

**A MARXIST APPROACH TO URBAN GROUND RENT :
THE CASE OF FRANCE**

Alain LIPIETZ
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The purpose of this paper is to present the outcome of research which started in the early 70s in the context of the French Housing Ministry.¹ At that time and for a 20 year period, France had experienced unprecedented industrial and urban growth and the urban question became a major issue. The tools of main-stream economics were proving themselves ineffective and even deceitful. Hence a tolerance developed for non-orthodox and even Marxist theories.²

Nowadays the economic crisis has moved the urban land question to the background, as the oil rent problem has become a burning issue. On the other hand, the phenomena related to urban landed property carry the trade-mark of the specific social formation in which they occur. Thus, the present study cannot be transferred to other industrialised countries without great caution. Our purpose is simply to show to what degree the Marxist theory of agricultural ground rent can be useful for our understanding of the laws of urban land prices, provided that it is not naïvely transferred word for word.³

The first section is devoted to a critique of the main-stream approach, the second outlines the theory of what we will call 'urban land tribute'; the third section studies this tribute's sources and the fourth analyses its variations in space and time.

Methodological Questions

Empiricism

At the time, a first approach was in favour of watching, comparing, measuring. It seemed legitimate. Computers made the task easier. They could 'digest' large quantities of data related to the sample's features. And they produced the following law: 'The price of land is equal to 1/8 the product of the cost-price per square metre of surface and of the urban occupation coefficient' (Dutailly 1970).

The scientific sterility of this method, if we take it as the only 'positive' one, is evident: it does not teach us anything about an explanation, it only reflects the effects of contingent conditions imposing

themselves through permanent mechanisms over which the theory has nothing to say. Moreover, we know nothing about the conditions of validity of such a law, neither do we *a fortiori* learn anything about ways of modifying it. This law gives us a picture, 'a quiet reflection of the world of *phenomena*' (Hegel). However our interest is in the essence, and we have to explain the phenomenon by means of concepts coherent with those which have permitted us to illuminate other aspects of reality. Therefore we have to start from a theoretical framework and test its relevance for the particular field under study.

Marginalism

Most theories of urban land prices are influenced by the 'dominant theory': marginalism. They approach urban land as a 'good in itself', desirable to the consumer because of its usefulness.

Let us not study the mathematical problems raised by the introduction into the general equilibrium theory of this good which, besides quantity and price, possesses another quality: location. We will look mainly into the epistemological basis of this approach.

For these theories, land value is based on the utility of locating one's housing on such and such a plot (in fact at this or that distance from the centre). Land being a scarce good, it is thus subject to the theory of 'optimal allocation of scarce resources'.

The optimum to be achieved is a distributional one. Since the stock is fixed, the optimum depends only on the 'utility function' in the user's mind. For Wingo (1964) and Mayer (1965) the trade-off is limited to a reduction in the generalised transportation cost of the home-job trajectory: a minor aspect but which has the credit of being measurable. Alonso (1964), in a more cautious way, makes utility dependent on the distance and the plot's area, without specifying the shape of the function which can have extremely varied outcomes, depending on the 'elasticities of substitution'. Maarek's model (1964) gives to empirical data the task of specifying the function's parameters.

The theories have all the shortcomings of the marginalist school, over-emphasised for the case of 'distributional optima'. They are theoretically based on psychology, regarded as the irreducible root. To develop the numerical model we need, in addition, to suppose a particularly productivist psychology (Wingo) or else either stay in uncertainty (Alonso), or fall back into empiricism (Maarek).

The most bothering feature of this approach is that it implicitly or explicitly (Mayer 1965) involves a separation between the price of the building and that of its plot, as if one could freely combine them

à la carte.

However, 'urban land' is never demanded for itself but for the access that it allows, when it is at one's disposal, in the sphere of economic and social relations. In a social formation, this possibility of disposing of land expresses itself in some legal manner (ownership, leasing . . .) which can give rise to a transaction but a transaction which relates (and this is the essential point) not only to abstract land, but to a particular access granted, within the economic and social sphere, by the legal claim over a given plot.

Now, in capitalist social formations, to speak of a particular situation implies mainly (but not only) speaking of a particular situation with respect to the general movement of capital.

We are thus forced to leave the heaven of 'utility functions' embedded in the citizens' minds, and to anchor ourselves on the concrete ground which is subject to competition between capitals in their attempt to valorise themselves. More precisely we will study urban land prices in so far as they relate to the capitalist production of housing (CPH).

The problem, then, presents itself in the following way: to understand how the access to a legal claim on land is priced as a condition for the valorisation of capital. Now, this legal claim is in the possession of landowners who can therefore levy a 'tribute' on the circulation of capital. For the case of agriculture, the laws which govern this tribute were analysed by Marx,⁴ basing himself on (but also correcting) Ricardo. Provided we do not attempt simply to transfer this analysis (which was left by the author as a very rough draft), we can use it for the study of the urban ground problem.

Towards a Theory of Urban Land Tribute

In order to study land prices as a tribute levied by landed property on the process of capitalist production and circulation, it is imperative to address two preliminary questions. What is produced? Which capital is set in motion? This seems evident. Yet numerous Marxists miss this point and ask a different and wrong question: 'Where is the rent?' As far as we are concerned, we will stick to the principle: start from production.

Suddenly, things do not appear as simple any more. What is in fact produced when housing is built? A shelter? Not only that.

The Built Environment as a Product

While wheat in Marx's and Ricardo's fields was a simple product satisfying a precise social need with minor qualitative modulations and merely susceptible to variations in yield per acre or in its transportation cost, the dialectic between product and the need and the multiple articulation of the 'instances' must be taken into account in the consideration of the 'products' that spring up on urban ground.

First of all, land is 'urban' only in so far as it is the base of urban society, which is the dominant lifestyle of capitalism.

This agglomeration is a rigid and constraining structure; it is not a functional organisation but the manifestation in space of the mode of production in the context of a historically-determined social formation. Just as capitalist 'civil society' is an antagonistic confrontation of social classes, so too the urban agglomeration is a deployment of the economic and social division of space (ESDS).

The Economic and Social Division of Space. The economic and social division of space is the spatial effect on the agents' practice and on the structure of their lifestyle of the totality of the social formation's structure (with its past). It reflects the effect of all instances (economic, political, ideological) and therefore it will not let itself be reduced to some economic and mechanistic model. Nevertheless, the reality of its own presence in urban practices powerfully contributes to the maintenance of the social formation while exacerbating its contradictions. Particularly, 'the value of the home-job trip' will not be the variable which controls the modulation of land price, but instead the location within the ESDS, which is an infinitely more complex determination.

The economic division of labour which prevails at the level of productive forces and relations of production reappears in the economic division of space in the distribution of factories, offices and housing. The social division of labour which lies at the level of social relations of production reappears in the social division of space: here live the employers, there the engineers, there the workers.

The constitution of the SDS is a very complex phenomenon. It is first made possible, and determined in its spatial form, by the state of the urban transport system. It is then confirmed by the differentiated treatment given by urban administrations and public services. This is an immediate consequence of the dominant class's preferences. But it is also a domination of urban forces over economic ones: rich neighbourhoods welcome only rich buildings, 'public consumption of space' can only be secured on less expensive land. Moreover, the SDS is socially and

consciously wanted; the most typical case is that of racial segregation: the arrival of black workers making middle-class whites move out. The SDS is also the object of a specific political practice. Urban planning becomes a strategic element in the maintenance of order: this 'police urbanism' being clear in the Paris of Hausmann. The SDS is finally reaffirmed legally and administratively by 'zoning' decisions.

All these indications do not pretend to constitute the theoretical notion of the ESDS. They simply attempt to throw enough stones at the pond that reflects the peaceful image of a radiocentric city inhabited by homogeneous wage-earning citizens who sensibly weigh the substitutability of their precious time and money. Behind the 'map of land prices' we have to read the geological map of the economic and social uses of urban land.

Inside and around the city we thus have a series of users, ranked in decreasing order of ability to pay for location: the superior tertiary sector (banks, high level trade), housing (ranked by the users' incomes), industry and finally agriculture. Again this classification articulates with the reality of geographical disposition historically given by numerous determinations.

And what about the public use of urban space? This is where we have to approach the concrete production conditions of the built environment: one way is to consider a private capitalist who uses land as a way to produce a good (housing) or as a way to valorise his capital (a factory or a store), another is when the political power, whose function is to assure social cohesion, intervenes by creating the general conditions of social reproduction, constructing roads or the necessary public buildings. In any area where it operates, the urban land tribute that will have to be paid will not be determined in an endogenous manner by its own activity but only by the prevailing use in that particular area.

Therefore we will hold that public use of land does not create a specific form of urban land tribute other than the one provoked by the private use that it induces. If we temporarily put aside the dominant (but less important) special case of the superior tertiary use, we are brought back to the problem of land use for housing production which is the principal element of the built environment.

The Housing Product: A Special Commodity. We can analyse a commodity in two different ways: as a need satisfied or as a product sold. The line of reasoning which starts from needs is dangerous and may be even mystifying in a social formation ruled by the capitalist mode of

production, where the aim of production is the growth of capital. This growth is, of course, subject to the realisation condition: in order for something to have exchange value, it must also have use value. But it is capital which, from the set of possible needs and desires, chooses those which it is profitable to satisfy.

Nevertheless, housing cannot be thought of as just another commodity, for two reasons:

(1) Housing, even when it is reduced to a simple den, is an essential element in the reproduction of the labour force; it therefore affects its value as a commodity.

(2) Private housing is the 'structuring focus' of consumption in capitalist urban society. It is around and through housing that 'household consumption' is organised and modulated so that it regulates the growth rate of expanded reproduction.

It is through a typical type of housing more than through the myth of equal access to elementary school that the belief in social homogeneity in 'Civil Society' imposes itself on antagonistic classes. This aspect of the role of housing has become crucial since, after World War II and in all industrial countries, the 'intensive accumulation scheme' has become generalised. It was based on very fast productivity gains and on mass consumption of automobiles, household appliances etc.⁵ This is why the den, which was characteristic of primitive accumulation, has been progressively replaced, since the turn of the century (in France mostly since the Second World War), by a homogeneous model of housing, only slightly variable in its technical characteristics (layout, services), therefore barely variable in its construction cost per unit of area. Thus, it is a good whose production cost is relatively invariable which is offered to a set of social strata whose purchasing power varies from 1 to 10.

Now we have to bring together these two results:

(1) The social and economic division of space is a given that cannot be attributed only to economic considerations. It can be considered as a given for urban development, though development nevertheless leads to its modification. As a habitat, it is geographically much differentiated by income level.

(2) Housing production provides a homogeneous product for a demand which is itself highly differentiated by income groups.

Now the good sold is not the building but the housing, that is a building localised very specifically in the ESDS.

It is in the lag between what is produced and what is sold that we shall find one of the several origins of urban land tribute. But first we must deal with the question: who (which capital) produces housing, and how?

Capitalist Housing Production

Who produces built environments and particularly housing? This question has produced much confusion and is the origin of numerous misunderstandings. We have, therefore, to underline vigorously this obvious fact: the built environment is the product of the activity of construction firms – just as cars are produced by automobile firms and a nation's armaments by arms manufacturing firms. We have to add that all construction firms in France are private. Therefore, at least formally, the built environment in France is entirely produced under capitalist conditions.

Nevertheless, there is an important difference between this and other products of capital: in France generally, money-capital which is intended to turn through the production process into a house or road is not initially in the hands of capitalist contractors (the *maîtres d'oeuvres*). It is not their property. This capital is normally in the hands of *maîtres d'ouvrages*, or 'developers' (*promoteurs*).

It is here that we have to bring in the basic distinction developed by Bettelheim (1975) between 'property' and 'possession'. The capitalist production process is the unity of two processes: a labour process (setting in motion productive forces: equipment and materials, human labour force, in pursuit of the actual production of use-values) and a valorisation process (an engagement of capital in pursuit of its own growth by surplus-value extraction). We speak of possession to designate the relation to the production unit of the agent who dominates the labour process, who 'sets in motion the productive force', and of property to designate the agent who dominates the valorisation process, that is to say, the one who has the power to direct labour to a particular activity and to dispose of its product.

In the capitalist mode of production, where the valorisation process dominates and informs the labour process, the agent who dominates the valorisation process also dominates the production process; he is therefore the real owner, even if he is not (e.g. in the case of a promoter who uses a loan) the legal owner.

In the present conditions of Capitalist Housing Production in France,

there is a separation between the 'property' of capital which circulates productively in the CHP, which we will call 'development capital', and this capital's 'possession' in the production process, which is in the hands of construction firms, building entrepreneurs.

There are two reasons for this: (i) the final purchaser's lack of funds: it is thus necessary that a pre-financer advances the money capital to the entrepreneur and then transfers the housing-good to a capitalist (maybe himself) who will act as seller to the user; and (ii) especially the landed property problem.

In France, landed property has been, since the Revolution of 1789, scattered through all social groups. One of the conditions for housing production thus eludes the scope of any firm's production. No capital can produce it, because a 'building site' is not a product, but the inscription in space of numerous social relations. On the other hand, as many sociological studies have shown, the landowners, those who legally dispose of land, are generally not quick to get rid of it, no matter what economic advantages they would obtain. To get a free plot is usually beyond the scope of the building entrepreneur.

Thus, to produce housing is not only to engage capital in a building activity, it is to 'set up a development programme' where capital circulates under the *maîtres d'ouvrage's* 'property' through the *maître d'oeuvre's* 'possession'.

It is the role of the promoter to advance the money to 'buy' the right to build from the land owner, to advance the circulating capital put at the contractor's disposal, to pay the fixed capital (which is anyway the contractor's property) and to manage the stock of housing until its final sale. Such is the rotation cycle of promotional capital. The building firm appears then as a 'sub-contractor' of a formal firm: the development firm. The necessity to liberate a piece of land each time to re-engage the reproduction cycle of construction capital and to find a new partner each time, brings the building firm to limit the use of fixed capital which it is not sure of being able to pay for regularly. The firm will also try to maximise the role of circulating capital (specially wages) since it will be advanced by the promoter.

For these reasons the organic composition of capital is weaker in the construction industry than in other industrial branches. Now, the Marxist theory of value shows that, in the case of such a branch, a relatively higher surplus value is produced (relative to capital employed) than in other branches.

As for 'promotion capitals', they constitute a rather complex system (Topalov 1970) that will not be studied here because this system varies

too much from one country to another and from one time to another (see Chapters 2 and 3). It compounds private capitals of very different origins and magnitudes, obeying various logics, and public aid and loans aimed at coping with the uneven access of households to housing. But we know enough to enter into the heart of the matter.

The Rise of the Urban Land Tribute

Let us imagine a capitalist aiming to collect a profit by engaging his capital in housing production. To simplify we will suppose he is a 'builder', that is both promoter and contractor at the same time, and that he intends to appropriate an 'average profit' determined by industrial activity as a whole. He knows that in a certain place within the social division of space he will be able to sell at a particular price. An obstacle to the operation: he doesn't own the land so he has to enter into a legal relation with the owner.

The differences from Marx's farmer are evident when the question is posed in these terms. While wheat production process is repeated from year to year with a timeless regularity, housing production takes place for a few months and it won't be restarted on the same site for many years. So the land tribute does not take the form of a regular rent, as in the case of agriculture, but it is a rather discrete transaction: the sale of the building site. Therefore the land price is not the simple capitalisation of a rent. It is the land tribute itself; it is the form which reveals the social relations between the owner and the promoter (the barter of the right of land disposal against a part of the profit), disguising it at the same time as the purchase of an economic good.⁶

While it is easy to measure the quantitative differences between harvests on different pieces of land, the difference between two housing products in two different points of the SDS is qualitative. Hence, the differences in 'productivity' between building sites don't have purely physical or economic origins but depend also on the sale price of housing at different points in the SDS (which is, let us recall, an effect of the totality of the social formation).

The nature of land prices appears clearer now. When the promoter 'buys' a building site, he doesn't advance his capital in the same manner as when he buys materials, machines or labour power. What the promoter is buying is a legal right which he doesn't pay for as a part of his productive capital, but as an advance on the surplus profit he expects to make (beyond the average profit that he reserves for himself). This is why land prices don't exist by themselves, but are created by the promoter's activities which give land a determined use; so capital

may be multiplied on the same spot in a few years.

Let us summarise. The urban land tribute is the part of surplus profit which, for various reasons, promotional capital captures in capitalist housing production and which the landowner is able to appropriate. We say that the landowner 'is able to' because the promoter's ability consists in leaving the owner ignorant of the potentialities of his piece of land!

It remains to be seen why there is, globally, a surplus profit in capitalist housing production and what modulates this surplus profit and the land tribute from site to site and from year to year.

Where Does the Land Tribute Come From?

Why is there a surplus profit and how is it modulated? Economists generally don't put the question in these terms. In fact we will see that the question is rather formal. If we proceed in this way, it is to distinguish ourselves from prevalent concepts that appear to us as false and to introduce two different groups of concepts.

The Land Tribute's Structure According to Marx, Engels and the Marginalists

Marx's and Engels's Position. Marx distinguished two types of rent:

(1) That which is based on the relation between each plot and the worst cultivated plot: it is the surplus profit made by the farms which utilise the more fertile and the better-located plots (differential rents of type I). It is also the difference of surplus profits per acre due to the unequal distribution of capital over the plots (differential rents of type II). These differential rents (DR) are not due to the existence of landed property, but the latter is able to appropriate them.

(2) Those which are levied even on the worst plot, as a pure tribute of landed property on capital. It is the absolute rent (AR). Total rent (TR) paid on any plot is then of the form:

$$TR = AR + \sum DR$$

Then Marx asks the question:

Does absolute rent enter in the price as a tax received not by the State but by the land owner, that is to say, as an element independent

of the value? (*Capital*, VIII, 142)

Of course, rent is fixed by economic conditions (competition, effective demand). How about its origin? Who pays the rent? Where is the value produced, the part of surplus value which is paid to the landowner? Marx begins by pointing out that rent can be compatible with the theory of value, i.e. that wheat can in fact be sold at its value, paying profit and rent at the same time. It is possible if the surplus value created by waged workers in agriculture exceeds the quantity sufficient to grant the average profit to capitalist farmers. We know that when it is so in other branches, the profit rate is levelled by an influx of new capitals which compete between themselves. Then relative prices are no longer regulated directly by value, but a system which is a 'transformation' of the system of values, the one of prices of production.⁷ Here, landed property prevents the functioning of this mechanism, and the surplus over the average profit is used to pay the rent. We thus have:

Value > production price	→	There is a surplus profit that is
Existence of landed property		transformed into rent

This reasoning is a logical order, which defines the limits of ground rent in the framework of the labour theory of value. It is neither the real nor the genealogical order of the appearance of ground rent.

Marx immediately makes a reversal of the formulation:

Due to the blockage caused by landed property, the market price should rise sufficiently to allow the plot to pay a surplus over the production price, that is to say, a rent. But, according to this hypothesis, as the value of goods produced by agricultural capital is superior to their production price, this rent, except for a case of which we'll talk later, is composed of the total or partial surplus of the value over production price. (*Capital*, III, 146)

In short, this is just fine! In the agricultural sphere, where it is necessary to pay a rent, value is above the price of production. As a matter of fact, the presence of landed property has clearly played the part of a restraint on capital accumulation, therefore imposing 'technologically' a surplus of labour value over the price of production in agriculture.

But it is not necessarily so. (We can think, for example, of rent in oil countries.) Marx knows it well and contemplates another source of land

rent: the surplus profit obtained from the sale of a good whose price is fixed as a 'monopoly price', determined neither by the price of production nor by the value, but by the demand and ability-to-pay of the buyer. What this means is that the monopoly on land reflects itself in the transitory scarcity of a commodity (wheat, housing) which, by raising the cost of living, forces industrialists to subsidise the nobility through the workers' wages. It is the battle between Whigs and Tories concerning the monopoly on wheat.

How about housing? Marx dedicates only one sentence to the subject by referring to the 'absolute predominance of monopoly rent'. As for Engels (1969), he is emphatic: the rent which housing owners appropriate (in addition to amortisation and construction profits) is 'a cheat', and 'as soon as a certain average amount of cheating becomes a rule in any place, it inevitably has to find (in the long run) a wage increase as a compensation'. He thus refers to Marx's monopoly rent and not to the difference between price of production and value.

A Critique of Marx's and Engels's Positions. Here we would like first to challenge the 'AR + Σ DR' structure. For it is not enough to explain the sources of absolute rent! The same problem concerns differential rent. It is known that Marx's theory holds that the market price oscillates around the price of production (cost price + average profit) obtained in average social conditions of production. Now, this theory of differential tribute assumes that the base of the market price is the price of production imposed by the worst production conditions for wheat. So, the sum of profits and differential rents in total production of wheat exceeds the product: 'total capital employed \times average profit rate'. In any case, and even without absolute rent, it is necessary to foresee a total surplus profit (in relation to the price of production), obtained in the sale of wheat, to pay for the differential land rents!

We are in the first place induced to ask a question: what is the source of the surplus profit which pays urban rent (and more generally the tribute)? That is, where does the excess value brought into play by the realisation of land-related production come from? And then: what makes surplus profit per acre different from one place to another?

Thus, the structure of price is not:

$$TR = AR + \Sigma DR$$

but: $TR = AR \pm \Sigma DR.$

the absolute rent being not the rent (or the tribute) on the worst spot,

but on the medium one, so that the regulating price is determined by adding cost + average profit + average tribute, the 'differential tribute' being only differentiation of tribute.

Of course, the problem of the origin of the average tribute remains, just like the problem of the absolute rent in Marx. Here is the second criticism we would address to Marx. If the tribute is to be paid with surplus value not equalised through competition of capitals (because of the existence of landed property), this surplus-value could have been produced either within the branch (if value \geq cost + mean profit) or outside (if value < cost + mean profit). Thus the distinction between 'absolute rent' in Marx's sense and 'monopoly rent' is rather irrelevant⁸ as we can see when computing the regulating price of the algorithm of transformation with a unit rate of profit and of the tribute per acre (Lipietz 1979b). Anyway, we shall have:

$$\text{sum of profit} + \text{sum of rents} = \text{sum of surplus value}$$

but the surplus value has no smell nor taste, and one can't say: this tribute in building production comes from the very production of buildings. Yet, there is the problem of producing this part of surplus-value and devoting it to landed property; that is what we call the source of tribute.

The task now is to create two groups of concepts:

(1) The sources of tribute, that is, the set of social relations which exist between the capital invested in building, agriculture or any other activity related to ground's disposition, and landed property, these social relations being expressed by different forms (ground price, rent) of *land tribute*;

(2) The modulation of the tribute by the articulation, with these relations, of other relations or practices of promoters, users, of the State, etc., articulations which cause various types of differentiation which will be designated by the term of *differential tribute*.

The Marginalist Position. It is interesting to note that the marginalist school explicitly acknowledges a structure of land price similar to that of Marx. We know the city's radius R (determined by its density and its population). We derive from its inhabitants' 'utility functions' a differential equation which expresses for all points the marginal increment that they are willing to pay in order to come closer to the city centre. It is a kind of situation-differential tribute at a distance r from

the city centre. We have then to solve a Dirichlet differential problem – that is, it is necessary to know the ground price at the city's periphery, P_R . Therefore we have a structure similar to that of Marx:

$$P_r = P_R + \int_R^r \frac{dp}{dx} dx$$

We can compare this metric structure to that of a volcanic island (Mayer 1965): above a certain level, given exogenously at the periphery, the island's altitude increases regularly towards the centre according to laws concerning the equilibrium of slopes.

As far as the 'absolute tribute' P_R is concerned, its estimation varies according to different authors:

(1) $P_R = 0$, an evidently unrealistic position of Maarek [1964] which builds the city in a sandy desert.

(2) $P_R = a$ (price of agricultural ground). This is Alonso's position; it is also that of Adam Smith which Marx takes up without much examination in *Capital*: agriculture being the predominant use of land, the housing absolute rent is the total tribute paid at the periphery of the city.

$$(3) P = \begin{array}{l} a + b + c + d \text{ within the city} \\ a + c \text{ at the outside} \end{array}$$

This is Mayer's proposition: b is the development cost; c an 'anticipation rent'; d is a 'scarcity rent' on buildable plots. The 'volcanic island' will no more rise smoothly from sea level, but will rise at once, with a discontinuity, the 'Mayer Threshold' $c + d$; and it will produce waves (though we do not know how they damp out to reach a , the agricultural price).

It is useless to criticise this position theoretically since we don't agree even with Marx's position with regard to the implied structure of land prices, given our former criticism of the 'psychological' conception of urban price modulation.

When tested out, this conception clashes with some noted contradictory examples. The econometric adjustment made for Nantes has given unstable coefficients with 'distance', (which proves that 'the value of time' is not the same for everybody and that it is necessary to take into consideration at least the social stratification), with 'orientation' (which shows that the social typology of central districts of the city tends to spread towards the outskirts) and with time (which shows that

ground prices depend on the general economic conjuncture). Above all, Vielle's study (1970) on Teheran shows that land prices are higher on uncultivated stony fields located north of residential districts, than on more fertile lands located south, where the poor districts are.

We are thus brought to think that land prices are determined from the centre towards the outskirts, the possible urban use entering in competition with the real agricultural use and being able to bring about a greater land tribute by itself. Therefore we have to think not of the 'volcanic model' but rather of the 'alpine model', with the rise of a granite core pushing waves all around.

The Structuring of Land Tribute by the Promotional System

In order to specify this idea, we have to deal with relations and practices which intervene in a concrete domain, that is, through and in the framework of a pre-given system, functioning as a whole, which specifies the elements and their relations. This domain is that of the functioning of the system of promotional capitals, more particularly in its confrontation with urban property but under the constraints imposed on it by the state of the wider circulation system of social capital, and that of effective demand.

The heart of the theory of urban land tribute is that each use of the land brings about its specific tribute in each specific situation. The problem then is: how is the land tribute fixed for a use? And how are the uses of land distributed?

In the first place, let us remember that the hierarchy of the economic and social division of space is dominated by the superior tertiary sector, which brings about a tribute corresponding to particular relations, and which is superior to that brought about by housing. On the other hand, agricultural use creates its own tribute which is generally inferior to that of housing.

The land required for housing is determined by the mass of capital invested in building, these capitals being divided into sub-markets by the level of public subsidy and thus requiring different rates of profit. This mass and these rates are determined by the conjunctural situation of the circulation of social capital: general rates of profit in industrial sectors, rate of interest, volume of mobile capital, monetary policy, and so on. The real estate sub-markets are defined by the confrontation of the promotional system and the structure of effective demand (the incomes of various social classes). They compete for the occupation of the pre-existing ESDS. The hierarchy of these sub-markets fixes the order of priority for the occupation of spots, from prestige tertiary to

social housing. The sale price that can be sustained by the user in one market fixes the theoretical surplus profits for the promoter, and the difference between this surplus profit and the average profit fixes the tribute that the promoter will agree to pay to the landowner in exchange for access to the site. Thus, it is eventually the use of the land that settles its price.

Thus, we can say that it is not because land prices increase that housing prices do: on the contrary, it is the rising purchasing power of the ruling classes which proceeds to certain neighbourhoods which makes land prices increase.

Finally the administration, confronted by the presence of promoters, owners and users, carries out investment and fixes the land occupancy rules. The urban land tribute per unit of capital determined by the above mechanisms is then transformed into a tribute per unit of area. This is how land prices per square metre are finally fixed.

It is evident that at this point the system 'loops': this outcome can in turn modify the state of the construction system, etc. With regard to the 'edge' problem between two uses of land (in the ESDS), it has to be approached from a dynamic angle, for example by means of logistic curves.

This is the way the land price pattern is determined. Now, we know that this urban tribute is a part of social surplus value. Where does this surplus value come from?

The Sources of Land Tribute

Reading this one can recall Marx's judgement over 'monopoly' rent: 'Urban owners make others pay for the right to inhabit the land'. It is actually the first 'source' of urban rent which Engels worked out: thus we will call it 'Tribute à la Engels'. But there is another one, related to that evoked by Marx in the agricultural case: 'Tribute à la Marx'.

Tribute à la Engels. It is clear that the land tribute's structure gives great importance to the purchasing power of middle and superior classes: it is also necessary to recognise that what is implied in this case is not so much the right to inhabit the land but the right to not cohabit with anybody.

What then is the social relation that is involved? It is the relation between the capitalist class as a whole (with its vassal classes) and urban property. This tribute is actually a redistribution of social surplus value, which shifts first in the form of strongly skewed incomes and then through the selection of places in the social division of space (which is

itself very segregated whereas construction prices do not fluctuate much) and is then partially transferred to the parasitic layer of urban property owners.

In Marx's and Engels' time it was mainly this social relation which was affecting housing for all social classes: the middle-bourgeois class of urban landowners could, due to the rural exodus and to the mediocrity of dens, easily extort a 'Tribute à la Engels' from the working class. This would raise the cost of labour power, levying a share of the surplus value extracted in the industrial world as a whole. This secondary contradiction within ruling classes (between 'productive' capitalism and 'parasitic' urban property) turned little by little in capital's favour (1923 and 1948 laws), but still keeps a distinct importance in France, given its archaic social structures.

The 'Tribute à la Engels' particularly, is and will be the principal source, the 'womb' of differential tribute linked to the social division of space. For, contrary to the case of wheat farming where differential rent is directly quantifiable (and this is not so in the case of great vintages!), the difference between houses is qualitative and it only becomes quantifiable through the structure of differentiated purchasing power of different social classes.

The Tribute à la Marx. During the sixties, in France, housing 'producers' tended to become increasingly powerful users of suburban land, thus moving the housing crisis from a quantitative to a qualitative one. Their goal was then to transform housing into a good free from monopoly rent — that is, into a product subject to autonomous feasibility conditions (comparable with the general circulation of social capital). We could say without 'abnormal' transfer of surplus value from one sector to another. But, we have shown that construction is precisely one branch where the ratio of surplus value to productive capital employed exceeds the average ratio. And this is no more of a coincidence than in the agricultural case. Due to its 'pre-industrial' nature, not only is the organic composition of capital in house building, as we have seen, rather low, but also the exploitation rate in this sector is in France (and for connected reasons) higher than elsewhere.

We detect here a new contradiction, this time between the urban owners' interests and that of the 'big builders': the need to set aside a part of the surplus value for the land tribute prevents intensive accumulation of capital and industrialisation in the building sector.

The big firms drew a logical conclusion from this: 'The search for building sites and their first laying-out goes far beyond the builder's

duties, from both the financial and legal points of view. It is just as abnormal to ask this builder to provide the plot, as to ask an automobile producer to provide the road. The solution seems to be a formula similar to the present 'ready-to-build' one, where the serviced plot will be furnished by the administration and will be set at the disposal of a producer, who will be in charge of the design and realisation tasks, in the manner of a 'turn-key' project'.⁹

Scope and Limits of the Distinction between the Two Different Sources of Tribute. We have so far voluntarily stuck to the somewhat naïve way in which Marx and Engels presented the problem of the land tribute's 'sources'. As if the created value were a liquid substance, springing up from social labour into different branches of production and distributed afterwards in various revenues. We could then follow the trail of each 'molecule of value' as with a radioactive tracer, from its creation till its absorption . . . Thus, the land tribute 'à la Marx' would distinguish itself by the fact that it would be value created in the construction industry which would fall into the owner's pocket, while in the case of the tribute 'à la Engels' this value could have been produced in any branch.

Actually, the link between the distributed income and created value is more global and more fuzzy. Just as we say in French 'money doesn't have a smell', so circulating value doesn't remember its origins. Since it is all the social labour which is subject to the abstraction of price mechanisms, the part due to the landowner doesn't come more particularly from the capitalist production carried out in his plot, than from any other. The fact that the value created on his plot is superior (as in the case of housing, agriculture) or not (the oil case) to the price of production doesn't change anything. In a sense, every tribute is then a tribute 'à la Engels', a part of total social surplus value granted to landed property.

The laws which determine the level of this tribute are not the same as the ones which determine the surplus value level. Whereas the latter are concealed from the eyes of the economic agents and will only appear through theoretical analysis of the capitalist society's 'anatomy', the former are the subject of negotiations, contracts, public regulations, and even of international treaties.¹⁰ Nevertheless, at a general level, the famous 'Marxian equations' remain perfectly verified no matter what has been said about it (see note 7). If we choose unities such as:

sum of added values = sum of net product prices,
then: sum of surplus value = sum of profits and rents.

If this is so, what is the advantage in distinguishing tribute 'à la Marx' from tribute 'à la Engels'? Actually, behind the dubious hydraulic analogy, those authors were trying to detect where the social existence of landownership makes an impact in the capitalist accumulation cycle. In the case of tribute 'à la Engels' the articulation takes place only at the circulation level. When speaking of tribute 'à la Marx', one tries to point out (as we have sketched above) that the existence of landownership exerts its effect right down to the production process.

We get from this some really different types of antagonism or alliance between the distinct fractions of the industrial and financial bourgeoisie and the various types of land owners.¹¹ We are able to distinguish (Lipietz 1974) the different types of land reforms that have been proposed in France during the last fifty years, assailing in their different ways both sources of the land tribute, corresponding to distinct social contradictions, seeking for different class alliances.

Modulations and Variations of the Land Tribute

If we have shown how a specific use of land brings about a land tribute, and if we have shown what its sources are, what relations link capital and urban ownership, then we still have to account for the modulation in space of this tribute and its variations with time. (We will only consider here the land tribute brought about by capitalist housing production.)

If in this section, reverting to custom, we keep the term 'differential tribute' to designate the inequality of tribute provoked by the diversity of forms and conditions of the valorisation of capital. Let us simply remember that, for us, this tribute doesn't miraculously 'add' itself to a hypothetical 'absolute tribute' determined somewhere else by another use. Again for simplification purpose, we will use the word 'tribute' to name the surplus profit even when it is not actually paid to the urban owner, as for instance when the promoter 'fools' the owner with regard to the potentialities of his plot.

We can first study the tribute's modulation in space. It arises from the articulation of basic social relations which determine the land tribute's sources in the local differentiation of the practices of the

economic agents. These practices are very different if we talk about wheat production or about housing. Hence the vanity of attempts to transfer term-by-term the (already not very specific) Marxian concepts of 'differential rent of fertility', 'situation', etc.

We are driven to a basic distinction between two types of differential tributes: those which are independent of the promoter's autonomous (private) practices (we can call these exogenous) and those which depend on the promoter's practices (endogenous).

Exogenous Differential Tribute

An exogenous differential tribute can exist when the surplus profit on invested capital is not only limited by, but is also determined by conditions due to the site's properties.

In the case of housing a first type of differentiation is introduced by the conditions given to the labour process – that is, by problems encountered by the building process, conditions which sometimes can be 'physical' but generally are social: presence of old diggings, of more or less load-bearing soils, of ancient buildings to be removed (and we can add to this the cost of reaccommodation of former users – cost in money and in wasted time on immobilised capital).

We will name this type of differentiation: differential tribute of constructability. It modulates surplus profit in terms of cost price.

A second type of differentiation (and it is the most important) is obviously the economic and social division of space. From the moment it is inscribed, drawn out over the map, even as a 'project', every single limited operation (that is, one which does not modify this ESDS) is under the obligation to pay to landed property at least the tribute brought about by the locally-prevailing use: and it can do it because it is precisely the purchasing power of the social category of final users which is the source of this type of tribute. Otherwise the tribute linked to situation in the ESDS is, by its nature, by the underlying social relations, a tribute 'à la Engels'.

We can notice here the removal of the ambiguity introduced by the use of expressions such as 'tribute brought about by such a use of land'. It is not the promoter's fancy that, by his choice, determines the price of ground. It is the social division of space, globally determined, at the scale of the whole social formation, from the city's past. In the medium-term functioning of the development system, the ESDS virtually imposes itself on the promoter. It dictates to him which valorisation process will produce the possibility of such a land tribute.

The mechanism of differential tribute of social situation is precisely

the economic process (though there exist others) which stabilises the ESDS, by assuring the suitability of the housing produced to the social status of the neighbourhood.

It remains for the objective basis of the ESDS (quality of streets, of general architecture, illumination, transport services, neighbourhood services) to be produced by human labour, by a massive investment of private or public capital. Thus we approach the 'endogenous differential tribute' problem.

Endogenous Differential Tribute

We will not dwell for long over the 'extensive endogenous differential tribute' by which, over two equal plots 'equally located', a promoter will agree to pay a tribute twice as high if he can produce and sell twice as many houses.

We shall insist nevertheless on this point: the regulation of the 'Ground Occupancy Coefficient' (GOC) intervenes as a limit to the promoter's autonomy, but the tribute is actually brought about by the action of the capitalist promoter himself. Yet once the legal GOC is known, the landowner will naturally demand the maximum tribute consistent with the GOC and the situation in the ESDS.¹²

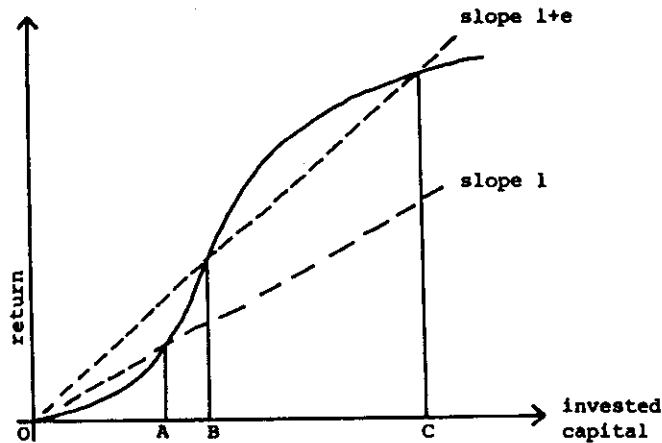
We will persist longer over the 'intensive differential tribute', that is, where the surplus profit rate depends on the level of invested capital. As a matter of fact, this is more or less always the case, but the concept's relevance is particularly clear in the case of a massive change in the use of ground – for example, from agricultural use in housing (urbanisation), or making an 'in' neighbourhood out of a 'lumpen' one (renovation).

Let us take the urbanisation case. The agricultural capital implanted in the ground is no longer considered of any value. It is necessary to invest first in the primary roads and various networks (water, electricity, etc.), then in the secondary networks, then in the first buildings. The cash flow is at first nil, then fast increasing, then decreasing with the number of floors; such is the rate of return on invested capital. Figure 7.1 allows us to compare the return to the cost price and to the average profit (of rate e).

We can see that the rate of profit on marginal outlay is a strong function of the global level of investment. Hence the level of tribute depends on the mass of invested capital.

This is the reason why a highly sophisticated set of forms of public regulation and financing has been set up in France (for instance with responsibilities for the financing of the primary transport network), in

Figure 7.1: Return with Increments of Capital Invested



OA: heavy investments are made but there are few inhabitants to pay for them. Only public funds can take up this stage of urbanisation.
 AB: houses sold can cover their costs, but the density is too low to yield an average profit.
 BC: private capital makes a surplus profit.

order to give private building capitals opportunities to invest directly at the profitable stage (BC in Figure 7.1). Other regulations have been made in order to prohibit landowners from appropriating on their sites the intensive endogenous land tribute corresponding to these huge investments of public or private capitals.¹³

Variation of Land Tribute through Time

Variations show two components: a general element (average price movements of urban land) and a local one. After World War II these movements were generally upwards. This allows a commercial game, not purely speculative, which consists in buying for reselling after the rise, pocketing a 'land surplus value'.

General Variation of Land Tribute. The land tribute can grow because

the total profit increases in the production related to the ground, or because the average profit rate decreases. This second cause expresses the saturation of the system of expanded circulation of capital, due to a tendential decline of the profit rate, to overproduction crises, or to other factors (e.g. return of colonial capitals). The first is essentially due to an increase in the tribute 'à la Marx' (industrialisation). On the other hand, urban development immediately makes a differential tribute of social situation appear over all plots previously urbanised, financed by the middle classes forced to pay higher prices for centrality (tribute 'à la Engels').

Finally, let us re-emphasise what may be obvious: that the incorporation of capital (particularly public capital) in land increases its price just as much as density-increases do.

Local Variation of Land Tribute. By definition, this is a question of differential tribute. It can be due to: (1) a variation of extensive endogenous tribute, limited by variation of the legal GOC, for example, the removal of a construction ban; (2) a variation in social use, which can be the consequence of an action by the promoter himself, of some public development (creation of a primary network) or of a move in 'l'air du temps' (e.g. the lofts in New York). According to the case, we can talk of intensive endogenous tribute variations (variation of marginal surplus profit realisable from the housing once the infrastructure is modified) or we can talk of an exogenous variation in the ESDS.

The So-called Land Surplus Value. We have assumed that surplus profit falls into the urban landowner's pocket. Obviously this is not always so:

(1) A speculator (etymology: someone who waits and observes) can buy a plot according to the land tribute corresponding to the initial use (e.g. agriculture) and resell it to a promoter at a price including the subsequent local tribute.

(2) A promoter can carry out the same operation and make a surplus profit which doesn't completely transform itself into land tribute.

These two operations are not equivalent. Both are allowed only by the landowner's ignorance concerning the plot's possibilities. Nevertheless the pure speculator only 'waits' for society to produce (in his plot's vicinity) the increase in land tribute, while the promoter is, at least

partly, this society's direct agent, changing the use of ground by his investment.

We use the term 'land surplus value' for the difference between the plot's purchase price and the land tribute corresponding to the final use. This 'surplus value' is not related to the Marxist meaning of the term; it does not correspond to any 'added value'. But the term is prevalent enough (in French) for us to adopt it. Surplus value can be the object, on the part of an intermediate owner, of an active appropriation (if it brings about, by his investments, a local increase in the land tribute) or of a passive one (if he only takes advantage of the local or general variation of the land tribute).

Conclusion

What do we get from such a theory? What do we get from this heavy conceptual apparatus?

First a representation of reality matchlessly finer, a capacity of integration and explanation of facts and figures without measure from Mayer's or Alonso's models. (The epistemological status of those models is a quite separate weakness.) But is the theory 'operational'? It will be necessary first to know what that means. Is it a question of having a model which allows us to calculate, from some features of a plot, its average price? We can first note that Alonso-Mayer models cannot do it. Anyway, it is clear that a theory cannot act directly as an operational model in economics any more than in mechanics. But the theory gives us the components of the model which remains to be constructed:

(1) In a general way, land price depends on the average profit rate and on the purchasing power of social classes, on the pugnacity of land-owners . . .

(2) Locally it depends on the 'residential quality', on the construction costs, on the permitted land use and density (GOC) . . .

Essentially the theory shows us in which direction this or that exogenous action or change will make the land price move and how that movement interacts with current social practices and patterns. The theory can then be interpreted in two different ways.

From Sirius's viewpoint, which is that of the academic research inspiring this paper, it allows us to interpret the evolution of the French

bourgeoisie's politics in a surprisingly fine way.¹⁴

From the normative viewpoint it will allow us, we hope, to avoid the loose debates over the respective merits of those various fiscal, regulatory or financial measures which, by only intervening on a unique type of tribute, cannot resolve the urban problem by themselves.

Acknowledgement

Thanks to Ricardo Hausmann for his help with the translation, but I assume responsibility for the result.

Notes

1. The full development of the issues presented in this paper are to be found in Lipietz (1974).

2. This 'tolerance' was far from being complete. The first publication of the present theory had to appear under a false name (Juillet 1971).

3. Applications to the case of oil rent can be found in Lipietz (1974), and especially in Hausmann (1981).

4. These analyses are to be found in *Capital*, Volume III, and *Theories of Surplus-Value* (about Ricardo). Both of these books remained as drafts when Marx died, and many contradictions remain between these texts (see Chapter 9 - eds.)

5. In the seventies several French scholars (e.g. Aglietta 1979; Coriat 1979 and Lipietz 1979a) emphasised the specificity of this regime of accumulation, and called it 'Fordism' (following an old insight of Gramsci). The role of housing in post-war French Fordism is very peculiar: though the new standard of housing was necessary for Fordism to develop, house building itself failed to participate in the trend of productivity borne along by Fordist processes of production. On the contrasted logics of motor-car and building industries, see Lafont, Leborgne and Lipietz (1980).

6. This oddness of a part of the surplus-product which appears as an element of production costs confused even Sraffa (1960). Hence the inconsistencies of his chapter on rent, noted by several scholars. For an analysis of these inconsistencies, see Lipietz (1980b).

7. There has been a lot of arguing about the results of this transformation, because the 'standard' solution of the problem (Seton-Okishio-Morishima) exhibited some paradoxical results. A closer examination of this standard solution plus the discovery of a new solution by Demunil, Foley and Lipietz made clear the following (see Lipietz 1982). Everything depends on the definition which is adopted for the value of labour power. If it is the 'value of the commodities purchased through wages', then the value of the commodities purchased through profits equals the total surplus value.

If, instead, we take the value of labour power to be the portion of the value added which is assigned to wages, then the sum of profits equals the sum of surplus value. (These sums relate only to the net product.) This last theorem has been extended to the case of fixed capital and rent in Lipietz (1979b).

8. Anyway, the word 'monopoly' pervades Marx's texts about rent (see *Capital*, III). Landed property, as a social relation, is from the beginning a 'monopoly on defined parts of the earth' (p. 8), just as a capitalist class could be defined

by a monopoly on the means of production. So any land rent is a monopoly rent.

Even in the case where 'absolute rent + capitalist profit \leq surplus value', the price of the product is not defined only by the condition of capitalist production, but also by a bargain between the user, willing and able to pay for a plot, and the landowner, able to levy a tribute or to forbid the use of the plot, no competition of capitals being able to raise this barrier. So this price is also a monopoly price, as Marx admits (p. 146: 'But, whenever the absolute rent would be equal to the totality or only to a part of the excess (of value over price of production), the price of the agricultural product would be a monopoly price, because it would be above the production price').

Moreover, 'though landed property is able to bring the price above the production price, it is not itself, but the market conditions, that will define up to what point the market price will approach the value and by-pass the production price'.

So the existence of landed property is the cause of the rent, but not the determinant of its magnitude. The quantity 'value minus price of production' is of no relevance at all. There is no difference in Marx between 'absolute rent' and 'monopoly rent', either as a concept or as a practical mechanism. The only difference could be perceived in national accounting! Yet there is an idea in this distinction, that we shall catch as 'tribute à la Marx'.

9. That was the answer of M. Pagezy, top manager at St Gobain-Pont-à-Mousson, to an inquiry on the industrialisation of building activity.

10. On the distinction between these two kinds of laws, see Hausmann and Lipietz (1983).

11. For instance, as far as tribute is 'à la Engels', there is a community of interests between landowners and capitalists investing on their plots, against the rest of the society. This was quite noticeable in the early seventies between oil companies and OPEC. As far as it is 'à la Marx', the contradiction splits between landed property and intensive accumulation in land-using sectors. Hausmann (1981) suggests a distinction within the landowner-user relation: the relation of access and the relation of payment. The first is more relevant to the effect of landownership on the forms of accumulation, thus on the tribute 'à la Marx'.

12. As Kascynski (1982) recently pointed out, one peculiar form of this tribute is the parcelling-out of vast pieces of field suitable for 'rurbanisation' (individual house-building in the countryside for urban workers), at present the most important form of house building in France. Using the present theory of land tribute, Kascynski was able to construct a model and a methodology of land prices observation in the region Nord-Pas-de-Calais.

13. One may notice that in essence the difference between 'exogenous tribute' and 'endogenous tribute' (at least, as far as the intensive form is concerned) refers to the fact that, in the first case, the investment is done in a pre-given social framework, without modifying it, and in the second case it changes it. This distinction is connected to another: 'competitive regulation vs. monopoly regulation' of the production of social space (Lipietz 1980a).

14. In Lipietz (1974) last chapter.

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