

## Urban Ground Rent: Building a New Conceptual Framework

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Urban rent theory, like economics in general, is dominated by the neo-classical school and its perception of capitalism and the city. This picture is proving to be rather sterile for an understanding of either of these systems or their interrelationship, and this poverty of explanatory power reflects in the neo-classical version of rent theory. It is necessary, therefore, to build a new conceptual framework with which to elucidate the structure of capitalist cities and, as one step in this process, to reconstruct urban rent theory from the ground up.

The neo-classical models of the city and rent are based on the von Thünen model of agricultural rent (c.f. Alonso, 1964; Mills, 1972; Muth, 1969). Rent in these models is exclusively differential rent, structured by transportation costs to a central market or city center. Generally, differential rent can be said to originate from differences in costs of production, including transport, at different locations, given freely competitive prices in both product and land markets; the number of producers adjusts so that the output market clears and marginal producers pay no rent (i.e. at the margin price equals the cost of production).<sup>1</sup> This concept is widely familiar and needs no further elaboration.

The question we must address is whether differential rent is an adequate land rent in the Twentieth Century capitalist city. The critical assumptions embodied in differential rent, and carried over to the von Thünen/neo-classical models of the city are: (1) that rent reflects differences in real productivity (lower unit costs of production/transportation) at various locations; (2) that the city center is the most productive location in the urban area (due usually to the concentration of transport facilities there); (3) that rent falls to zero at the margin, and the marginal locations are at the urban fringe; (4) that firms and landowners are competitive price-takers and there is no monopoly; and (5) that the urban system is an atomistic market-exchange economy, without government or social classes.

If we are to come to grips with the modern city, however, it is necessary to reconsider these assumptions and begin to think in terms foreign to neo-classical analysis: pervasive monopoly, class division in society, growing government regulation and redistribution, circulation of the economic surplus, and disequilibrium in the land market. Out of this framework emerge very different categories of rent from the one we are used to — monopoly, absolute, and redistributive rent.<sup>2</sup> The focus of this paper is the specification of these concepts.

### *Monopoly Rent*

The first problem with models of differential rent is their assumption that all firms are competitive price-takers and that, as a result, differences in land rents have their origin solely in differences in costs of production. This conception completely overlooks the effect of location on the firms' revenues, either through sales volume or price.<sup>3</sup> It thus excludes the possibility that rents could derive from excess profits due to monopoly prices, rather than from excess profits due to productivity differences. Yet, such monopoly prices, and hence monopoly rents, do arise as a result of monopolistic or oligopolistic competition for markets in space, or as a result of the direct consumption of space.

An important source of monopoly rents is competition among sellers in space, a process little noted by economists since Chamberlin (1933) and Hotelling (1929), but well developed

by economic geographers, such as Lösch (1954) and Berry (1967). Because firms are profit-maximizers they seek to optimize their location in terms of both the costs of doing business and the revenue effects of access to customers and location relative to competitors. Contrary to the simple assumption of the von Thünen model, in which all products are sold in a central market, retail firms in reality "carry their market with them." Chamberlin summarizes the problem:

The movement of buyers being impeded, the "product" of each site contains an element of convenience to a certain group, and the seller locating on the site has a monopoly of its product, the full value of which he is obliged by competition of others for its use to pay into the hands of the landlord. (Chamberlin, 1933, p. 243).

In Chamberlin's model, free competition does not eliminate the monopoly aspect of space—hence the name "monopolistic competition." The monopoly inheres to space. He concludes: "agricultural rent is a purely competitive return; urban rent is a purely monopolistic one." (Chamberlin, 1933, p. 242).

A somewhat different approach to monopoly rent is by means of the theory of oligopolistic competition. Lösch (1954) has shown that perfect competition among sellers results in a hexagonal pattern of market areas in which all customers are served. If, however, there are fixed costs of entry due to technical indivisibilities which form a barrier to free competition—the classic oligopoly case—excess profits may result which are bid into monopoly rents. That is, fixed costs of entry can lead to non-hexagonal market areas, from which firms can earn varying profits, and which may leave "gaps" between areas where customers are left unserved. (Mills and Lav, 1964). As Lösch himself notes, "a residue may remain in this case that is too small to permit the existence of an additional firm, yet [which yields excess profits]" (Lösch, 1954, p. 6). In addition, one can easily visualize the strategies by which oligopolists could manipulate the 'residual' customers and maximize their excess profits while excluding new competitors. This "excess" may not be insignificant—witness the discontinuities of shopping center locations in suburbia.

Thus far we have assumed that the product being sold is not itself fixed in space, but that consumers are. But certain features of land itself may be sought as objects of final consumption, especially in connection with housing as, for example, a hillside or a lake front. This brings in the heterogeneity of land, which is explicitly excluded from consideration in neo-classical models. It is not enough that the assumption of homogeneous land ignores natural variations in landforms, but it also overlooks man-made features that are fixed in space and in short supply, whether artificial lakes, parks, or good neighborhoods. In either case, the "product" being demanded has an element of uniqueness even more restrictive than Chamberlin's "element of convenience" in retailing (see above). There are few substitutes and few suppliers for the house on the 18th green, and these are the conditions which create monopoly power for the seller, and hence monopoly rents. The seller can extract the consumer's surplus corresponding to the difference between his location and the next best location; given non-continuity of property rights, there can never be perfect continuity of substitution here.

The issues of "marketing" in space are not confined to retailing for final consumption, although most discussions of the subject proceed on this assumption. Sales of intermediate products and services among firms are likely to be just as important in the urban scene. For instance, many observers cite the personal interaction among the managerial, financial and professional elite as a basic reason for the concentration of banks, law firms and brokerages in the city center. (Vernon, 1960). Usually the real productivity of close personal access is emphasized, (Vernon, 1960; Gaffney, 1967) but reductions in cost are probably insignificant compared to the revenue gains from proximity. In the restricted world of the economic elite, where access is measured less by distance than by the ability to make contracts over lunch, market relations can, at best, be characterized as oligopolistic, and monopoly profits and rents must enter with a vengeance at the city center. If, in addition, considerations of status motivate businesses to locate at the center, monopoly rents may be extracted in the same manner as land rents of a good neighborhood.

It is worth remarking at this point that the problem of "marketing" has been conceived of rather narrowly by both economists and geographers. In Marxian theory, the question of

the sale of commodities is put on an equal footing with the production of commodities; Marx devotes Volume II of Capital to the issues posed by the circulation of capital, in both money and commodity form, and the realization of surplus value. A strong case can be made that in the twentieth century, under monopoly capitalism, the problems of the circulation of capital and realization of surplus value have become preeminent over problems of the production of surplus value. (Gillman, 1957; Baran and Sweezy, 1966). For the capitalist city, this means a transformation from being primarily a site of production, as in the nineteenth century, to being the center of circulation and realization. The movement of manufacturing, wholesaling, and retailing out of the city center has been widely noted (Mills, 1972), as has replacement of these functions by corporate and financial headquarters and the professional services that attend them. One explanation for this phenomenon of "financial centers" is the need for those institutions and persons concerned with the movements of capital — the circulation and disposal of surplus value — to gather in close cooperation at the focus of the city. Where economic concentration and power is at its highest and the common aim is to manipulate successfully the surplus product without jeopardizing the existing relations of production, traditional notions of competition and the market become obsolete. The concepts of normal economics are inadequate to deal with this process; even "revenue maximization" does not do it justice. The payment of exorbitant monopoly rents can be justified, just as the cost of ever higher skyscrapers, because the differential costs of location are trivial compared to the unacceptable "revenue" effects of locating outside the financial centers.<sup>4</sup>

### *Absolute Rent*

A positive rent at the margin is specifically excluded from neo-classical/von Thünen rent theory. By assumption, landowners are willing to accept any positive return for the use of their land, rather than earn nothing. (Mills, 1972, p. 89). In opposition to the same proposition is Ricardo's treatment of rent. Marx introduced the new category of absolute rent, a positive return going to the owners of even the worst quality (marginal) land. This rent is owing to the universal unwillingness of the class of landlords to lease their land for less than an "acceptable" positive return, however that is defined. Marx compares the two kinds of rent:

Differential rent has the peculiarity that landed property here merely intercepts the surplus-profit which would otherwise flow into the pocket of the farmer...landed property is here merely the cause for transferring a portion of the commodity-price... But landed property is not the cause which creates this portion of the price, or the rise in price, upon which this portion of the price is premised. On the other hand, if the worst soil cannot be cultivated — although its cultivation would yield the price of production — until it produces something in excess of the price of production, rent, then landed property is the creative cause of this rise in price. Landed property itself has created rent. (Marx, 1967, p. 755).

An awareness of the possibility that a non-zero margin of rent can exist is not confined to Marxians, being generally conceded by several early classical and neo-classical economists. J.B. Say mentions it in his note to Ricardo (Cherbulierz, 1862, p. 409), and even the illustrious Pareto was aware of it (Pareto, 1971, p. 248). The Italian marginalist Pantaleoni observes:

If the surplus produce from lands of lowest quality, which is theoretically possible and has probably been realized hundreds of times in close markets, is admitted to be rent properly so called, then the surplus produce that land of one uniform quality may yield when its quantity is short of the demand, is also rent. (1898 (1957 ed.) p. 272, n. 1).

But none of these investigates the implications of how the "shortage" of land which Pantaleoni notes arises. When Marx proposed absolute rent, he attributed it to the power of the landowners to create an artificial scarcity of land by their behavior as a class in demanding a positive return on all land in use; he distinguishes this from rent that arises due to a monopoly price for the output of the capitalist using the land. (Marx, 1967, p. 764) Clearly, monopoly rent, as we have defined it, also implies a non-zero margin, and appears

the same in this regard as absolute rent. But monopoly rent results from conditions of selling and competition or the characteristics of the land, and accrues to the landowner independent of his actions. In this passiveness of the landowners, monopoly and differential rent are alike. Absolute rent, on the other hand, requires a definite action of the part of landowners; as Marx says: "Landed property has itself created rent."<sup>5</sup>

The interesting question is how absolute rent might arise in the urban system. There are at least four ways this might happen, only one of which the neo-classicals have even considered. First, there is direct collusion. At the city center, for instance, landowners may be few enough to form a cartel to raise rent. Although Mills (1972, p. 111) dismisses this possibility glibly, there is some evidence for such collusion. Second, the police power of government can be used to effect a coalition to erect artificial barriers in the land market, thereby raising land values. The classic example of this, exclusionary zoning, and its effects on the housing market are well known.

Zoning and collusion are "interferences" with the workings of the market in the neo-classical world, but absolute rent can just as well originate in the "normal" operation of capitalism. Capital has invaded the once separate class of landed property to such a degree that it often blurs the distinctions between land and productive capital, rent and interest (Gaffney, 1962). Marx observed this process in his own time. (1967, p. 776). The owners of capital will invest freely in either land or production, depending on the profits to be made. The result of the universal "capitalization" of land that we are interested in here is that land will be withdrawn from the market (held idle) until it realizes a competitive rate of return.

Harvey (1973) has noted the practical effect of this process on the urban housing market. Oftentimes usable houses — long since amortized and now earning quasi-rents as man-made features incorporated into the land — will be abandoned by their owners because the rents they bring in, though non-zero, are unacceptably low by "normal" profit standards, and are therefore not worth the bother and risk of rental. The result of widespread abandonment, however, is the creation of a permanent supply shortage of low-rent housing, even though an excess physical stock of vacant houses exists. Supply and demand of housing do not equate at a market clearing price as the neo-classicals imagine (c.f. Alonso, 1964, p. 99), because equilibrium in the housing market is subservient to the requirements of the capital market and the class of landlord/capitalists. The excess supply of housing is eliminated by abandonment until the market price is sufficient to return an acceptable profit. Moreover, what appears at first glance to be irrational behavior on the part of individual landlords (taking nothing when they could get something), becomes rational for the class of landlords, because this conduct preserves all rents at a higher level. (Emmanuel, 1972, p. 221).

Absolute rent can occur in a dynamic framework as well as in the essentially static case just discussed. Andre Farhi (1972) has incorporated absolute rent in a model of urban growth and class struggle. He depicts urban growth as a product of scale economies from density balanced against diminishing returns to extension upward and outward.<sup>6</sup> Absolute rent can arise if landowners control a single ring of land at the edge of the city: "By-passing that ring would result in higher costs of housing and transportation for the workers and diminish either the workers utility level or the capitalist's rate of profit, or both." (Farhi, 1972, p. 13) The mechanism by which such a ring is held is not direct collusion; but land speculation:

Land speculation at the border of the urban area — the withholding of land at the border and waiting for the urban area to extend beyond the land withheld in order to sell it at a higher price resulting from the higher rent it can claim once it is well within the urban area — can be considered as having an effect equal to the existence of absolute rent. (Farhi, 1972, p. 14)

Speculation is due to the normal appreciation of land values at the urban fringe and to the normal acquisitiveness of capitalists, though it often creates its own "abnormal" dynamic, or bubble. It simply means holding land out of the market, although it could earn a positive income, in order not to preclude greater future returns.<sup>7</sup> Again the cause of absolute rent is the rational behavior of the class of capitalists investing in land; it is a result of a class monopoly over land and capital jointly. But a paradox in capitalism is

created if, in the aggregate, the two kinds of investment become antithetical because absolute rent and speculation drain the vitality of the urban system.<sup>8</sup>

### *Redistributive Rent*

Government has a very different role to play in the economy than profit-making firms. Although it is deeply imbedded in the predominantly market-capitalist system, neither its allocational logic nor its economic function should necessarily be judged by the lights of market activity. It is not simply a peripheral response to "market failures" as it is often portrayed in neo-classical writing. On the contrary, government is in large part a redistributive, not a market, institution. Redistribution is a form of economic organization in which the surplus product is appropriated by a central authority and reallocated by whatever criteria under which that authority is operating. Historically, redistribution dominated independently of markets, and has until recently dominated them as an economic form — although this fact is obscured by modern scholarship which sees in all earlier economies the nascent form of the market. (Polanyi, et. al., 1957; Harvey, 1973)

Most theories of economic rent concentrate on market relations alone, but with the growth of government in western capitalist societies it has become imperative to consider the effects of governmental redistribution on urban form and urban rent. Government uses its taxation and expenditure powers to supply collective goods and services not normally offered by private enterprise, and to engage in direct transfer payments. To the extent that such services and transfers are fixed in space, they may give rise to rent and may be capitalized into land values. The rents so created are of three kinds: differential, monopoly, and redistributive.

When government provides spatially-oriented public services such as roads and sewers — or to use Gaffney's term, the "utility-transportation network" — these man-made features affect productivity and revenues in much the same way as natural features, such as lakes and hills. In so far as these man-made improvements create differential rents, proximity to a freeway is no different in that regard than proximity to a navigable river. This is the classic public goods case, like Dupuit's bridge, which requires a large fixed outlay for construction, but whose use incurs no variable costs; marginal cost of use, and hence price, equals zero. But the benefits of lower transportation costs are capitalized into land values on either side of the bridge.<sup>9</sup>

One can imagine, however, that a shortage of water mains may exist and that competitive bidding for these advantages would create monopoly rents on those lands served. Similarly, homesites fronting on a man-made lake or golf-course will be as eagerly sought after as homesites on a natural lake, and can as easily be exploited by discriminatory pricing.

Services that are extended over space, such as water mains, streets and sewers, will have different cost-benefit characteristics from facilities located in one spot, such as a bridge or lake. A sewer line provides a limiting case. Here the benefits of use are all-or-nothing; one does not move to the sewer, as in crossing a bridge; instead, it comes to you. Once hooked on, the benefits of use are equal at every location. But the costs of extension are spatially variable. While there are increasing returns to scale in volume, there are diminishing returns to horizontal extension. The users closer to the treatment plant cost less to serve. If all users are priced "neutrally," that is according to the marginal costs of serving them, so as to eliminate cost differentials, no rents will arise. But more commonly, governments will underprice users at the fringe, in effect making a transfer payment to them from overpriced central users or from the general revenues. Because this transfer is spatially fixed, attaching to the house and not the person, it becomes rent, but it would be a misnomer to call this rent either differential or monopoly. Its origin is the government's ability to redistribute the social surplus; hence we can call it redistributive rent.

Admitting the distributional effects of collective goods and their prices into a discussion of rent — where they have been completely absent except for the work of Gaffney — opens a Pandora's box of unresolved issues. What constitutes a "neutral" pricing scheme is still disputed by neo-classical economists. Also, private business may provide collective ser-

vices,<sup>10</sup> such as telephones, which are priced differentially but not "neutrally" over space, creating redistributinal effects among users. We cannot pursue these complications here, except to point out the general rule: goods priced differentially by spatial location, rather than differentially by persons, can be translated into rents by the process of competitive bidding for lower-cost sites. In so far as price differentials reflect real cost differentials, differential rent arises; but if price does not absorb the real cost differences of providing the good or service, then a transfer takes place, and redistributinal rents result.

Government transfers that create redistributinal rents can be less subtle than the pricing of collective goods, and may be just as important in the spatial organization of the city. Suppose that a line is drawn down the middle of a town and mortgages cost ten per cent on one side and eight per cent on the other, houses otherwise being identical. The result will be a rise in house/land values on the eight per cent side until price equivalence is restored. This process is no different than the capitalization of different property taxes into house and land values (the process of capitalization of taxes, etc. into land values is discussed thoroughly by Gaffney, 1962). In fact, American cities are normally divided into separate areas in which different financial institutions are dominant, with differing fund availability and interest rates, and some areas where no mortgages can be obtained (Harvey, 1972; also see the article by Harvey and Chatterjee in this journal). The federal government, with its FHA mortgage-subsidy program, a massive redistributinal effort, enters into this scheme and respects the lines drawn by the finance institutions; FHA loans thus become widely available in certain areas, most notably the suburbs, and absent in others, usually the city center or "transition" zones (which may be most of the inner city). The result is higher house and land values (redistributinal rents) in the favored areas.

Gaffney has argued that government pricing subsidies for collective services at the urban fringe have contributed to inefficient urban sprawl, and, like speculation, serve to drain the productive surplus of the city. Thus, redistributive rent could play a role in the urban system akin to that of absolute rent. The overextension of services should be added to the effects of mortgage subsidies and other government programs which have fueled the move to the suburbs. In keeping with our earlier discussion of the growing importance of circulation vis a vis production under capitalism, it can be argued that any dissipation of the productiveness of the city, cum Gaffney and Farhi, is subordinate to the creation of effective demand in the city, and that suburbanization has been essential in creating demand. (Harvey, 1973). In this context, government redistribution in the form of loan subsidies is no different than government redistribution in the form of social security; both satisfy government's principal role within capitalist society, the creation of effective demand. (see also the Harvey and Chatterjee paper).

It should also be noted that government expenditure powers, like government police powers, are an increasingly important tool in the distribution of the economic surplus. All rents created by government action, whether differential, monopoly, redistributive, or absolute, will have distributional effects among individuals, interest groups, and classes who will seek to direct these rents in their favor. Neo-classicals dismiss such "pecuniary" effects as non-essential, but they are the life-blood of politics. (Gaffney, 1972). No theory which treats politics and economics as separate processes can hope to come to grips with the urban space-economy.

### *Conclusion*

All ground rent is created by a scarcity of favorable locations and features of land. Nonetheless, it makes all the difference how scarcity arises — whether it is technically necessary or socially manipulated. One should therefore be aware of the social relations and the nature of the productive system in which rent is embedded. The costs of overcoming distance have a universality in all economic systems, and as such have nothing in common with the current practice of legislating scarcity through zoning. Some kind of differential rent may therefore be useful as a "sorter and arranger" of land uses. But any concept which depends on assumptions of free competition among atomistic producers, consumers, and landowners, and full-employment equilibrium in various markets, does not seem a very accurate tool

for understanding modern capitalism or capitalistic cities. The varieties of monopoly, absolute, and redistributive rent, with no claim to universality, may in fact be more important in explaining the contemporary urban process than their universalistic cousin.

#### FOOTNOTES

- <sup>1</sup>Mason Gaffney (1962, 1967, 1972) offers a much more dynamic theory of differential rent and the urban economy which is based on scale economies and "synergism," the interaction among land users. The resulting conception of differential rent reflects real productivity, rather than just the simple dimension of transport costs. Unfortunately, space prevents a greater discussion of his model here.
- <sup>2</sup>The separation of differential, monopoly, and absolute rent is due to Marx (1967) and has been revived for use in the urban context by Harvey (1973). Redistributive rent is a new category, but reflects in large part the thinking of Gaffney.
- <sup>3</sup>The neo-classicals are simply repeating the mistakes of their predecessors. Losch (1954) long ago chided Weber (1909) for leaving out the revenue side of profit-maximization and locational decisions in his theory of industrial location.
- <sup>4</sup>Harvey (1973) regards this concentration in monumental city centers as chiefly symbolic, but I think that this cause, while not insignificant (witness the competition among some corporations and banks for the tallest headquarters), is secondary to the real problems of mutual access of the capitalist elite which brings the occupants of the skyscrapers together in the first place.
- <sup>6</sup>Harvey (1973) has not adequately distinguished monopoly and absolute rents. The active/passive role of the landowners is the crucial variable, and mirrors Marx's intent most nearly.  
Also, the relation of absolute rent to the gap between value and price of production, which occupies considerable space in Marx's discussion, and to which Harvey pays homage in passing, is a dead horse and should not be beaten any further. Emmanuel (1972, p. 220), discusses the matter thoroughly and concludes: "Absolute rent can very well exist, however, without this yardstick (the difference between value and price of production) and without this limit." I see no reason to disagree with this view.
- <sup>7</sup>The fact that not everyone's expectations can be realized does not make this behavior "irrational" in a dynamic, uncertain market, however. The situation is comparable to the exploitation of a common property resource, such as a fishery: "so long as the price allows an average rate of profit to the entire branch that exceeds the general rate by however little, capital will flow into it, since every fresh entrepreneur may reasonably hope to obtain this average rate for himself." (Emmanuel, 1972, p. 224)
- <sup>8</sup>Gaffney, who is so astute on most issues having to do with rent, stubbornly refuses to admit that his "parasitic" landlords who are hyperextending the city through speculation are none other than his "virtuous" capitalist in a different suit. Marx makes no such error. He was well aware that investment in productive assets has no inherent favor over investment in unproductive or speculative activity among capitalists. They seek only the highest return, even if this creates a "contradiction" in the system.
- <sup>9</sup>The common solution to the "pricing problem" of such indivisible, or partly divisible, goods is a two-tier price, one part reflecting marginal costs and the other a fixed levy or tax, often on land.
- <sup>10</sup>Meaning any commodity or service which cannot be produced, sold, and consumed in individual units which are completely alienable and can be discretely priced.

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