It is true, Turgot says to the anti-usury wing of the scholastics, that money as a 'mass of metal' is barren and produces nothing; but money employed successfully in enterprises yields a profit, or invested in land yields revenue. The lender gives up, during the term of the loan, not only possession of the metal, but also the profit he could have obtained by investment: the 'profit or revenue he would have been able to procure by it, and the interest which indemnified him for this loss cannot be looked on as unjust'. Thus Turgot integrates his analysis and justification for interest with a generalized view of opportunity cost, of income foregone from lending money. And then, above all, Turgot declares, there is the property right of the lender, a crucial point that must not be overlooked. A lender has

> the right to require an interest for his loan simply because the money is his property. Since it is property he is free to keep it...; if then he does lend, he may attach such conditions to the loan as he sees fit. In this, he does no injury to the borrower, since the latter agrees to the conditions, and has no right of any kind over the sum lent.

As for the Biblical passage in Luke that had for centuries been used to denounce interest, the passage that urged lending without gain, Turgot pointed out that this advice was simply a precept of charity, a 'laudable action inspired by generosity', and not a requirement of justice. The opponents of usury, Turgot explained, never press on to a consistent position of trying to *force* everyone to lend his savings at zero interest.

In one of his last contributions, the highly influential 'Paper on Lending at Interest' (1770), A.R.J. Turgot elaborated on his critique of usury laws, at the same time amplifying his noteworthy theory of interest.[7] He pointed out that usury laws are not rigorously enforced, leading to widespread black markets in loans. But the stigma of usury remains, along with pervasive dishonesty and disrespect for law. Yet, every once in a while, the usury laws are sporadically and unpredictably enforced, with severe penalties.

Most importantly, Turgot, in the 'Paper on Lending at Interest', focused on the crucial problem of interest: *why* are borrowers willing to pay the interest premium for the use of money? The opponents of usury, he noted, hold that the lender, in requiring more than the principal to be returned, is receiving a value in excess of the value of the loan, and that this excess is somehow deeply immoral. But then Turgot came to the critical point: 'It is true that in repaying the principal, the borrower returns exactly the same weight of the metal which the lender had given him'. But why, he adds, should the weight of the money metal be the crucial consideration, and not the 'value and usefulness it has for the lender and the borrower?' Specifically, arriving at the vital Böhm-Bawerkian–Austrian concept of time-preference, Turgot urges us to compare 'the difference in usefulness which exists at the date of borrowing between a sum currently owned and an equal sum which is to be received at a distant date'. The key is time-preference – the discounting of the future and the concomitant placing of a premium upon the present. Turgot points to the well known motto, 'a bird in the hand is worth two in the bush'. Since a sum of money actually owned now 'is preferable to the assurance of receiving a similar sum in one or several years' time', the same sum of money paid and returned is scarcely an equivalent value, for the lender 'gives the money and receives only an assurance'. But cannot this loss in value 'be compensated by the assurance of an increase in the sum proportioned to the delay?' Turgot concluded that 'this compensation is precisely the rate of interest'. He added that what has to be compared in a loan transaction is *not* the value of money loaned with the sum of money repaid, but the 'value of the *promise* of a sum of money compared to the value of money available now'. For a loan is precisely the transfer of a sum of money in exchange for the current *promise* of a sum of money in the future. Hence a maximum rate of interest imposed by law would deprive virtually all risky enterprises of credit.

In addition to developing the Austrian theory of time preference, Turgot was the first person, in his *Reflections*, to point to the corresponding concept of *capitalization*, that is, the present capital value of land or other capital good on the market tends to equal the sum of its expected annual future rents, or returns, discounted by the market rate of time-preference, or rate of interest.[8]

As if this were not enough to contribute to economics, Turgot also pioneered a sophisticated analysis of the interrelation between the interest rate and the 'quantity theory' of money. There is little connection, he pointed out, between the value of currency in terms of prices, and the interest rate. The supply of money may be plentiful, and hence the value of money low in terms of commodities, but interest may at the same time be very high. Perhaps following David Hume's similar model, Turgot asks what would happen if the quantity of silver money in a country suddenly doubled, *and* that increase were magically distributed in equal proportions to every person. Specifically, Turgot asks us to assume that there are one million ounces of silver money in existence in a country, and 'that there is brought into the State, in some manner or other, a second million ounces of silver, and that this increase is distributed to every purse in the same proportion as the first million, so that he who had two ounces before, now has four'. Turgot then explains that prices will rise, perhaps doubling, and that therefore the value of silver in terms of commodities will fall. But, he adds, it by no means follows that the interest rate will fall, if people's expenditure proportions remain the same, 'if all this money is carried to the market and employed in the current expenses of those who possess it...'[9]. The new money will not be loaned out, since only saved money is loaned and invested.

Indeed, Turgot points out that, depending on how the spending–savings proportions are affected, a rise in the quantity of money could *raise* interest rates. Suppose, he says, that all wealthy people decide to spend their incomes and annual profits on consumption and spend their capital on foolish expenditures. The greater consumption spending will raise the prices of consumer goods, and there being far less money to lend or to spend on investments, interest rates will rise along with prices. In short, spending will accelerate and prices rise, while, at the same time, time-preference rates rise, people spend more and save less, and interest rates will increase. Thus Turgot is over a century ahead of his time in working out the sophisticated Austrian relationship between what von Mises would call the 'money-relation' – the relation between the supply and demand for money, which determines prices or the price level – and the rates of time-preference, which determine the spending–saving proportion and the rate of interest. Here, too, was the beginning of the rudiments of the Austrian theory of the business cycle, of the relationship between expansion of the money supply and the rate of interest.

As for the movements in the rate of time-preference or interest, an increase in the spirit of thrift will lower interest rates and increase the amount of savings and the accumulation of capital; a rise in the spirit of luxury will do the opposite. The spirit of thrift, Turgot notes, has been steadily rising in Europe over several centuries, and hence interest rates have tended to fall. The various interest rates and rates of return on loans, investments, land, etc. will tend to equilibrate throughout the market and tend towards a single rate of return. Capital, Turgot notes, will move out of lower profit industries and regions and into higher profit industries.

14.6 Theory of money

While Turgot did not devote a great deal of attention to the theory of money proper, he had some important contributions to make. In addition to continuing the Hume model and integrating it with his analysis of interest, Turgot was emphatic in his opposition to the now dominant idea that money is purely a conventional token. In his critique of a prize-winning paper by J.J. Graslin (1767), Turgot declares Graslin totally mistaken in 'regarding money purely as a conventional token of wealth'. In contrast, Turgot declares, 'it is not at all by virtue of a convention that money is exchanged for all the other values: it is itself an object of commerce, a form of wealth, because it has a value, and because any value exchanges in trade for an equal value'.

In his unfinished dictionary article on 'Value and Money', Turgot develops his monetary theory further. Drawing on his knowledge of linguistics, he declares that money is a kind of language, bringing forms of various conventional things into a 'common term or standard'. The common term of all currencies is the actual value, or prices, of the objects they try to measure.

These 'measures', however, are hardly perfect, Turgot acknowledges, since the values of gold and silver always vary in relation to commodities as well as each other. All monies are made of the same materials, largely gold and silver, and differ only on the units of currency. And all these units are reducible to each other, as are other measures of length or volume, by expressions of weight in each standard currency. There are two kinds of money, Turgot notes, *real* money – coins, pieces of metal marked by inscriptions – and *fictitious* money, serving as units of account or *numéraires*. When real money units are defined in terms of the units of account, the various units are then linked to each other and to specific weights of gold or silver.

Problems arise, Turgot shows, because the real monies in the world are not just one metal but two – gold and silver. The relative values of gold and silver on the market will then vary in accordance with the abundance and the relative scarcity of gold and silver in the various nations.

14.7 Influence

One of the striking examples of injustice in the historiography of economic thought is the treatment accorded to Turgot's brilliant analysis of capital and interest by the great founder of Austrian capital and interest theory, Eugen von Böhm-Bawerk. In the 1880s, Böhm-Bawerk set out, in the first volume of his *Capital and Interest*, to clear the path for his own theory of interest by studying and demolishing previous, competing theories. Unfortunately, instead of acknowledging Turgot as his forerunner in pioneering Austrian theory, Böhm-Bawerk brusquely dismissed the Frenchman as a mere physiocratic naive land-productivity (or 'fructification') theorist. This unfairness to Turgot is all the more heightened by recent information that Böhm–Bawerk, in his first evaluation of Turgot's theory of interest in a still unpublished seminar paper in 1876, reveals the enormous influence of Turgot's views on his later developed thought. Perhaps we must conclude that, in this case, as in other cases, Böhm-Bawerk's need to claim originality and to demolish all his predecessors took precedence over the requirements of truth and justice.[10]

In the light of Böhm-Bawerk's mistreatment, it is heartwarming to see Schumpeter's appreciative summation of Turgot's great contributions to economics. Concentrating almost exclusively on Turgot's *Reflections*, Schumpeter declares that his theory of price formation is 'almost faultless, and, barring explicit formulation of the marginal principle, within measurable distance of that of Böhm-Bawerk'. The theory of saving, investment and capital is 'the first serious analysis of these matters' and 'proved almost unbelievably hardy. It is doubtful whether Alfred Marshall had advanced beyond it, certain that J.S. Mill had not. Böhm-Bawerk no doubt added a new branch to it, but substantially he subscribed to Turgot's propositions'. Turgot's interest theory is 'not only by far the greatest performance...the eighteenth century produced but it clearly foreshadowed much of the best thought of the last decades of the nineteenth'. All in all,

> It is not too much to say that analytic economics took a century to get where it could have got in twenty years after the publication of Turgot's treatise had its content been properly understood and absorbed by an alert profession.[11]

Turgot's influence on later economic thought was severely limited, probably largely because his writings were unfairly discredited among later generations by his association with physiocracy, and by the pervasive myth that Adam Smith had founded economics. And those nineteenth century economists who did read Turgot failed to grasp the significance of his capital, interest and production theories. Though Adam Smith knew Turgot personally, and read the *Reflections*, the influence on Smith, whose conclusions, apart from a broadly *laissez-faire* approach, were so different, was apparently minimal. Ricardo, typically, was heedless and uncomprehending, simply admiring Turgot for his thankless political role as liberal reformer. James Mill had a similar reaction. Malthus admired Turgot's views on value, but the only substantial Turgotian influence in England was on the great champion of the subjective utility theory of value, Samuel Bailey. Although the influence on Bailey is patent, he unfortunately did not refer to Turgot in his work, so that the utility tradition in Britain could not rediscover its champion.

It is on the French, self-avowed Smithian, J.B. Say, that Turgot had the most influence, especially in the subjective utility theory of value, and to some extent in capital and interest theory. Say was the genuine heir of the French *laissez-faire*, proto-Austrian, eighteenth century tradition. Unfortunately, his citations of Turgot underplayed the influence, and his obeisances to Smith were highly exaggerated, both probably reflecting Say's characteristic post-French Revolutionary reluctance to identify himself closely with the pro-absolute monarchy, pro-agriculture physiocrats, with whom Turgot was unfortunately lumped in the eyes of most knowledgeable Frenchman. Hence the ritualistic turn toward Smith.

14.8 Other French and Italian utility theorists of the eighteenth century

Two other distinguished French writers on economics, both contemporaries of Turgot, must be mentioned as contributing greatly to economic thought. The Abbé Ferdinando Galiani (1728–87) was a fascinating character who, though a Neapolitan, may be counted as largely French. Reared by his uncle, the chief almoner to the king, Galiani early came into contact with the leaders of Neapolitan thought and culture. At the age of 16, Galiani translated some of Locke's writings on money into Italian, and began an eight-year study of money. During the same period, Galiani took religious orders. At the age of 23, he published his remarkable major work, *Della Moneta* (*On Money*) (1751) which set forth a utility–scarcity theory of the value of goods and money. Unfortunately, *Della Moneta* has never been fully translated from the Italian.

In 1759, the Abbé Galiani became secretary and later head of the Neapolitan embassy in Paris, where he stayed for ten years, and where the erratic, witty, erudite, 4½ foot tall Galiani became the social lion of the Paris salons. After his return to Italy, though he wrote several minor works in linguistics and politics, and held several leading positions in the civil service, he considered himself an exile from his beloved France.

In the late scholastic–French–Italian tradition, Galiani expounded the value of goods as subjective valuation by consumers. Value is not intrinsic, he pointed out, but 'a sort of relationship between the possession of one good and that of another in the human mind'. Man always compares the valuation of one good with another, and exchanges one good for another in order to increase the level of his satisfactions. The quantity demanded of a good is inverse to its price, and the utility of each good is in inverse relation to its supply. Alert to the law of diminishing utility upon increasing supply, Galiani, like his predecessors, stops just short of the marginal concept, but is at any rate able to solve the 'value paradox': the view that use-value is severed from price- or exchange-value because bread or water, goods highly useful to man, are very cheap on the market whereas fripperies like diamonds are highly expensive.

Thus Galiani writes, with great subtlety and perception and with his usual flair:

> It is obvious that air and water, which are very useful for human life, have no value because they are not scarce. On the other hand, a bag of sand from the shores of Japan would be an extremely rare thing – yet, unless it has a certain utility, it is without value.

Galiani then states the alleged value paradox, quoting from the seventeenth century Italian writer, Bernardo Davanzati. Davanzati laments that 'A living calf is nobler than a golden calf, but how much less is its price!' while 'others say: "A pound of bread is more useful than a pound of gold".' Galiani then brilliantly demolishes this doctrine:

> This is a wrong and foolish conclusion. It is based on neglect of the fact that 'useful' and 'less useful' are relative concepts, which depend on the specific circumstances. If somebody is in want of bread and of gold, bread is surely more useful for him. This agrees with the facts of life, because nobody would forego bread, take gold, and die from hunger. People who mine gold never forget to eat

and to sleep. But somebody who has eaten his fill will consider bread the least useful of goods. He will then want to satisfy other needs. This goes to show that the precious metals are companions of luxury, that is, of a status in which the elemental needs are taken care of. Davanzati maintains that a single egg, priced at 1/2 grain of gold, would have had the value of protecting the starving Count Ugolino from death at his tenth day in gaol – a value in excess of that of all the gold in the world. But this confuses awkwardly the price paid by a person unafraid to die from hunger without the egg, and the needs of Count Ugolino. How can Davanzati be sure that the Count would not have paid 1,000 grains of gold for the egg? Davanzati obviously had made a mistake here, and, although he is not aware of it, his further remarks indicate that the knows better. He says: What an awful thing is a rat. But when Casilino was under siege, prices went up so much that a rat fetched 200 guilders – and this price was not expensive because the seller died from hunger and the buyer could save himself.

Professor Einaudi informed us in 1945 that 'this is the classical section which is always read in Italian seminars when a telling illustration of the principle of diminishing utility is to be given'. In addition to illuminating this crucial principle, the above passage also shows how people, satiated with bread, turn to the consumption or use of other goods foregone.[12]

In addition to taking a subjectivist, 'pre-Austrian' approach to utility and value of goods, Galiani also introduced the same approach towards interest on loans, outlining at least the rudiments of the time-preference theory of interest in passages that influenced Turgot. Thus Galiani wrote:

From this arises the rate of exchange and the rate of interest – brother and sister. The former equalizes the present and the spatially distant money. It operates with the help of an apparent agio, which...equate(s) the real value of the one to that of the other, one being reduced because of lesser convenience or greater risk. Interest equalizes present and future money. Here the effect of time is the same as that of spatial distance in the case of the rate of exchange. The basis of either contract is the equality of the real value.

Galiani defines a loan as 'the surrender of a good, with the proviso that an equivalent good is to be returned, not more'. But, in contrast to the centuries-long tradition of anti-'usury' writers who proceed from the same premise to denounce all interest on loans as illegitimate, Galiani points out what would later be a fundamental insight of the Austrian School: a good, in this case an 'equivalent', is not to be described by its physical properties or similarities, but rather by its subjective value in the minds of individual actors. Thus Galiani writes that those who conventionally define the equivalence of goods as 'weight, or similarity of form', focus on the physical objects in each exchange (such as units of money). But, he adds, those who adopt such definitions 'understand little of human activities'. He reiterates, instead, that value is not an objective characteristic inherent in goods, but rather it is 'the relationship of goods to our needs'. But then, 'Goods are equivalent when they provide equal convenience to the person with reference to whom they are considered as equivalent'.

Another prefigurement of the Austrian approach was Galiani's intimations towards a theory of distribution, which were not taken up until Böhm-Bawerk, probably independently, arrived at a similar but much fuller analysis a century and a half later. For Galiani hinted in his *Della Moneta* that it was not labour costs that determine value, but the opposite: it is value that determines labour costs. Or, more concretely, that the utility of products and the scarcity of various types of labour determine the prices of labour on the market. Though he begins his discussion by stating that labour in the sense of human energy 'is the sole source of value', he quickly goes on to point out that human talents vary greatly, so that the price of labour will vary. Thus:

> I believe that the value of human talents is determined in the very same way as that of inanimate things, and that it is regulated by the same principles of scarcity and utility combined. Men are born endowed by Providence with aptitudes for different trades, but in different degrees of scarcity.... It is not utility alone, therefore, which governs prices: for God causes the men who carry on the trades of greatest utility to be born in large numbers, and so their value cannot be great, these being, so to speak, the bread and wine of men; but scholars and philosophers, who may be called the gems among talents, deservedly bear a very high price.

Galiani was undoubtedly over-optimistic about the 'very high price' to be commanded by scholars and philosophers on the market, having overlooked his own scintillating example of scarce goods, such as 'bags of sand from the shores of Japan', which, though rare, may have little or no utility or value in the minds of consumers.

On the theory of money proper, the Abbé Galiani paved the way for the Austrian Menger–von Mises analysis of the origin of money by demonstrating that money – the medium of exchange – *must* originate on the market as a useful metal, and that it cannot be selected *de novo*, as a convention by some sort of social contract. In a lively assault on money-as-a-convention that could apply to any social contract explanation of the origin of the state, Galiani derided

> those who insist that all men had once come to an agreement, making a contract providing for the use, as money, of the *per se* useless metals, thus attaching value to them. Where did these conventions of all mankind take place, and where were the agreements concluded? In which century? At which place? Who were the deputies with whose help the Spaniards and Chinese, the Goths and the Africans made an agreement so lasting that during the many centuries which have passed the opinion never was changed?

Galiani pointed out that the sort of metal that would be chosen on the market would have to be universally acceptable, and hence would need to be highly valuable as a non-monetary commodity, easily portable, durable, uniform in quality, easily recognizable and calculable, and be difficult to counterfeit. Wiser than Smith and Ricardo after him, Galiani warned that money should not be regarded as ideally an invariable measure of value, for the value of a unit of account necessarily varies as the purchasing power of money changes, and therefore such an invariable standard cannot exist. As Galiani put it with typical pungency: 'Finally, this concept of stable money is a dream, a mania. Every new and richer mine that is discovered immediately changes all measures, without showing an effect on them but changing the price of the goods measured'.

Galiani made clear throughout *Della Moneta* that his entire analysis was embedded in the conceptual framework of the natural law. Natural laws, he explained, have a universal validity in economic affairs as much as in the laws of gravity or of fluids. Like physical laws, economic laws can only be violated at one's peril; any action defying the order of nature will be certain to fail.

The abbé proved his point by citing a hypothetical case: suppose that a Mohammedan country suddenly converts to Christianity. The drinking of wine, previously prohibited, now becomes legal, and its price will rise because of the small quantity available in the country. Merchants will bring wine into the country, and new wine producers will enter the field, until profits in dealing with wine fall back to their normal equilibrium level, 'as when waves are made in a vessel of water, after the confused and irregular movement the water returns to its original level'.

This equilibrating action of the market, which Galiani shows also applies to money, is furthermore propelled, marvellously enough, by self-interest, greed, and the quest for profit:

> And this equilibrium wonderfully suits the right abundance of commodities of life and earthly welfare, although it derives not from human prudence or virtue but from the very vile stimulus of sordid profit: Providence having contrived the order of everything for her infinite love of men, that our vile passions are often, in spite of us, ordered to the advantage of the whole.

The economic process, Galiani concluded, was guided by a 'Supreme Hand' (shades of Adam Smith's 'invisible hand' a generation later!).

The institution of money, indeed, enables all people to 'live together', to be interdependent on each other, while still benefiting greatly in pursuing their individual ends. As Galiani eloquently puts it:

> I saw, and everyone can now see, that trade, and money which drives it, from the miserable state of nature in which everyone thinks for himself, have brought us to

> the very happy one of living together, where everyone thinks and works for everybody else: and in this state not for the principle of virtue and piety alone (which are insufficient in dealing with entire nations), but we earn our living for the purpose of our personal interest and welfare.

Galiani's analysis is fuelled by an original and profound comparative analysis of seeing, mentally, what happens in different social systems. Thus he noted that, to avoid the inconveniences of barter, people might try 'living together' literally, in communities, as monasteries and convents do, but this is hardly feasible for entire nations. In a larger society, there might be a system where everyone produces whatever goods he wishes and then deposits them in a public warehouse where everyone could draw on the common store. (Galiani might have phrased it as, 'from each according to his ability, to each according to his needs'). But the system would collapse because lazy people would try to live at the expense of exploiting the hard-working ones, who in turn would work less. The public warehouse could, on the other hand, give producers 'receipts' which would then exchange for other goods at relative prices fixed by the prince; but one problem is that the prince might well inflate by printing an excessive number of such receipts. So that metals are the only viable money.

Galiani's youthful work *On Money* was his great contribution to economics. In his early days an ardent Catholic, abbé and monsignore, in Paris Galiani became a free thinker, roué, and Voltairean wit. In the course of rising in the bureaucracy, he completely changed his economic views, publishing the well-known *Dialogues on the Grain Trade* in 1770, which ridiculed *laissez-faire* and free trade, natural rights and the very idea of economic laws transcending time and place. Thus Galiani was not only an excellent utility theorist, but in his later years a forerunner of the nineteenth century historicists.

In his private letters, Galiani reveals quite frankly the underlying reason for his later conservatism, adherence to the *status quo*, cynical Machiavellianism, and critique of any liberal or *laissez-faire* disruption of the existing state of affairs. Attacking the idea of worrying about anyone's welfare but one's own, Galiani writes: 'The devil take one's neighbor!' and that 'All nonsense and disturbance arise from the fact that everybody is busy pleading somebody else's cause, and nobody his own'. He wrote that he was well satisfied with the existing French government because it was frankly expedient for him to do so; specifically, he did not wish to lose his luxurious income of 15 000 *livres*.

Of course Galiani found it expedient to confine his Machiavellianism to private letters while pretending to moralism in his public writings.[13] Thus in his *Della Moneta*, in both the original edition and in the second edition in

1780, Galiani bitterly denounced the institution of slavery: 'There is nothing that appears to me more monstrous than to see human beings like ourselves, vilified, enslaved and treated like animals'. But his approach was very different in a letter written in 1772:

> I believe that we should continue to buy negroes as long as they are sold, unless we succeed in letting them live in America...The only profitable trade is to exchange the blows one gives for the rupees one collects. It is the trade of the strongest.[14]

In short, anything is right if it succeeds.

Another Italian utility theorist, in his case an analyst of exchange, was the highly influential Neapolitan Abate Antonio Genovesi (1712–69). Genovesi was born near Salerno, and became a priest in 1739. At first a professor of ethics and moral philosophy at the University of Naples, Genovesi shifted his interests and became a professor of economics and commerce, in which he was a notable teacher. In his rather disjointed *Lezione de economia civile* (*Lessons on Civil Economy*) (1765), the learned Genovesi took a moderate free trade stance. More important, he pointed out the essential double inequality of value involved in any exchange. In any exchange, he said each party desires the object he acquires more than he does the object given up. The superfluous is given up for the necessary. Hence the mutual benefit necessarily present in any exchange.

The last gasp of subjective utility theory in the eighteenth century was set forth brilliantly by the French philosopher, Étienne Bonnot de Condillac, abbé de Mureaux (1715–80). Condillac, a leading empiricist–sensationalist philosopher, was the younger brother of the communist writer Gabriel Bonnot de Mably, and son of the Vicomte de Mably, who served as secretary to the parliament of Grenoble. After being educated at a theological seminary in Paris, Condillac left to pursue philosophy, publishing several philosophical works in the 1740s and 1750s.

In 1758, Condillac went to Italy as tutor to the son of Duke Ferdinand of Parma. There his interest was stimulated in economics by acquaintance with the pro-free trade economic policymaker, Tillot, state secretary to the duke. At the same time, Condillac learned of the work of Galiani and other Italian subjective value theorists. After a decade as tutor of the future duke, Condillac published a 16-volume *Course of Studies* he had prepared for his pupil.

When Condillac returned to Paris in the late 1760s, interest in trade, political economy and physiocracy was at its height, and Condillac, always favouring free trade on his own subjectivist grounds very different from the physiocrats, was stimulated to write his last work, *Le commerce et le gouvernement considérés relativement l'un à l'autre* (*Commerce and Government*), published in 1776, only a month before *The Wealth of Nations*.

In *Commerce and Government*, unfortunately destined to be swept away by Smith's all-commanding influence, Condillac set forth and defended a sophisticated subjective utility theory of value. The last of the utility–scarcity theorists before the advent of the British classicists, Condillac declared that the source of value of a good is its utility as evaluated by individuals in accordance with their needs and desires. Utility of goods increases with scarcity and decreases with abundance. Exchange arises because the utility and value of the two goods exchanged is different – indeed the reverse – for the two people engaging in the exchange.

As in the case of Genovesi, in exchange the superfluous is exchanged for the object in insufficient supply. But Condillac was careful to point out that exchange does not mean we give up things which are totally useless. An exchange only implies, as a later commentator summed it up, 'that what we acquire is worth more to us than what we part with'.[15]

As Condillac put it: 'It is true that I might sell a thing that I wanted; but as I would not do so except to procure one that I wanted still more, it is evident that I regard the first as useless to me in comparison with the one that I acquire'. The point is *relative*, rather than *absolute*, superabundance. And this set of superfluous-for-scarce exchanges greatly increases the all-round productivity of the market economy. Notes Condillac:

> The superabundance of the cultivators forms the basis of commerce...the cultivators procure the thing which has a value for them, while they give up one which has a value for others. If they could make no exchanges, their superabundance would remain in their hands, and would have no value for them. In fact, the superabundant corn which I keep in my granary, and which I cannot exchange, is no more wealth for me than the corn which I have not yet produced from the earth. Hence next year I shall sow less...

Furthermore, Condillac pressed on and generalized Galiani's utility theory of costs and distribution, declaring that 'a thing does not have value because it costs, as people suppose; it costs because it has a value'.[16] And the value is determined by the subjective opinions of individuals on the market.[17]

Condillac, moreover, refuted the typical classical and preclassical doctrine, dominant since Aristotle, that the fact that one good exchanges for another must mean that the two goods are of 'equal value'. Condillac rebutted this point neatly, a rebuttal which was promptly lost for 100 years: 'It is false that in exchanges one gives equal value for equal value. To the contrary, each of the contractors always surrenders a lesser for a greater value'.

Since consumer utility and demand determines value, people will tend to receive income from production to whatever extent they satisfy consumers in the production process. Hence, as Hutchison summarizes, 'people could expect to receive in income whatever they could expect to receive from the sale of such productive agents as they commanded.... Pay was regulated in markets by sellers and buyers, and depended on productivity and the expected utility of what was produced'.[18] Since greater intelligence and skill is in scarcer supply, it will tend to command a higher price, or wage, on the market.

Condillac's theory of entrepreneurship followed Cantillon, profits of the entrepreneur depending on the way in which he meets uncertainty and is able to forecast future markets. Like Cantillon, too, Condillac denied that money's value is arbitrary or determined by mere convention or government. The value of metallic money depends on the utility of monetary metals and their supply on the market, so that money's value is determined, as is that of other goods, by supply and demand. And Condillac also followed Cantillon in analysing the equilibrating, self-adjusting processes in international money flows and the balance of payments.

It was, then, not a great exaggeration when, nearly a century afterwards, the British economist Henry Dunning Macleod waxed rhapsodic over his rediscovery of the then forgotten Condillac. Macleod noted that Condillac drew from his insights an ardent devotion to complete free trade, and to an attack, far more consistent than that of his contemporary Adam Smith, on all forms of government intervention in the economy. Macleod noted Condillac's discussion of the 'mischievous consequences produced by all violations of, and attacks on' the principle of free markets:

> These are wars, custom-houses, taxes on industry, privileged and exclusive companies, taxes on consumption, tamperings with the currency, government loans, paper money, laws about the export and import of corn, laws about the internal circulation of grain, tricks of monopolists...

Condillac, Macleod went on,

> first proclaimed, as far as we are aware, the doctrine that in commerce *both* sides gain; the old doctrine sanctioned by Montaigne, Bacon, and many others, was that what one side gains, the other loses. This pernicious folly was the cause of many bloody wars. The Physiocrats then maintained that in exchange the values are equal. But Condillac laid down the true doctrine, that in commerce both sides gain. And he shows truly that the whole of commercial dynamics arise from these inequalities of value.

Himself joining in anticipation of the imputation, or marginal productivity theory of wages or other factor pricing, Macleod also underlined the significance of Condillac's insight that costs are determined by a good's value to the consumer rather than the other way round. In that way, Condillac helped inadvertently to refute the entire Smithian labour theory of value apparatus which was coming into being the same year that Condillac published his work. As Macleod puts it:

> Thus, too, he strikes at the root of many of the prevailing theories of value, which are based upon labour; he says that people pay for things because they value them, and they do not value them because they pay for them, as is commonly supposed. This is exactly the doctrine of Dr. [Archbishop Richard] Whately, when he says that people dive for pearls because they fetch a high price, and they do not fetch a high price because people dive for them...that it is not labour that is the cause of value, but value that attracts labour.

Macleod concludes his discussion with a rhetorical flourish. Noting that Condillac and Smith's classic works were published in the same year, he contrasted Smith's 'universal celebrity' with Condillac's neglect, but then notes that the world is rediscovering Condillac and learning of the superiority of his conception of economics to that of Smith. And, besides, Macleod wrote not without justification, 'the beautiful clearness, and simplicity' of Condillac contrasts notably with 'the incredible confusions and contradictions of Adam Smith'. However, 'at length he will receive justice...'.[19] If we contrast, however, the hypertrophy of Smith's bicentennial celebration with the non-existence of Condillac's, we might not be so quick to conclude that history has yet judged correctly.

14.9 Notes

1. The 'Elegy' was prepared by Turgot in a few days as material for Gournay's official eulogist, the writer Jean François Marmontel. Marmontel simply took extracts from Turgot's essay and published them as the official eulogy.
2. In the course of arguing for free trade in iron in this letter, Turgot anticipated the great 'Ricardian' doctrine of comparative advantage, in which each region concentrates on producing that commodity it can make efficiently relative to other regions.
3. Although the incomplete article remained unpublished for decades, it was written for an aborted dictionary of commerce to be edited by Turgot's lifelong friend and fellow Gournay disciple, the Abbé André Morellet (1727–1819). Morellet published a prospectus for the new dictionary in the same year, a prospectus that repeated Turgot's model of isolated exchange very closely. It is known, furthermore, that this prospectus was owned by Adam Smith.
4. The 'Reflections' (1766), remarkably, were 'scribbled' hastily in order to explain to two Chinese students in Paris questions Turgot was preparing to ask them about the Chinese economy. Rarely has a work so important arisen from so trivial a cause!
5. In an illuminating recent work on the history of the theory of the entrepreneur, Professors Hebert and Link examine the problem of whether an entrepreneur is only a capitalist or whether everyone, including workers without capital, is an entrepreneur. Turgot is considered as retreating from Cantillon's wider concept of entrepreneurship. But the important point here is that the capitalist–entrepreneur is the motor force of the market economy, and that by focusing for the first time on this vitally important figure, Turgot made an enormous stride forward. And we can hail this achievement even if it is also true that Turgot neglected the wider, less important areas of entrepreneurship. See Robert F. Hebert and Albert N. Link, *The Entrepreneur: Mainstream Views and Radical Critiques* (New York: Praeger, 1982), pp. 14–29 and passim.
6. Bert F. Hoselitz, 'The Early History of Entrepreneurial Theory', in J. Spengler and W. Allen (eds), *Essays in Economic Thought* (Chicago: Rand McNally and Co., 1960), p. 257.