

The Rent Gap Debunked

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[Paper received in final form, January 1993]

Summary. The rent gap theory of gentrification has inspired a substantial amount of critical attention as well as several empirical studies. None of these studies addresses a fundamental problem with the rent gap hypothesis—namely, its dependence on a distinction between actual and potential land rent. That distinction does not contribute to the explanation of either the location or timing of changes in land use. And, contrary to some claims, there are no antecedents for the rent gap in the history of economic ideas—whether Marxian or neoclassical. It is concluded that the standard neoclassical concept of land-use succession is more coherent than the rent gap concept. However, neither approach explains how neighbourhoods previously subject to disinvestment come to be perceived to have the potential for reinvestment and higher land rents.

1. Introduction

Neil Smith's rent gap theory of gentrification has received a substantial amount of critical attention since it appeared in the pages of the *Journal of the American Planning Association* in 1979. Hamnett and others have subjected many aspects of the theory to detailed criticism, yet the rent gap persists in the literature of urban geography and as an apparently meaningful and useful concept (Hamnett, 1984, 1991; Beauregard, 1986). In recent years, several geographers have even attempted to determine empirically whether the rent gap exists. Ley's study of Canadian cities, published in 1986, has been followed by Clark's (1987, 1988) work on Malmö, Sweden, Kary's (1988) on Toronto, Canada, and Badcock's (1989, 1990) on Adelaide, Australia.

One crucial problem has not received adequate attention in the published commentary

and empirical research on the rent gap hypothesis. This is that the concept of a rent gap depends on a distinction between *actual* and *potential* land rent that does not contribute to the explanation of changes in land use. (An analogous problem has led to confusion in the debate about the economic effects of taxes on land—see Tideman, 1982; Bourassa, 1992b.) In spite of widespread criticism of the rent gap theory, the recent attempts to measure differences between actual and potential rents reveal that there is still considerable confusion surrounding these ideas. The purpose of this paper is to dispel some of that confusion by subjecting the basic concepts of actual and potential rent to critical scrutiny. In support of this criticism of the rent gap theory, it will be shown that contrary to Clark's (1987) assertions, a careful review of the land economics litera-

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ture reveals no legitimate theoretical roots for the actual versus potential distinction. The concept of rent that is relevant to changes in land use is land rent as an opportunity cost, which is a function of the potential use of a site rather than its actual or current use. Furthermore, it will be shown that the difficulties with rent gap theory translate directly into the methodological problems that have been encountered by those researchers who have attempted to measure it.

This paper will begin with a brief sketch of the rent gap theory, an outline of basic terminology, and a discussion of some terminological problems evident in Smith's exposition of the theory. The next section of the paper will discuss the fundamental difficulties with the rent gap concept and will conclude with a critique of attempts to find theoretical antecedents for the rent gap. The third section will highlight the difficulties in testing the rent gap theory that are evident in the empirical applications by Ley, Clark, Kary and Badcock. The paper concludes with a discussion of alternatives to the rent gap.

2. The Rent Gap Theory

A Brief Outline of the Theory

Part of the attraction of the rent gap theory is its elegance, although this is unfortunately achieved at the expense of an over-simplified understanding of the process of gentrification (Hamnett, 1991). But, given the theory's simplicity, it can be outlined fairly quickly. Smith defined the rent gap as "the disparity between the potential ground rent level and the actual ground rent capitalized under the present land use" (Smith, 1979b, p. 545). The existence of a significant rent gap makes inner-city reinvestment attractive due to the potential for earning substantial increments in land rent and value.

Moreover, it is argued that rent gaps form due to an intrinsic tendency for capitalist urban development to be cyclical. Initial

investment in an area is later followed by disinvestment as investors seek more profitable opportunities elsewhere—in this case, suburban locations. Disinvestment eventually leads to a substantial disparity between the value or rent of land in its current use and its potential value if redeveloped or, in the case of gentrification, reused for a different purpose. This rent gap provides the incentive for investment to return to the inner city. Thus gentrification is essentially "a back to the city movement by capital, not people", to quote the sub-title of Smith's influential paper. Smith continues to endorse the rent gap concept in his most recent theoretical work on gentrification (Smith, 1986, 1987a, 1987b).

The discussion that follows focuses on the concepts of rent that underlie the rent gap hypothesis, and their significance for explanation of urban change. This paper is not concerned with the assertion that urban development in capitalist economies tends to involve a cyclical process of investment, disinvestment and reinvestment; however, it must be remarked that this process does not seem inevitable, as many neighbourhoods never experience disinvestment (Wong, 1988), although perhaps this observation depends on the definition of disinvestment. In any case, this is a topic for another paper. This paper is concerned instead to eliminate some imprecision in the basic concepts of rent employed to analyse processes of urban development. Such imprecision can cloud understanding or divert researchers to pursue misguided aims.

Basic Terminology

It is important to define some basic concepts so that the following discussion does not become stalled in a morass of gobbledygook. There are essentially two broad categories of rent relevant to the present discussion.¹ One is the *accounting* sense, which refers to the actual cash flows from a leaseholder to a landowner. The other is the *economic* sense that is defined in terms of the opportunity cost of the rents that could be obtained from

Table 1. Rent terminology

Usage	Sense	
	Accounting	Economic
Present paper	Contract rent	Land rent
Smith	Actual rent	Potential rent
Marx	—	Ground rent
Marshall	—	Ground rent
Gaffney	Contract rent	Land or ground rent

Source: See references cited in text.

the most intensive feasible alternative use of a site. The distinction between accounting and economic rent parallels that between accounting and economic profit. While the accounting concepts are concerned with only explicit costs, the economic ones also involve implicit opportunity cost—a distinction often explained in introductory economics textbooks, such as Dolan (1983). Generally, Smith uses *actual rent* to mean the accounting cash flow and *potential rent* to mean the economic opportunity cost. The present paper will adopt a more or less standard usage of *contract rent* to refer to the cash flow and *land rent* to refer to the opportunity cost. These terms are set out in Table 1 so that they may be referred to readily. Table 1 also includes some of the terms used by Marx, Marshall and Gaffney in their discussions of rent, which will be considered later.

It should be noted that the authors listed in Table 1 sometimes use other terms to mean the same things; the terms listed are those employed most commonly. For example, Smith sometimes uses *capitalised ground rent* as a synonym for *actual rent*, and Marshall uses *annual site value* as a synonym for *ground rent*. Gaffney uses *land rent* and *ground rent* interchangeably, and it is undoubtedly true that in common usage either of these terms may also refer to the accounting cash flow between a leaseholder and a landowner. And, just to confuse matters a bit further, Marx occasionally uses *actual rent*—e.g. in his review of Ricardo's theory of rent (Marx, 1988–91, vol. 31)—but it is clearly meant to be the equivalent of *ground rent*.

Some Terminological Problems

One immediately obvious problem with Smith's exposition of the rent gap theory is that he misuses terms that have well-established meanings in the land economics literature (Marxian as well as neoclassical). These terminological mistakes are relatively minor in comparison to the basic problem of the rent gap hypothesis. They merit discussion here only because they suggest that Smith's formulation of the rent gap notion was at least somewhat naïve and that the basic concepts underlying the rent gap need careful critical scrutiny.

One terminological error is Smith's substitution of the term *ground rent* for *land value*.² He does this to emphasise the fact that land value cannot be construed to be the result of labour power, unlike the value of other commodities, but this seems a rather crude attempt to follow Marxian doctrine and his usage only confuses matters (although Marx himself used the term *ground rent*, he certainly did not consider it to be synonymous with *land value*). The confusion stems from the fact that *rent* implies a periodic, or recurring, payment, while *value* is a once-only payment. Land value is therefore typically defined as the present value of an expected stream of future land rents. Smith makes the error of substituting the one concept directly for the other while also neglecting the systematic relationship between them.

A second confusion is in Smith's use of the term *capitalised ground rent*. To most students of land economics, including both

Marx and the neoclassical economists, this is the same as land value. The process of converting an expected stream of future rents into a present value is known as capitalisation. But Smith (1979b, p. 543) employs the term in a most unusual sense to refer to “the actual quantity of ground rent that is appropriated by the landowner, given the present use”. Here the term is synonymous with *actual rent*. Smith’s confusion on this point is well-illustrated by his use of *capitalised ground rent* later in the same paragraph in a context that clearly implies a present value (Smith, 1979b, p. 543): “In the case of owner-occupancy, ground rent is capitalized when the building is sold and therefore appears as part of the sale price. Thus the sale price = house value + capitalized ground rent.”

3. Theoretical Issues

*The Rent Gap and Urban Development*³

According to Smith, for any given site there is, on the one hand, a potential rent, based on its so-called “highest and best use”,⁴ and there is also an actual rent, based on its existing use. The difference between these two amounts is the rent gap. Intuitively, this seems quite reasonable. But common sense is often misleading in economic matters. A more careful analysis reveals that the difference between the accounting cash flow and the economic opportunity cost (that is, the ‘rent gap’) has little direct relevance for the allocation of land use. This is because it is only land rent as an opportunity cost that has any clear economic significance. The economically significant form of rent is independent of the current use of a site: it is a function of the site’s highest and best use. This highest and best use is a function of uses on surrounding sites and is the use to which the site would be put if it were bare. As Gaffney (1969, p. 141) puts it, land rent is best defined as “the highest latent opportunity cost of land”. This sense of land rent is equivalent to Smith’s potential rent.

This is not to deny that actual rent may

exist in the form of rents actually appropriated by landowners—that is, *contract rent*. But land rents are rarely appropriated as such by landowners (Tideman, 1982, p. 109): “most land is held by individuals or firms that use the land in conjunction with other inputs to yield an aggregate return that cannot be allocated unambiguously among inputs”. Moreover, even if land is owned separately from other inputs, contract rent can be observed, and the rent gap can be measured accurately, it has only a very dubious theoretical significance. This is because the magnitude of the rent gap has at best imprecise implications for the location or timing of changes in land use or occupancy.

Contract rent is usually set to approximate what Smith calls potential rent. The landlord typically wants to collect at least the opportunity cost of a site, while the leaseholder is willing to pay at most that amount. When contract rent does not approximate potential rent, that implies that: (1) the site is being held speculatively in anticipation of future development or sale; (2) some kind of subsidy or other adjustment is involved; or (3) the parties to the lease miscalculated the site’s potential rent. The latter is particularly likely to occur in the case of a long-term lease, or during periods of rapid, unpredictable change. In these cases contract (or actual) rent departs from land (or potential) rent, but not in any systematic way.

It will be helpful to consider some illustrations of the ambiguous implications of rent gaps for both the location and timing of development. It seems analytically useful to consider location first and then timing (although as a practical matter, decisions about location and timing are made jointly). Vacant sites and buildings in relatively high land value areas are prime locations for development and by definition have high rent gaps because there is no contract rent. Substantial rent gaps are likely to occur, for example, at the fringe of a developing city where vacant land is held in anticipation of conversion to urban uses. It is also true, however, that sites and buildings with relatively non-intensive uses compared to surrounding areas are

likely candidates for development. In these cases, however, the rent gap may be relatively small. For example, most if not all of the rent paid to use a relatively old and derelict building at a high land value location will effectively be for the land (i.e. the location) rather than the building, and a true measure of actual rent may not differ much from potential rent. Some such properties may become vacant well before they are developed, while others may be converted rapidly from one use to another. Because disused sites in high land value locations have high rent gaps and sites with non-intensive uses in such locations may have low or zero rent gaps, while both types of sites may be equally likely to be developed, suggests that comparison of the magnitude of rent gaps across locations does not tell us too much about where development is likely to take place.

For a specific example of this, consider two inner-city sites, of which one is a vacant riverfront site likely to yield maximum return if developed as a luxury hotel and the second is an old loft building currently used as a warehouse but likely to yield maximum return if developed into rental housing. The rent gap on the first site is quite high relative to that on the second site, both because the first site currently yields no rent and also because the river view affords a premium in potential rent. Nevertheless, there is no reason to assume that the riverfront site will be developed prior to the loft building. This raises the question of the optimal timing of development. Although the riverfront site may promise substantial potential rent, the optimal timing of the hotel development could be many years into the future, while the best time for the apartment development could well be the present.

As an example of the ambiguous relationship between the rent gap and the timing of development, consider a site in the central business district of a large city that is held vacant in anticipation of an optimal future date for development. The site yields no actual rent while it remains vacant, yet it has a substantial potential rent. Alternatively, it

might be feasible to lease the site for car parking during the period prior to development, in which case the actual rent would be greater than zero. The fact that the rent gap in the former case is greater than that in the latter has no bearing on the timing of development, which is the same in the two cases because it is solely a function of the site's potential rent in the new use.

An analogous example involving gentrification may easily be constructed. Consider the case of two identical adjacent houses in a gentrifying neighbourhood. Both are held by the same developer in anticipation of rehabilitation and resale. To minimise costs, the developer plans to rehabilitate them simultaneously. One of the houses is vacant, while the other yields modest rents from relatively low-income tenants. While there is no actual rent in the former case, much of the rent paid in the second case could be imputed to the land. Here again, there is a large rent gap in one case and a small or non-existent gap in the other, but this difference in magnitude has no bearing on the timing of development.

Even if the rent gap were a meaningful indicator of the location or timing of development, it would not contribute anything to an explanation of why certain deteriorated and derelict areas of inner cities have become desirable residential neighbourhoods. The really interesting question for research on gentrification (and urban development generally) is not to measure differences between actual and potential rents, but rather to explain changes in potential rents over time. The rent gap simply attempts to measure in a rather crude way certain conditions associated with land-use change without explaining how those conditions came about.

Clark (1992) has attempted to defend the rent gap hypothesis in a recent paper that is in part a response to Bourassa (1990). In his paper, Clark makes much of a supposed "one and only land value" that he somehow associates with the argument that actual rent has no economic importance. He claims that this represents an overemphasis on long-term static equilibria in land markets and ignores

the dynamics of urban development that form the motivation for the rent gap thesis. Clark also mentions that the land economist Gaffney places considerable emphasis on urban dynamics in his discussion of land rent. But it is not at all clear why the claim that potential rent is the only economically significant form of rent should in any way imply a neglect of urban dynamics. Indeed, the very word *potential* implies a focus on growth and change, and the concept is entirely consistent with Gaffney's idea of land rent and its role in allocating a continually changing pattern of land uses. While Gaffney (1962) mentions a distinction between contract rent and land (or 'ground') rent, he essentially discards the former as lacking any analytical interest because it is only the latter that is relevant to, among other things, the allocation of land among users and the timing of development.

Theoretical Antecedents for the Rent Gap?

Although Smith makes no attempt to find antecedents for the rent gap in the history of economic ideas, Clark (1987, p. 86) claims to find at least indirect support for the concept in the work of Marx, Marshall and others: "That the rent gap exists in reality and constitutes an important force of urban change is supported not only by 'common sense', but by the auxiliary hypotheses of such very different schools of thought as neoclassical economics and Marxian political economy". It will be convenient for the purposes of the present paper to focus on the ideas of Marshall and Marx since they present paradigmatic expressions of neoclassical and Marxian concepts of urban land rent.

Clark seems to find the most direct corroboration of the rent gap concept in Marshall's *Principles of Economics*, form which he quotes a long passage. It is worth reproducing this passage, in part to demonstrate how it has been misinterpreted and in part because it makes an important point about urban land rent:

We have already seen that the ground rent which a builder is willing to pay for

any site is governed by his estimate of the additional value which that site will give to the building erected on it. . . .

He contrives to the best of his ability that the site and the house (or other building), which he puts on it, shall be permanently appropriate the one to the other. In so far as he succeeds, the rent of the property at any future time is the sum of its annual site value and the annual value of the building. . . .

As time goes on, the purchasing power of money may change; the class of house for which that site is suitable is likely to change; and the technique of building is certain to be improved. Consequently, the total annual value of the property at a later date consists of its annual site value, together with profits on the cost of building a house giving accommodation equally desirable at that date with the existing house. But all this is subject to the dominant condition that the general character of the house has remained appropriate to its site: if it has not, no precise statement as to the relation between total value, site value and building value can be made. If for instance a warehouse or a dwelling house of quite a different character is needed to develop the full resources of the site, the total value of the property as it stands may be less than its site value alone. For the site value cannot be developed without pulling down those buildings and erecting new (Marshall, 1961, pp. 796–797).

Clark (1987, p. 56) follows the quotation with this statement: "The point Marshall makes here is that site value is independent of actual total value, the latter being comprised of building value and the actually realized ground rent (which the existing building sets limits on)." But a careful reading of Marshall reveals that he does not imply that the existing use sets limits on contract rent—what Clark refers to here as "actually realized ground rent". Marshall is not saying anything about contract rent; he is merely pointing out that land value may

Table 2. Marx's components of land rent

Component	Sources
Absolute rent	Transaction costs, uncertainty
Monopoly rent	Monopoly ownership of sites with scarce productive capabilities
Differential rent	
Differential rent I	Fertility, locational advantages
Differential rent II	Technological change, population growth

Source: Evans (1988, 1991, 1992).

exceed total property value if the value of the building is negative (due to demolition costs). Marshall's point is precisely that the existing building does *not* set limits on land value or rent. As Marshall says elsewhere in *Principles of Economics* (1961, p. 445): "site value . . . is governed by causes which are mostly beyond the control of him who determines what buildings shall be put on it . . ."

Clark includes his discussion of Smith's rent gap hypothesis in a chapter titled "Urban Applications of Marxian Land Rent Theory". It is revealing to observe that: Clark does not explain the connections between Marxian concepts of land rent and Smith's theory; and Smith himself identifies no such connections. In regard to the latter point, it should be noted that Smith mentions Marx only in passing in his influential paper on the rent gap. Moreover, Smith mentions Marx while endorsing the labour theory of value in the context of a discussion of house value, a matter that is not relevant to his fundamental distinction between actual and potential land rent. It is true that Smith's critique of the consumer sovereignty assumptions of neoclassical economics and his emphasis on the production side of the production-consumption equation are squarely within the Marxian tradition, but these aspects of the rent gap hypothesis in no way rely on any Marxian concepts of land rent. (The links between Marxian thought and Smith's theory of gentrification are made more explicit in Smith, 1979a, 1982 and 1984 and Smith and LeFaivre, 1984. However, none of these publications discusses Marx's concepts of land rent.)

Although Marx (1990, especially pt. 6)

distinguishes several kinds of land rent, he does not devote attention to anything corresponding to Smith's actual rent. Marx identifies three forms of land rent—absolute, monopoly and differential—of which the last is divided into two sub-types—differential rent I and differential rent II. These components of land rent are summarised in Table 2. In regard to *absolute rent*, Marx argues that landlords will require rent to be paid on even the worst land under cultivation and that this is a consequence of the institution of landed property. If all land were used by owner-occupiers, then the requirement of absolute rent would no longer prevent marginal land from being cultivated. Evans (1988) has suggested that transactions costs and uncertainty about the future may account for the existence of absolute rent. *Monopoly rent*, which is discussed only briefly by Marx, reflects to rent that "may arise if the product or service derived from a few sites may only be obtained from those sites and so the owner of the site has a monopoly over the provision of the product or service by virtue of his ownership of the site" (Evans, 1991, p. 7).⁵ This is simply the standard concept of monopolistic profits applied to land rents.

Marx's concepts of differential rent seem at first sight potentially more relevant to the subject at hand. *Differential rent I* refers to the rent that arises from the differential fertility or locational advantage of land. This is quite similar to Ricardo's and von Thünen's concepts of land rent. In contrast, *differential rent II* is a somewhat more complicated concept. It refers to the rent that arises from the application of different amounts of capital to lands that otherwise

would be equally productive. This could apply to the same land over time—as, for example, when increases in population result in a more intensive use of land and corresponding increases in land rent. Similarly, increases in land rent due to improvements in technology allowing more intensive use of land would also be in the form of differential rent II. It should be noted that Marx departs from Ricardian marginal analysis in his discussion of differential rent II, assuming that price is based on the average product. Aside from this point, which is not relevant to the present issue, Marx's concepts of differential rent are quite compatible with neoclassical concepts of land rent (Evans, 1992).

None of the elements of land rent distinguished by Marx involves an actual, as opposed to potential, form of rent. Marx does not even allude to such a distinction in his primary discussion of land rent, in volume 3 of *Capital*. Nor is there any such allusion in his other major discussion of land rent, in *Theories of Surplus Value* (see particularly the discussions of Rodbertus's, Anderson's, Ricardo's and Adam Smith's theories of rent in Marx [1988–91, vol. 31, roughly pp. 250–399 and 457–580]). Clearly, Marx was concerned essentially with rent in its economic, rather than accounting, sense. Moreover, Clark's assertion of both neoclassical and Marxian support for the rent gap concept must be rejected because it is not supported by the evidence.

4. Empirical Attempts

It is not surprising that researchers who have attempted to test the rent gap theory have faced considerable methodological difficulties. In this regard it is revealing to note that the rent gap *per se* plays little or no role in Smith's *own* empirical studies of gentrification (Schaffer and Smith, 1986; Smith, 1989, 1992; Smith *et al.*, 1989; Smith and Schaffer, 1987). Although two of his empirical studies include discussions of the rent gap theory, no attempt is made actually to measure a rent gap. The researchers who have tried to measure rent gaps have encountered

problems because, as noted previously, actual rent rarely appears as such and, even when it does, the relevant data are unlikely to be available. Potential rent is also difficult to measure, although it could be derived from property tax records, which typically give separate appraised values for land and improvements. Unfortunately, local property tax appraisals are notoriously unreliable and, among other problems, are slow to reflect changes in value. While empirical research has stumbled over these methodological hurdles, it has also suffered from interpretational problems stemming from lack of appreciation of the theoretical problems with the rent gap. Thus the following discussion addresses interpretational as well as methodological issues.

Ley's Study of Canadian Metropolitan Areas

Ley's (1986) objective was to compare competing explanations of gentrification using a variety of data describing the 22 Census Metropolitan Areas (CMAs) in Canada in 1971 and 1981. Some 35 elements of data were employed in an attempt to compare four sets of competing explanations for gentrification involving demography, housing market dynamics, urban amenities, and the economic base. Two of the housing market elements were purportedly relevant to the rent gap hypothesis. These were the ratios of inner-city to CMA house values and house rental costs.

It is immediately obvious that the definition of these ratios bears little resemblance to Smith's definition of a rent gap. Ley (1986, p. 533, fn. 11) argues that they are appropriate measures of the rent gap because a low ratio represents a situation in which there is considerable incentive to re-invest in the inner city:

The rent gap thesis argues that the more depreciated the inner-city land market, the higher the probability of reinvestment and gentrification. But this reinvestment is likely to occur only when the alternative suburban market is high priced and prop-

erty is in short supply relative to the inner city.

This assumes, however, that appropriate and attractive properties are available in the inner city. It is easy to imagine a situation in which inner-city-CMA value and rent ratios are quite low yet there is little or no opportunity for profitable reinvestment in inner-city neighbourhoods. This could be due to factors such as lack of appropriate housing stock or buildings suitable for adaptive reuse or the existence of substantial negative externalities making inner-city locations unattractive for residential use. In any case, Ley's ratios are not capable of demonstrating whether there was or was not a gap between actual and potential rent.

Clark (1988, p. 245; cf. Smith, 1987a) makes substantially the same criticism of Ley's ratios:

As interesting as these variables may be in the context of geographical patterns of housing costs, they tell us nothing about the existence or size of any rent gap. Building and land values are conflated in the ratios, which neither measure capitalized land rent nor potential land rent. The gap measured by Ley is that between inner city housing costs and metropolitan housing costs, which suggests that his test of the rent gap hypothesis is based on a misconception. He assumes the hypothesis to say that gentrification will take place where housing costs are lowest, when in fact the hypothesis states that the difference between potential land rent and capitalized land rent constitutes an economic force toward redevelopment and that redevelopment is therefore most likely to occur where this difference is greatest.

Ley, of course, recognises the difficulty in applying the rent gap concept, but his solution to that problem begs the question by measuring something altogether different.

Clark's Study of Malmö, Sweden

Clark (1987, 1988) tried to measure more

directly the rent gap in his study of sections of Malmö, Sweden, during the period 1860–85. To determine actual land rents, Clark used tax assessment data that distinguished between land and building values. With some adjustments, assessed land values were used as the basis for developing a series of actual land rents for each of the various study areas. A series of potential land rents was determined from bills of sale both just prior to the original development of sites and also just prior to their redevelopment. Interpolations between these values were based on general population and property value trends in the city.

The use of tax assessment data as a basis for determining actual rent is questionable in two key respects. First, given the vagaries of assessment practice, it is doubtful that assessed values correspond to reality as closely as one would like. Furthermore, as Clark notes, assessments may not accurately apportion total values between land and buildings. According to Clark (1987, p. 100): "This assumption is the one considerable weakness in the refined data . . ." Unfortunately, there is also a much more serious problem with these data.

The second, and more crucial, problem is that generally accepted tax assessment procedure requires the calculation of land value on the basis of highest and best use, not current use. Thus it is quite revealing to observe that Clark's so-called actual land rents in many cases anticipate future changes in use (see, for example, Clark [1988, p. 250, fig. 5]). If observed sales prices for vacant land anticipate redevelopment more rapidly than assessed values, that only reflects the well-known lags and other inaccuracies that plague property assessment. This is all too evident in the fact that the measures of potential and actual rent in Clark's case-studies are not even the same at the time of redevelopment, which is precisely when the rent gap theory would predict they should be equal. The differences at the time of redevelopment are obviously due to the fact that assessed value continues to lag behind potential value, even when recent sale price data

are available. They do not imply that assessors are trying to measure something other than potential value—that is, value in highest and best use.

In a recent paper, Clark (1992) has attempted to defend his attempt to apply the rent gap concept. Among other things, he argues that assessed values do reflect current use because they remain quite low for many decades, only to increase dramatically just prior to redevelopment. This could, however, easily be explained by poor assessment practice or, perhaps more likely, the fact that potential land values may make sudden changes rather than evolve smoothly over time. Indeed, it seems that Clark's method for interpolating potential land rents between development and redevelopment results in unrealistically smooth curves. He admits this in one of his case-studies (that of the Pontus block), where there was an obvious reason for doubting that the curve would be so smooth. Because the interpolations are based on growth in population and assessed property values for the entire city, they almost certainly mask the detailed changes in perceptions about potential land uses and values for the small areas used as case-studies. There is no reason to believe that these perceptions changed as smoothly as the interpolation procedure assumes.

Kary's Study of Toronto, Canada

Kary (1988) tried to test the rent gap hypothesis by looking at relative house prices in Toronto. His methods involved an attempt to determine whether there was a "land value valley"—or, more precisely, a house price valley—in inner Toronto and also an analysis of the evolution of house prices in the Cabbagetown/Donvale area, described as a prime example of gentrification in Canada. Like Ley, Kary was unable to measure the rent gap directly and instead simply compared inner-city house prices with suburban ones, in the case of his more general study, or looked at relative house prices over time, in the case of the Cabbagetown/Donvale study.

Neither of these approaches is capable of demonstrating the existence of a rent gap, because neither demonstrates that there was at any time a potential rent that differed from actual rent. Thus Clark's criticism of Ley's ratios applies with equal force to Kary's measures.

Badcock's Study of Adelaide, Australia

Badcock (1989) attempted to determine whether there was a rent gap in the 30 local government areas of metropolitan Adelaide, South Australia, between 1970 and 1985. He used a measure of combined house and land value based on sales prices as a proxy for actual rent, on the assumption that actual value (rent) will be something less than total property value (rent). Potential value (rent) was measured by the actual sales prices of serviced vacant lots. Thus Badcock claimed to have identified a rent (or, more precisely, *value*) gap in Adelaide when he showed that the values of bare parcels in the inner city exceeded the total property values of land parcels with houses. This gap contracted and closed between 1975 and 1980.

Badcock (1990, p. 460) mentions that in inner Adelaide in 1970 "the housing stock was dominated by undersized allotments and subject to an encumbrance prohibiting redevelopment where they fell below a minimum size". This suggests that combined house and land values in inner Adelaide were low relative to vacant lot values due to legal restrictions on redevelopment of the former. This does not imply anything about any differences between actual (contract) and potential (land) rent, if legal feasibility is a condition of potential use. After the restrictions were removed, the so-called rent gap disappeared. Instead of closure of a gap between actual and potential rent, this should be characterised as a change in potential rent. Feasible uses after removal of the restrictions were more intensive than the feasible uses while the redevelopment prohibitions remained in force.

5. Conclusion: Alternatives to the Rent Gap

Where does all of this leave the rent gap hypothesis? The notion of a rent gap relies on a concept of rent that depends on the current use of land. But, as Tideman (1982, p. 109) argues: "Such a definition has no special virtue from the perspective of theory and does not correspond to anything that might plausibly be observed empirically." Although the latter part of Tideman's remark may be overstated, it is true that attempts to apply the rent gap hypothesis in empirical studies of gentrification have encountered severe measurement problems. In regard to the more fundamental point, the concept of actual rent adds nothing to our understanding of gentrification because it explains nothing that was not already understood in more coherent terms. As Ley (1987, p. 468) concluded:

The devalorization cycle and the mystique around the rent gap now become unnecessary baggage. All that is now required for gentrification to occur is the potential for profit. This bears striking similarity to neoclassical accounts of developer behavior and as such it is a claim that can be assessed using conventional indicators.

Indeed, the standard neoclassical account of land-use succession does not rely on any distinction between actual and potential rent or value. In the standard analysis, a property can be profitably developed only if:

$$V_n - C_n \geq V_c + D_c,$$

where: V_c is the market value of a site and the building currently on it, if any (the subscript c refers to *current* use); V_n is the expected market value of the same site and either a rehabilitated or a new building on it (n refers to the *new* use); D_c is the cost of demolishing the current building if there is one and if it is to be replaced by a new building ($D_c = 0$ if the current building is retained and rehabilitated); and C_n is the cost of rehabilitating the existing building or constructing the new building, *exclusive* of the cost of purchasing and—in the case of a new

building replacing an existing one—clearing the site (this is based in part on Heilbrun, 1974).

It should be understood that, in this formula, land-use change does not depend on the existence of a gap between actual and potential *rent*, only between current and potential, feasible land *uses*. Because land rent and value change as soon as perceptions about the future change and do not wait for land use to change, the site values contained in V_c and V_n are identical—both are based on potential, rather than actual, use. Any difference between the two is due solely to the possible differences between the value of the current and the new (or rehabilitated) buildings or uses.⁶ Obviously, the formula over-simplifies the development decision. A developer considers not only the potential profit from current development, but also how $V_n - C_n - V_c - D_c$ is likely to change over time in various locations, and the implications of that for the optimal location, timing and form of development—for example, it is possible that it would be profitable to develop a site immediately, but even more profitable to wait and develop it at a later date. Nevertheless, the site values contained in V_n and V_c are the same and do not depend on any distinction between actual and potential land rents. In both cases, site value is the present value of the expected future stream of land rents. More importantly, like the rent gap hypothesis, the formula does not go very far in explaining why gentrification does or does not actually take place. In other words, neither approach explains how neighbourhoods previously subject to disinvestment come to be perceived to have the potential for reinvestment and higher land rents. Detailed historical studies of the reasons for and impacts of changes in potential values and rents are needed to properly explain gentrification. Excellent examples of such studies may be found in Hamnett and Randolph's (1986) study of tenure transformation in inner London and Zukin's (1982) study of loft housing in New York's SoHo.

In conclusion, it should be noted that this

paper is not intended as a neoclassical critique of Marxian urban economics. Although it has been maintained that the neoclassical concept of urban land-use succession is more coherent theoretically than Smith's rent gap theory, that is not meant as an implied endorsement of neoclassical explanations of gentrification. As has been argued elsewhere (Bourassa, 1992a), neither explanations based on neoclassical residential location theory nor those based on (the at least ostensibly) Marxian rent gap theory provide a satisfactory account of gentrification. In fact, these competing explanations suffer from analogous problems. On the one hand, the Marxian theory fails to explore the origins of potential rent—that is, it does not explain how it historically becomes profitable to rehabilitate or redevelop inner-city neighbourhoods. On the other hand, the neoclassical theory, with its assumption of consumer sovereignty, fails to explore the origins of the tastes that underlie consumer demands. In each case, the theory fails to address and explain the most fundamental and interesting aspects of the phenomenon in question: namely, the sources of the changes in value that constitute gentrification.

Notes

1. Economists often prefer to speak in terms of land rent rather than land value, and discussion of the rent gap has followed that practice. The relationship between the two concepts is quite simple. If L is the market value of the land, E is the expected annual land rent, and r is the rate of return that could be earned on alternative equally-risky investment, then $L = E/r$.
2. Smith (1979b, pp. 542–543) wrote: "A further complication with housing is that the sale price represents not only the value of the house, but an additional component for rent since the land is generally sold along with the structures it accommodates. Here it is preferable to talk of ground rent rather than land value, since the price of land does not reflect a quantity of labor power applied to it, as with the value of commodities proper."
3. In the discussion that follows, the term *development* is used in the broadly inclusive sense to refer to redevelopment, which might involve rehabilitation of existing buildings,

as well as development of previously undeveloped sites.

4. A recent treatment of the concept of highest and best use can be found in Dotzour *et al.* (1990). The reference to 'so-called' highest and best use is an allusion to the fact that the highest and best use from a private landowner's point of view is often not the same as that from a social point of view due to the existence of externalities and public goods. Dotzour *et al.* note that although highest and best use has traditionally been identified with the private landowner's point of view, social costs and benefits began to be incorporated into the concept in the 1970s.
5. Marx (1990, chs 38 and 45) sometimes uses the word *monopoly* loosely to refer to the general monopolistic control over land use maintained by landowners. The land rents arising from private landownership are typically in the form of differential or absolute rents; however, the term *monopoly rent* here refers to a form distinct from either of those two types. Marx (1990) refers to this distinct type of monopoly rent in his ch. 46.
6. As Hamnett and Randolph (1986) demonstrate in their case-study, it is possible that the differences in value may be due solely to a gap between the value of a property as 'tenanted investment' housing and its 'vacant possession' value to owner-occupiers. They show that in inner London there was an incentive to covert properties from rental to owner-occupancy due to a 'value gap': $V_n > V_c$. In this case, $C_n = D_c = 0$.

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