such exchange is not to be made by equality between things exchanged, but rather according to a proportion between the value of one thing and the value of the other thing, this proportion being taken with regard to need, which is the course of exchange."

This appreciation of the role of the relative need of the buyer-exchanger opened up the way to the demand interpretation of just price which eventually came to be predominant in scholastic thought. The predominance was due in large measure to the way in which Aquinas took up Albert's interpretation of Aristotle's exchange formula. Saint Thomas does not lose sight of the cost dimension. For example, he observes:

"The arts will be destroyed if the workman who has made some article does not receive for it another article similar in quantity and quality. One man's labour must be compared with another's if the exchange is to be just."
(*Commentarium in X. libros Ethicorum*, V, 8).

Nevertheless, Aquinas expands on the demand side of the issue. Commenting on the *Ethics* (Book V, Lect. 9), he argues that the scale of values established by human estimates of the utility of commodities may differ markedly from the scale according to nature and creation. In creation, a pearl is a lesser thing than a mouse. Yet, because of human estimation the pearl is the more highly valued object. The price of things which are saleable is governed by their usefulness. A similar line of reasoning is repeated in the *Summa* (II-II, 77, 2, 3).

For St. Thomas, subjective estimate of utility gives the basis for relative value. Prices will reflect the market consensus of groups of individual preferences and subjective calculations concerning need. Aquinas writes (*Ethics*, V, 9): "The one thing which measures all truthfully is need, because it embraces all exchange goods insofar as they are related to human need."

Both of these pioneering assessments of what Aristotle's analysis of exchange meant, served to help set the tone for some centuries of controversy on the just price. Yet, it can be argued, these assessments were flawed as understandings of Aristotle. The Philosopher was concerned with inter-household trade, and the hurly-burly of market exchange was something which he despised intensely and which he wished to keep to the very margin of social interchanges. To put this in geographic terms, the hurly-burly of the port of Piraeus should be peripheral to just exchange among the worthies of Athens. The Schoolmen do not seem to have appreciated such niceties, and tried to apply a very special, even idiosyncratic, analysis of just exchange to the entirely different circumstances of the medieval market towns.

USURY AND MONEY

It has been argued earlier in this paper that Aristotle, like Plato, adopted a non-metallist theory of money. If this is the case, there is little evidence that the Schoolmen concurred. As Langholm observes, "what the scholastics found in Aristotle (or, as I said, thought that they had found, for we are here less concerned with what the historical Aristotle tended to convey) was a purely metallist conception of money... however the functions and valuation of money are conceived, the whole issue turns on money as specie, as coined money." (O. Langholm, *Economics in the Medieval Schools*, p. 162). Hence, medieval scholastic monetary analysis is confined within relatively narrow bounds by way of modern analytical requirements. As far as the different functions of money are concerned, Albert and Thomas remained very much within the Aristotelian framework. Some later writers, notably John Buridan and Nicole Oresme, were to probe the issues involved at greater length. Much of this later probing was prompted by the practice of currency debasement by princes.

On the subject of usury, the medieval schoolmen went well beyond Aristotle in the range of arguments they marshalled to condemn the taking of interest on money loans. Drawing on a wide variety of traditional sources, secular as well as religious, they produced at least ten lines of argument. These turned on: (i) the passage of ownership of money in a loan; (ii) the absence of risk to the lender; (iii) the consumptibility of money, since, in Roman law it was classified as a fungible; (iv) the nondeterioration of money; (v) the usurer sins because he sells time; (vi) the sterility of money; (vii) the sterility of all fungible goods; (ix) the borrower is not a free agent, he is under economic duress; (x) the purpose of money as a social institution.

Not all of the above arguments, it should be noted, are found in Albert's or Thomas' writings. In fact, they rejected some of them. Albert's main line of reasoning against usury is the argument from economic duress. He also employs those from the passage of ownership, and the absence of risk. Thomas' main argument is from the consumptibility of money. In addition, he bases his opposition to lending at interest on the social role of money, and on the presence of duress.

Certain of these arguments owe something to Aristotle's reasoning. The teleological argument relating to the purpose of money, we have seen, was enunciated by Aristotle in the *Politics*. Again, the argument from economic duress may have been inspired in part by Aristotle's discussion of the nature of voluntary and involuntary actions in Book III of the *Ethics*. Thirdly, Aristotle played a role in the promotion of the argument from the sterility of money.

According to this latter as commonly understood, usury "is that form of wealth-getting which makes money breed money, which is against nature because only natural organisms can breed.....since usury means offspring, and since money is an artificial thing which cannot generate any offspring, therefore usury is unnatural and therefore it is wrong." (O. Langholm *The Aristotelian Analysis of Usury*, p. 58). Stated in this way the argument turns on a biological analogy and cannot be taken seriously.

Was this Aristotle's argument? In the *Politics* he wrote:

"For money was brought into existence for the purpose of exchange, but interest increases the amount of money itself (and this is the actual origin of the Greek word: offspring resembling parent, and interest is money born of money); consequently this form of the business of getting wealth is of all forms the most contrary to nature."

(*Politics*, (trans. Rackham), 1258 a-b).

This passage certainly opens up the possibility of the foregoing interpretation, but the context of the passage (the teleological argument against usury) suggests that this was not Aristotle's contention. He was not claiming that money cannot breed, but rather it should not be made to breed. The latter is an unnatural use of money, given its social end or purpose, namely, to act as a medium of exchange.

REVIEW

Aristotle's economic analysis was formulated in terms of his conception of the emergence of the city-state, and his understanding of the arrangements necessary to permit its citizens to live "the good life". A major focus was on exchanges between the heads of the households which comprised that state.

Later commentators on Aristotle have often failed to give due weight to the specific social and political context of his economic thought, and hence that thought has been misinterpreted. The economics has been wrenched out of its city-state setting. The Schoolmen were among those prone to misinterpret the Philosopher, so medieval Aristotelian economics is not a faithful representation of what Aristotle meant to convey in every respect. Further, in developing their economic thought the medievals drew on a wide range of sources of which Aristotle's writings constituted one component only. It is inaccurate then to treat early European economic thought as analysis simply inspired by the transmission of Aristotle's ideas to a later generation of thinkers who were entirely trustworthy interpreters of their mentor's meaning. Unfortunately, such a treatment is all too common in history of economic thought textbooks.

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