

## CHAPTER V

### Objections to the Hypothesis Considered

In this chapter we treat of several objections that critics have raised or could raise against the hypothesis. We cannot hope to anticipate all the comments the hypothesis will evoke from people of various backgrounds, but we have discussed it with enough people to be sure we are answering a good portion of them. Some of the objections we treat are misconceptions; others have merit. In either case, they offer a chance to set the hypothesis in perspective, and relate it to other ideas in economics.

Objection I: "Differences in the production from land under different operators are not differences in land rent, but different imputed wages of management to the operators. Rent is the same in any case. It is therefore impossible to conceive of underused land, and the hypothesis concerns a nonesuch."

This objection is simply wrong. It reduces to an absurdity when land is utterly unused -- then, as there is no produce, there is obviously no rent. Proceeding from disuse upward through the whole scale of use intensity, there is clearly a whole scale of different rents. It is a familiar fact that different tenants will bid different rents

for the same site. Likewise different owner-operators will impute different implicit rents. Let us consider some of the basic forces that make different users impute different rents to the same land.

Japanese farmers made their place in California agriculture by offering higher rents. They could do so by accounting less wages for their labor. As one writer put it:

Their willingness and ability to pay high rents does not come so much from better methods of farming, though as a rule they are good farmers, but because they live more frugally than the American or the immigrant from northern Europe. 1

Figure 1 illustrates the point:

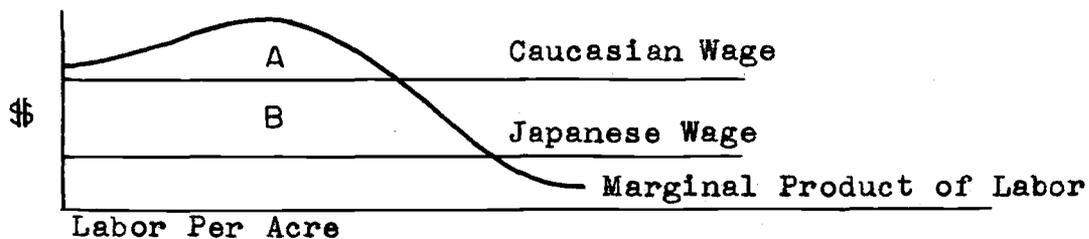


Figure 1  
Rent Imputed by Japanese and by Caucasian Farmers

The Japanese accounted a lower price for their labor, and hence also applied more labor per acre, working out to a lower margin. Thus they produced a greater surplus over their labor cost, to count as rent. In the figure the area "A" represents what rent the Caucasians could pay. The area "A" plus "B" represents what the Japanese could pay.

The Japanese accounted less cost for their labor because of perfectly sound economic reasons. They had fewer

alternatives for their time, both in other job opportunities and in leisure. They probably, too, accomplished more per hour, because of their great industry, but that is not the essential matter. They worked the land at less cost in benefits foregone, hence the free play of economic forces led them to outbid other tenants. The principle of comparative advantage, or specialization, selected them as the operators.

To a degree it was race prejudice that closed other doors to them, to a degree their lack of education, or of American education. One might call these non-economic factors. But we are not here concerned with all the historical reasons why individuals differ from one another. We only select the Japanese -- who of course also differ among each other -- to illustrate an economic principle: individuals differ, and some are better suited for certain jobs, and worse suited for others.

The same principle -- comparative advantage -- also selects a best user for every piece of land. I know a young man who has lived on the same farm all his life. He knows and loves it from river to hilltop; he knows the crops, the weather, the rocks in the meadow, the stock and equipment, and the neighbors. He knows very little else, and I would not give 40¢ an hour for his time as a news commentator, a soda-jerk, or a Fuller Brush man, and not so much more for his time as a hand on a neighbor's farm. For all that, he

works hard and well on his home grounds, and his barns bulge with prosperity. He probably imputes more rent to that land than would any other living person.

For each piece of land there is one person whose individual background, tastes, abilities, friendships, disposition, health and other qualities fit him above all men to use the land. He charges the least in foregone gain for each unit of work on it. It is he who can impute the highest rent to it.

There is also a whole scale of different rents that different persons would impute to the same site. They range from a maximum for those who are especially productive and happy on the site, and unproductive and unhappy elsewhere; to a minimum for those who bungle and dislike work on the site, and whose time is very valuable elsewhere. These differences will persist, until each of us is cast in the same mold. For as long as we are all individuals, we all live to some degree in our individual economies which no market, however perfect can ever completely merge.

There is, one sense in which it is true that land rent is the same to all users. The highest rent that anyone can impute the land is the social opportunity cost of the land. If one wished to call that the "true rent," and conceive of it as existing regardless of actual conditions, then he would express our problem by saying the problem speculator

holds land although he imputes to it less than its true rent, its social opportunity cost. That would be saying what we have said in different words.

Objection II: "There are many bidders for any site, not just two as in your example. Some of the good users will also be strong speculators. All of them will bid higher than a pure speculator who will misuse the land, and one of them will bid in the title."

Certainly it is true there are many persons both strong speculators and good users. Where they exist, they will clearly outbid others who lack one or both of those virtues. But, clearly too, there are not enough of them to hold all the land. Otherwise there would be little separation of ownership and management as there is in fact, nor much vacancy or other misuses. Owner-operators would hold most of the land.

If speculative power and the qualities of a good land user generally went together in the same individuals, most land would be in good hands. Now there is one reason to hope that they might: a strong speculator has the assets to improve the land. He can use more capital in production, and account a lower price for what he does use, just as our Japanese farmer used more and cheaper labor, leaving more surplus for rent. But on closer scrutiny this parallel proves untrue. For he who can supply money at low interest

rates has the attractive alternative of using it to buy more land, instead of improving what he already holds. Morris Birkbeck traced a familiar pattern when he wrote from Illinois in 1817:

The farmer, instead of completing the improvement of his present possessions, lays out all he can save in entering more land. In a district which is settling, this speculation is said to pay on the average, when managed with judgement, 15%. Who then will submit to the toils of agriculture, further than bare necessity requires, for 15%? 2

What tends to increase rent is not the capital used per owner, but per acre. It is true that strong speculators can, if they wish, apply more capital per acre. But they will probably not do so. We have already seen in Section II, B, 1, of Chapter III that larger landholdings, of a given quality, tend to be less, not more intensely covered with capital. This suggests that the tendency Birkbeck described in 1817 still prevails; that strong speculators incline more to widen their holdings than improve them. Then, holding more land than they can manage efficiently, they find the marginal productivity of capital sinking toward zero before it is as intense, and the imputed rent per acre as high, as it would be under some less extended owner-operator.

This interpretation fits well with what we know about how interest rates affect the present valuation of future sums. The interest discount cumulates from year to year, and so the relative weight of interest rate in determining present value increases rapidly with the futurity of the

sum being discounted. The more remote the future values, the greater the advantage of low interest rates over high ones. Hence the stronger the speculator, the more of his assets we should expect to find in claims to the remote future, for there is where his greatest bidding advantage lies; there is the market where weak speculators cannot compete. We should expect to find a larger portion of his assets in land, with its endless life; and a smaller portion in ephemeral human products, whose values lie nearer the present where weaker speculators can reach them with less handicap. As Frank Knight said:

Land will be in demand especially by persons disposed to store up wealth for future use; i.e. to discount the present. 3

Thus comes about a paradox and a problem: the more assets one has, and might use to develop his lands, the more lands he can buy, and the less capital he tends to apply per acre. So we cannot conclude that a strong speculator's access to money will make him improve his land well. On the contrary: the stronger the speculator, the higher portion of his assets are probably in land, and the less in improvements.

It is still true that stronger speculators can account a lower annual charge for such capital as they do use per acre. We do not belittle that. To supply capital cheaply is to leave more of the total produce to impute as rent.

If that were the only determinant of rent, the strongest speculator would generally be the best user. But other influences counteract it. We have just seen one: stronger speculators tend to use less capital per acre. Now we will consider another: stronger speculators tend to charge more for their labor; so if their land is to have an owner's care and supervision, the work will be costly, and stop at a high margin. The reason is that the very affluence that makes one a strong speculator frees him from the economic constraints that make people supply good work for low wages.

The strongest speculators, as we said earlier, are self-financed. That means, among other things, that they are fairly well-to-do. It is affluence, more than anything, that makes a strong speculator. Now affluence does not dispose one to put a low price on his services, but the contrary. We have already marked the contrast of immigrant Japanese farmers with the wealthier, softer Caucasians in California. The Caucasians could afford pleasures and comforts inaccessible to the Japanese, and so would not supply such cheap and efficient entrepreneurial labor. The same contrast obtains among individuals of all races, being due to contrasting economic circumstances, and not to any occult mysteries of the inscrutable oriental.

Especially when one has income or assets from sources other than his own labor, he is inclined to avoid what he

considers the less pleasant or prestigious aspects of life like grubbing in grease or muck, bearing heat, cold, dust and mud, or concentrating on details of supervision and accounting to pinch pennies. The mere responsibility of holding a job grows irksome. Miami and Santa Barbara beckon, with the beach, the club and the bar. Travel, society, culture and cocktails on the veranda all compete against hard work for his time, and as he has what it takes to enjoy them, he values his time more than otherwise. This is perhaps as it should be, that the abstinence of past years or generations should have its reward. But however that may be, it creates a problem: affluence tends to make a strong speculator, but a poor working manager.

Thus it was that land settlement specialists in the west when handpicking settlers, often chose men without capital and rejected men with it, in spite of its obvious advantages. The Holland Land Company, for example, famous in California for its success in land settlement, followed the policy, "Pick your man, then back him to<sup>4</sup> the limit." The Canadian Pacific Railroad followed a similar policy to get certain districts well settled. For as Elwood Mead often emphasized,

.... Few who had sufficient capital were willing to incur the hardships inseparable from the creation of irrigation in new areas. 5

There are outstanding exceptions to the rule that affluence brings ease, but over the generations it seems an

incontrovertible lesson of history and common observation, too familiar to need documenting. Enterprise or politics bring riches, riches bring luxury, leisure and ostentation, and these absorb the energies and mould the character of later generations so they have neither the wish, the training nor the need to follow their fortunes into the toils of production. That is an oft-told tale. Heiresses, particularly, are disinclined to sail with their own ships, and heiresses today hold a substantial part of the nation's assets as inheritance has become probably the heaviest travelled road to farm ownership.<sup>6</sup>

Thus, as land values rise, there evolves a peculiar kind of specialization whereby one person holds title to land while another manages and works it, and the very circumstances that fit persons for one function tend to unfit them for the other. The higher are land values, the sharper the contrast of the types, for the richer one must be to hold title to land. Few who can afford the investment will want all the dirty work that goes with it; and few who bear the heat of the day will have the price of the land.

The principle involved is, of course, a venerable pillar of economic theory: the diminishing marginal utility of assets.<sup>7</sup> The more one has, other things equal, the less will he sacrifice to get more. Practical observers, too, often remark this principle. Goldenweiser and Truesdell wrote:

After a man has once or twice made by speculation a sum greater than he would be able to make by a year's diligent labor, he is no longer as willing to devote himself to the actual work of farming.... 8

And two California state commissions had this to say:

Any man with a forty acre ranch can rent to Japanese and make from \$1,200 to \$2,000 a year without ever going near it. 9

(In the oven-like Imperial Valley) the marvelous productivity of (the) soil brings high rentals from the cultivators, thus enabling the owner to live comfortably in some less torrid locality. 10

We have already seen evidence of this principle of diminishing marginal utility. We have seen in Chapter II that the more valuable farm land is, the more likely is the holder to lease it to a tenant rather than operate it himself. Owner-operators are generally on poorer land. Indeed, one study showed that owner-operators in the north and west made little more income than tenants.<sup>11</sup> That implies that the only holders who stick to the work of farming are those whose land is almost worthless. Doubtless that would overstate the case considerably, but it does suggest a tendency. Those who can afford to hold valuable land are not so likely to operate it.

But we cannot rest with the overly simple formula that poor men labor while rich men idle. More accurately, it is not riches per se that make a strong speculator, but riches in excess of what the individual can or will manage effectively. Many a rich man makes business his hobby and goes right on

working hard, his powers augmented by the training his riches can buy him. But when we examine the matter more closely, it remains true that stronger speculators tend to be worse land users.

The strongest of all speculators is an idle rich person. "Strong speculator" is a misleading term insofar as "strong" connotes "active," "vigorous," "enterprising" or "growing". A strong speculator is one with a low interest rate, which means he lacks lucrative investment outlets for his money. Now the further one divorces himself from productive work, the lower grows the rate of interest he can earn, since to earn high returns one must generally invest himself along with his money.<sup>12</sup> The sidelines investor lives in a world of low interest rates, and naturally turns to buying land, in whose purchase his low interest rate gives him the greatest differential advantage.

By the same token, those rich persons who still actively manage all their assets in production are less likely to buy land they will not use, as they have better uses for their money. It earns good returns when prudently disbursed into inventories, equipment, payrolls and even land under their active management. Their speculative power drains out through the outlets of their own enterprise. Thus the industrious rich man, by virtue of his industry, is a weaker speculator than the idler.

That at least is true as long as the industrious rich

man is industrious enough, and not too rich, to manage all his assets efficiently. But even an industrious rich man will be a strong problem speculator when he accumulates more assets than he can manage effectively. Having riches in excess of what he can manage, he has a fairly low interest rate, and hence buys land. At the same time he puts a very high price on his labor because he has so many assets to manage, assets to which he alone can give an owner's care. (Managing-assets-with-an-owner's-care is a very high-paying labor opportunity that opens up only to those who have assets to manage.) The more he has, the thinner he spreads his attentions, the more valuable becomes his time, and the less he gives each acre. Thus each acre gets but little management, and that at a high price. It therefore yields little rent.

Thus when we take account of the fact that many rich persons work hard and well, it is still true that the very quality that makes a strong speculator tends to make a poor manager. That quality is possession of assets beyond one's capacity to manage.

Now let us take account of the fact that some strong speculators are not very rich. To repeat, what makes a strong speculator is not just riches, but riches in excess of what the individual can or will manage effectively. What he can manage depends entirely on the individual and his

circumstances, and therefore of course varies enormously. Some persons with only \$5,000 are very strong speculators, in a small way, because they do not know how better to use the funds. Sometimes that is because they are incompetent, or lazy, but often it is just because their professions offer no investment outlets.

When an employee or professional man has his house and car he is ready to expand outside his domain. The successful doctor, sales manager, pugilist or matinee idol is like as not to join the tycoon and heiress dabbling in vacant lots and income property, or gentleman farming with the "mink and manure set" on weekends. <sup>13</sup> They may be productive citizens in the fields of their own competence, but they do not generally pick up these lands because they can make them especially productive, or manage them with an especially low charge for their labor. On the contrary, their labor is valuable in their specialties, and their specialties are not land management. It is their speculative power that lets them bid the land away from others who would like to use it.

Summing it up, strong speculators tend to be mediocre land users because the very thing that makes one a strong speculator is possessing assets beyond his capacity to manage them. The strong speculator puts a low interest rate on funds because he has more than he can contrive to invest at high interest rates. He puts a high price on his labor because he has the money to buy leisure at a high price,

and to make it especially enjoyable; because he has vast holdings to manage; or because another profession preoccupies him. On the other hand, the best land users are those who have no excess of assets to soften or debauch them, and over which to dissipate their management. Their assets earn high yields complementing their own enterprise, so they live in a high interest-rate economy and are weak land speculators.

Now obviously there is room in our characterization of types of speculators for those who are at once strong speculators and good users. Many persons refuse to conform to the social and economic pressures that make "types". We do not say that no competent manager ever acquires land title. We only offer an explanation of why there are not enough strong user-speculators to keep all the land in or near its best use, and there are so many problem speculators to keep land prices high and out of reach of many good managers.

In concluding, this point, another type of problem speculator deserves mention. That is the corporation. With its bureaucracy, its high administrative overhead, its division of ownership from management, its leeway for manipulation and speculation by insiders, its handicap of special taxation, and other drawbacks, the corporation has hardly reached its present commanding position by being the most efficient organization conceivable for supervising productive operations. Rather, it is an especially potent device for

raising funds at low interest rates. It is first and foremost a financial institution. That means corporations are strong speculators. That, and not management efficiency, being their greatest virtue and raison d'etre, it follows that corporations will often annex territories beyond their capacity to manage them most efficiently. We will consider that matter further in a sequel.

Objection III: "The strong speculator can keep title, but let the land to the best user. Thus it will be put to the same use as if the best user held title."

As we elaborated in Chapter II, there are costs in the relation between landlord and tenant. The net produce of the land is less when the user is a tenant than when the same user holds title. The same man, in worse circumstances, puts the land to worse use. Therefore one cannot say the land is put to "the same use" just because the same man manages it.

One may object that tenancy is an economical division of function; that, while it might be more ideal for tenants to hold title, the fact is they cannot afford the interest burden, and the free market makes the best possible adjustment. We will consider that question in answering the next objection.

Objection IV: "Refer to Figure 2, page 352, Chapter IV. You allege there that "B", who would earn \$3.00 annual rent from a given site, is a better user than "P", who would earn \$2.00, because \$3.00 is greater than \$2.00. But there is more risk involved with "B" -- that is why his interest rate is higher than "P"s. It is risky to lend to him. Hence "B's" anticipated \$3.00 earning must be discounted more heavily for risk, as shown by the dotted lines on the graph. The market's decision is therefore correct even if "P" gets the land."

There are two kinds of risk to distinguish. First is the risk that the land user will not earn as high rents as he anticipates. The market would be quite correct in discounting more heavily for such a risk. Now in originally presenting Figure 2, we assumed for simplicity that there was no such risk. We might also assume that that risk was the same for each party. In either event, such risk is not the issue between "B" and "P". Insofar as risk is involved, it is a second kind: the risk that a lender runs in transferring assets to another person. That is the risk that keeps "B's" interest rate higher than "P's". It is not a risk of social loss, not a risk of anticipated production failure. It is the lender's risk that inflation, interest rate changes, moratoria, repudiation, etcetera during the course of the loan will redistribute his assets to the borrower. As Keynes

remarked, "it would not exist if the borrower and lender were the same person."<sup>14</sup>

Let us be clear, then, what Figure 2 means. "B" is just as likely to earn \$3.00 rent as "P" is to earn \$2.00. Each may be absolutely certain, and it would not change our conclusion. "B" discounts future values at higher interest rates only because he has better uses for his marginal funds than "P"; and for several reasons, one of which is risk of lending, "P" cannot equalize his interest rate with "B's" by lending to him.

It remains true that, because of barriers to lending, such as risk, it costs "B" more each year to carry the land title -- the present claim to the future values -- than it costs "P". In this sense there is greater risk in "B's" holding title. The excess interest burden of having "B" carry the title offsets the increased production that would result from transferring land to "B". Thus, although "B" will earn more from the land, it will cost more for him to get into a position to do so. I believe this is the heart of the objection.

Let us rephrase it to make this more clear.

Objection IV; rephrased: "Someone must bear the interest burden of holding title. "P" can do it at less social cost, as his marginal funds have lower alternative uses than "B's". Hence "B's" apparently superior land use is really not better when all things are considered."

To answer that, we need first refresh our minds on the purpose of this study. This is an economic evaluation of an institution, the land market. We do not here question that individuals economize as best they can within the institutional framework the market sets for them. We question the framework of the market itself.

Now the objection merely observes that, granting one must buy a claim to the infinite future incomes of land in order to have title at all, individuals economize accordingly. We certainly agree. But the very question we raised is whether the land policies that make that necessary are economical. Analyzing the economic effect of tariffs, we note that people adjust to the price structure the tariffs create. But that does not justify tariffs. We do not take for granted the policy we question. We do not now take present land policy for granted. Our purpose is to look beneath the policy to ultimate economic realities.

Now in ultimate economic reality, what is the social cost of one man's holding land? Clearly it is the foregone gain, or opportunity cost: the rent it would yield to the best other user. But what is the cost to the individual in the present system? It is the annual interest charge on the price of the title. This may be greater or less than the opportunity cost of the land, depending on the individual's interest rate. For those with low interest rates -- strong speculators -- the interest charge is likely to be less than

the opportunity cost of the land. Thus the individual, economizing by his own standards, does not necessarily economize by social standards. The strong speculator holds the land for less cost than its annual value to society.

This contradiction comes about as follows. What the land market really allocates from year to year is of course just the present year's use of the land. But to buy that, as title-holder, one must buy a claim to rents from now to doomsday. The cost to the individual who holds land is the interest burden on the price of the claim to the future rents. The true social cost -- the opportunity cost -- he does not pay directly at all. He only need pay it indirectly in explicit or implicit interest charges if the land price and his interest rate are both quite high, so that price times interest rate equals or exceeds the opportunity cost. If one or both is low, nothing in the market mechanism makes the landholder economize on land according to its actual worth.

Thus the land market is something like a tie-in sale, and has the same faults. If one could never buy a car without buying a truck too, nor buy a truck without a car, many more people would walk, while truckers would hold fleets of cars in mothballs. In the land market it is the infinite future that is tied to the present. One cannot buy a few years' ownership without buying a claim to rents in perpetuity. So some who want land now cannot have it, while some others,

who only want claims to future values, keep vacant lots in mothballs.

Putting it that way, our problem is an old one in economic theory, the problem of indivisibility. Present land policies may make land fairly divisible in space, but they leave it very poorly divisible in time. There is no time-divider except the costly and wasteful institution of tenancy. Aside from tenancy itself, this makes two other problems. Some landholders are well equipped to carry the interest burden of title, but poorly equipped to use the land. They hold it idle, or underuse it. Other holders are well equipped to use land, but poorly equipped to bear interest burdens. They use the land well, but take capital from very productive uses to pour it into a sterile land title. Those are the costs of indivisibility. The last, incidentally, is a waste of resources we have not hitherto made part of our problem, as it is a waste of capital, not land. But we may fairly attribute the waste of capital to land policies, as it results from land's being indivisible in time. It is a very real waste, especially noticeable where impecunious entrepreneurs are struggling to clear their titles of heavy mortgages.

Because of indivisibility in time, then, the present land market cannot measure up to the standard of perfection. If it is the best conceivable system, it is only as the best that human ingenuity can contrive, the least faulty of

several faulty plans. It is not ideal in any absolute sense. Theoretically society could improve it by freeing the present from the burden of the future, and allocating land by its rent rather than its value. Given the possibility, there is always a hope of effecting it in practice.

There is the more reason to hope this feasible because, again looking beneath the veil of present policies to basic economic necessities, there is no obvious reason why anyone at all need bear the interest burden of holding claims to the future of land. The objection we are discussing states that "Someone must bear the interest burden of holding title," but the necessity is not evident. Land, after all, is a free gift of nature. It is no burden to accept the gift. Individuals invest funds in land not to create it, but only to claim it for themselves. The value of capital, by contrast, is the incentive that makes men create capital. But land value serves no such purpose. Its only useful function is to allocate land. If rent allocates land better, and we can devise a way to let it do the job without incurring the wastes of tenancy, we need not fear to take liberties with land values. Society might conceivably lower or abolish them without endangering any useful institution.

Simply to keep in mind how many alternatives there are, and with no pretense at evaluating them, or even fully describing them, let us put before the house several alternative land policies.

One very effective policy, albeit somewhat indirect, would be to increase investment opportunities and thereby the general level of interest rates. At first glance it probably seems that this would not lower the interest burden of holding title, but closer analysis shows that it would increase the bidding power of weaker speculators relative to strong ones. For the higher are interest rates in general, transfer costs remaining constant, the nearer do low interest rates approach to being 100% of higher ones. For example if it costs \$2.00 to arrange a loan of \$100 from "P" to "B", and "P's" interest rate is 2%, then "B's" is 4% -- that is 100% more. But if "P's" rate is 10%, "B's" is 12% -- and that is only 20% more. Their powers to speculate are much nearer equal when interest rates are generally high. Therefore, in the framework of the present land market, land is allocated nearer the equimarginal ideal when interest rates are higher. High interest rates pare down the influence of speculative power on land allocation, and give more weight to present rent. Creating lucrative investment outlets is an effective kind of land reform. J. L. Buck has given an example on a small scale from a district of China (Buck 26).

There are also more direct methods. There are, first of all, the various communist systems of direct political control of land -- and everything else. We do not present them here as alternative land policies because they involve government control of so much more than land alone. But it

is well to keep in mind that discontent with the outcome of land policy has given and gives communism much of its support; that hundreds of millions have chosen its unknown terrors in direct preference to the known discomforts of land systems in many ways like our own; that in many areas communism is politically the most feasible alternative to present land policies. And so those who believe in free institutions would do well to consider some alternative land policies, and modifications of present policies compatible with -- even necessary to -- a free economy. There are several already used in the United States today. In the long run, the very life of freedom may depend on our intelligent choice among such policies.

A. Contingent tenures.

1. Usufruct.

The sovereign may grant a usufruct subject to specified conditions. Such, for example, are water rights under the appropriative doctrine which are established by use, and lost by disuse. As Oregon Chief Justice McBride put it in a controlling decision, "...it does not seem to me that it (water use) ever arose in this country above the dignity of a mere privilege, over which the legislature had complete control."<sup>15</sup> Such was Brigham Young's policy toward land in Deseret: "No man can ever buy land here for no one has any land to sell. But every man shall have his land measured out to him, which he must cultivate, in

order to keep it." The Puritans had a similar policy. Such are franchises granted private companies to use, subject to various requirements, valuable water power sites on Federal lands and navigable streams. Such, again, are the timber rights granted to loggers on National Forest and the reverted Oregon and California railroad grant lands. Such, too theoretically, are radio and television frequency assignments dispensed by the Federal Communications Commission, and grazing rights on the public domain. And such are various trucking or shipping route assignments of the Interstate Commerce Commission, natural gas pipeline certifications of the Federal Power Commission, and transportation franchises of many kinds.

## 2. Land grants.

The sovereign may grant title subject to specified conditions, for example to build and operate a railroad, or to build a farm house and reside in it. Of course railroad and homestead grants from the public domain contained such stipulations.

## 3. Leases.

The sovereign may lease subject to specified conditions. Here are some examples. The Forest Service grants 99 year leases for summer homes in National Forests, contingent on prescribed improvements. Boulder City, Nevada, a thoroughly planned city, is built on leased Federal land. Waters developed by Federal money are in effect leased to

water users' associations under the "9-e" utility-type contract the Bureau of Reclamation is introducing and the use is subject to acreage limitation, land price control, and other provisions of Reclamation Law. And various Federal agencies lease minerals and prospecting rights on public lands subject to certain Federal controls.<sup>17</sup>

B. Eminent domain.

The sovereign may use its power of eminent domain to condemn lands for what it considers the best use. In recent times this power has grown, and the courts have established that cities and states may condemn land to clear slums, or clean up derelict subdivisions, and even delegate that power to housing corporations.<sup>18</sup>

C. Periodic redistribution.

The sovereign may buy or appropriate land from one class of unwanted holders to transfer it to another at less than a market price. That was the program of Tiberius and Caius Gracchus, and Flaminius and Licinius who preceded them. It was the effort of many Byzantine emperors.<sup>19</sup> Many western European kings, too, struggled recurrently against the nobility to foster peasant holdings. William Howard Taft pushed through the Friar Lands Act in the Philippines to buy church lands and transfer them to peasants below cost. In the Irish, and again the Mexican land reforms, the state bought out landholders and transferred lands to peasants below cost. In the eastern European land reforms in the early

1920's, too, the sovereign bought out the landlords and sold to entrepreneurs -- peasants in this case. Such, too, are the current land reforms in Burma, India (Uttar Pradesh), Italy, Guatemala, eastern Europe again, Bolivia, China, Japan, South Korea, Taiwan, Egypt and Iran. Such, too, is the work of the Jewish National Fund (although in part that is privately financed).

In many cultures, for example in pre-French Indo-China,<sup>20</sup> land has been redistributed periodically. Indeed, such a redistribution is a firm part of the Judaeo-Christian tradition. Moses was quite explicit:

And ye shall hallow the fiftieth year, and proclaim liberty throughout the land unto all the inhabitants thereof: it shall be a jubilee unto you; and ye shall return every man unto his possession, and ye shall return every man unto his family. 21

And the land shall not be sold in perpetuity; for the land is mine: and ye are strangers and sojourners with us. 22

In the year of jubilee the field shall return unto him of whom it was bought, even to him to whom the possession of the land belongeth. 23

Thou shalt not remove thy neighbor's landmark, which they of old time have set, in thine inheritance which thou shalt inherit, in the land that Jehovah thy God giveth thee to possess it. 24

In the United States, "The Federal Government has been engaged in land use adjustment programs for several years."<sup>25</sup> By 1940 the Resettlement Administration had bought 9 million acres of marginal land to transfer it to other uses. In urban areas, Federal funds finance slum land acquisition at

high prices for resale at low prices to builders. Any many an ambitious young American city has bought up industrial sites and offered them free or below cost to those who would build on them. In Europe, many cities buy land in their outskirts to resell at reasonable prices to those who will build on it.

#### D. Credit subsidies.

The sovereign may intervene in the credit market to encourage particular kinds of land use. Moses proclaimed that every seventh year all debts were to be forgiven,<sup>26</sup> and debt moratoria and repudiation are time-honored in every land and clime, including our own.<sup>27</sup> Solon forbade his subjects to pledge their land for debts, and many sovereigns have struggled to keep lands inalienable. Long term low interest land purchase loans to working farmers, jointly and severally secured by the holdings of cooperative groups, were one leg of the extraordinarily successful Danish land settlement program,<sup>28</sup> and almost the only leg of the less successful French (Credit Foncier) and German (Raiffeisenbanken) and English (Rural Credits Act) programs. We adopted a similar plan with our Land Banks, FSA (now FHA) loans under the Bankhead-Jones Act, and so on, and expanded it into nonfarm lands with FHA, VA, FNMA, RFC, defense production loans, accelerated amortization, etc.

#### E. Taxation.

The sovereign may exercise its tax power and levy an

annual ad valorem land tax, for one reason to discourage withholding land from use. A small land tax, as one component of the general property tax, is nigh-universal in the United States (except where vacant lands have achieved virtual tax exemption through protracted delinquency, legislative indulgences, endless rights of redemption, low assessments, etc.). More specifically, certain taxing bodies, notably irrigation districts, tax land alone. One reason for doing so is to encourage land use, as I believe the following citations will establish:

Under district laws all lands susceptible of irrigation from the works of any district may be included in the district and taxed for district purposes. This tends to force development, since landowners cannot long afford to pay district taxes on unimproved land. 29

Many big farms have been broken up into small farms when the original owners found the taxes on their extensive holdings had become burdensome. The owners drew their own conclusions that they might well dispose of their holdings to persons who would improve them. 30

The advantage of taxation is material ... where it (land) is held by speculators... 31

The owner should improve the land at once or sell it, for to hold will require the payment of district taxes from which no added revenue will result. 32

Bare land is taxed also in many foreign countries, such as Denmark, Australia and New Zealand. There the purpose is much the same, according to Colin Clark: "It is a commonplace of economic theory that this form of taxation (and

indeed this alone) is no deterrent to production, and indeed encourages farmers and landowners to make fuller use of their land, to subdivide it where possible and employ more labor"<sup>33</sup>

To what these men have said, I would add that the policy will be most effective only if it is firmly expected to continue (for it is in future expectations that speculators deal). As a practical matter, that expectation has usually resulted from a districts' having large bonded debt outstanding, and poor prospects of revenue from other sources.

#### F. Tenant rights.

The sovereign may force landlords to allow tenants below-market rents, secure tenure, and other advantages; and in turn supervise tenants' practices and evict them, or let the landlord evict them if they are proven to have used forbidden practices. Such a system is common in English agriculture. Urban rent control is very common in many countries, including of course our own.

#### G. Manorialism.

Lands may be held and even in part operated in common by small village groups, as in the atavistic Kibbuz of Israel and Ejido of Mexico, as well of course as in the manorial villages of western Europe before the enclosures.

#### H. Municipal police power.

Municipalities may use their police power, to control land use. Of course they own and control that one-quarter

of municipal land which is in streets, and through traffic control and improvement policies considerably influence the use of other land. Some municipalities even plan their own streets, rather than accepting whatever the subdivider dedicates.

Cities also try to improve on the land market by tenement laws and building codes, which outlaw improvements below certain standards and thus (if the law is enforced) free the land for higher uses; and by zoning, to group complementary uses and separate conflicting ones. Rural zoning, too, has its advocates, and is practiced in some areas.

#### J. Municipal ownership.

Municipalities may use their power to hold real estate to control land use. Some cities, retain title to lands around municipal airports, and lease out concessions rather than sell, to keep speculators from disrupting the compact, integrated plan of business.

It has been often proposed that cities, irrigation districts and other municipalities take title to tax delinquent lands, either permanently or long enough to reassemble them into more economical units, to bring some order from the chaos that the land market has created.<sup>34</sup> Some municipalities have taken halting steps in that direction.

#### K. Direct controls.

The sovereign may directly prescribe the land use,

and remove operators who do not comply. Some European countries have "shoot-or-give-up-the musket" laws. In England, for example, County Agricultural Committees can designate farmers as "inefficient" and evict them.

#### L. Alien Land Laws.

The sovereign may forbid aliens to buy land, thus preventing absentee holding, at least by foreigners. That was the Dutch policy in Java, and is the British policy in the Gold Coast. California's unconstitutional Alien Land Act was technically the same, although its object was more to discourage than promote owner-operation.

#### M. Inalienability.

The sovereign may distribute lands as it sees fit and then declare them inalienable. Hitler tried by this means to create a class of permanent yeomen to support his party and man his armies. William the Conqueror had used the same device in the eleventh century to perpetuate his feudal levies.

That list by no means exhausts the possibilities, but it serves to make the point: we live in a world, and a country, where many different land policies are practiced, and even more proposed. We do not here undertake fully to describe, much less evaluate all these plans. We merely remind the reader that there are alternative land policies to choose from. Whenever we discuss present land policy,

they stand in the background, silently inviting comparison. We can never assume, therefore, that the interest burden of holding title is an inescapable hard fact of economic life.

If we confine ourselves to thinking within the framework of present land policy, then Objection IV has substance. It warns that reforms within that framework will probably cost more than they benefit. For example, it is a devastating criticism of public subsidy of capital markets to equalize individual's powers to speculate in land. Subsidized low-interest loans, even if they succeed in bringing individual interest rates closer together, are just as wasteful as any other kind of subsidy. Increased production thus facilitated would be less than the subsidy. The subsidy merely induces private parties to do what is not economical under present land policies. But that is no objection to our hypothesis, for the hypothesis holds the land market up against an ideal standard and, by implication, against the standards of alternative land policies.

Objection V: "Interest rate differentials tend to distort the allocation of capital goods, as well as land. Why limit your conclusions to the land market?"

It is true of course that stronger speculators have some advantage in buying capital goods. Especially where the benefits are long deferred, as with timber culture, that is quite important. We focus our conclusions on the

land market because the effect of interest rates is generally so much stronger there. The value of land generally derives from much farther in the future than the value of capital goods, so different persons' abilities to buy it vary much more with their different interest rates.

An auto, for example, wears out. It renders less service in each successive year of its life. The first year it looks best, rides best, needs the least gas and upkeep, is most reliable for emergencies, and so on. With the years, costs mount while performance falters, and the asset's net value drops quickly. In five years it is worth perhaps half a new model; in ten years worth less than the owner has put into it since purchase -- the original car is entirely consumed. The value of a new car, therefore, derives mainly from the first few years of its life. And the same is true, in varying degrees, of furniture, houses, stamping mills, shoes, and almost all human products, transitory arrangements of matter and energy, whose decomposition commences before even they are fully produced.

Land, on the other hand, is a permanent and non-reproduceable asset. The auto market would be like the land market only if some magic made all existing cars immortal, exempt from the ravages of time; and new car production ceased absolutely and forever. Then prices would rocket, but not because the annual use of a car was worth any more. An auto ownership certificate would entitle

one to hundreds of years of future values, and become an investment for the ages. Expecting population and income and demand for autos to grow, buyers would value the certificates more for their remote than their near futures. Certificates would gravitate to strong speculators -- others would rent. For the farther in the future values lie, the greater the weak speculator's handicap in buying them.

Another important distinction of land and capital is in respect to their resale values. Human products tend to be somewhat individualized, hence usually will not resell for nearly their cost of production. This is even true of standardized products like automobiles, and ever so much more so for articles of individual taste such as wallpaper, furniture, or clothing. Land, by contrast, is not custom tailored to the present holder, and, as future buyers have no recourse but to the second-hand market, land offers the continual prospect of resale at some remote future time.<sup>35</sup> For this reason, too, speculative power counts for more in buying land than human products.

We have mentioned two reasons for the weak speculator's handicap,<sup>36</sup> and will now repeat them together. First, the effect of any given interest rate differential increases with the futurity of the values being discounted. The present values of money due in the near future are nearly the same whether discounted at 2% or 4%, but the present values of money due in fifty or one hundred years are very different.

Second, interest rate differentials themselves tend to increase with the futurity of the values being discounted. The longer a loan is to run, the wider is the risk barrier that separates borrowers from lenders. The farther future a marginal borrower looks, the more per annum he must discount future values, as he can borrow only for limited terms. The self-financed speculator has no such worry. His interest rate may even be lower for more remote future years, since the alternative investment of lending at long term is less attractive to him with each additional year a loan is to run. Due to risks of lending that increase with length of loans, the certain equivalent of the long term interest rate he can earn may be quite low, even when the nominal rate is high. Thus the array of short term interest rates converges much nearer a single value than the array of long term rates.

Therefore interest rate differentials distort land allocation far from the equimarginal ideal, while they distort capital goods allocation much less. Thus Wilcox and Cochrane observe:

The inability to obtain sufficient credit probably does not play as important a role in the pricing of different grades of livestock as it does in the pricing of different grades of farm land. 37

The contrast is especially strong when people expect land rents to rise, as they usually do. But this calls up another objection.

Objection VA: "Land may also depreciate. Sometimes it is exhausted completely."

True, rents have their downs as well as their ups. In modern history the ups have predominated, and the expectation of them even more so. Our hypothesis is stronger in such conditions, but they are not essential to it. The crux is that income from land will string out over a long, long time.

True, too, some qualities of some lands are exhaustible. Their life span is finite. We have not claimed that our hypothesis applied to them with full force. But it is probably true as a practical matter that exhaustible resources usually have more in common with the permanent qualities of land than with human products.

A mine would be financially like an auto if, immediately on discovery, it disgorged its lode quickly and completely and then was sure to remain a worthless shell for the rest of time. But few if any mines ever play out quite that way.

In the first place the buried treasure is usually suspected long before it is struck. The suspicion has a value: it titillates speculators and raises prices over some area. The hunt may outlast the life-span of several autos. Then when the first dirt proves out it may yet be years before markets and transportation come close enough to warrant extensive survey and use. Meantime all anyone really knows

is that somewhere in the future looms some nebulous sum of easy money. Title to a chance like that gravitates to those who can afford to wait and to gamble. If the land has present uses, those strong speculators are not the most likely ones to fructify them.

When operations do begin, the first years are not always the most lucrative. Extraction and exploration go hand in hand, as each layer picked off reveals what is beneath. It may be years before peak production. Then that, may last for years or decades.

Too, there usually rises a hope that similar ores will fall into few enough strong hands to monopolize the supply. The hope alone will restrict output and push use plans farther to the future; the actual monopoly, if it comes, will do so even more. It can be a long, long time before known deposits finally go to market.

After miners finally dig in and carry off the pay dirt, the end is not yet. Mines often come back; some have produced for centuries. Over the decades men return to abandoned holes in wave after wave of price increases and technological advance. They probe deeper, sift the tailings, cut old retaining pillars, and outdo their ancestors with blast and pump and science in hundreds of new ways. "Exhausted" in one generation, many old mines offer good diggings to the next.

From the viewpoint of today's speculator, therefore,

a mine has much in common with a site. It is not a warehouse neatly stacked with a fixed amount of goods. It is more likely a hillside laced with veins and strewn with pockets. Like a wild berry patch, it always yields more when you look long enough. Any stroke of the pick may discover new values. Few actually do, but the possibility excites a gambling fever in mine speculators that is notorious. You can find mines that played out in a few years, but you can find few that were sure to do so from the start, and you can find many that have come back. To hold a mine, is to hold a ticket in the sweepstakes of the next century.

Of course there are Gothic Cathedrals, the pyramids and Venus de Milo which -- with care, repair and restoration -- have survived the brief play of many marginal mines. We cannot claim to be speaking an absolute principle. But I think a reasonable observer will conclude that the mass of human products, and especially those owned privately, do not begin to match the useful life span of the average mine.

Therefore I submit that the hypothesis, although formally applying only to perennial resources like sites, applies fairly well to most extractive resources as well. With modifications one could apply it quite rigidly. That is a big subject which we do not now undertake. For the present we are content to have shown that interest rate differentials will generally affect the allocation of

natural resources more than human products.

Objection VB: "But much land, especially farm land, is a labor product. Therefore it is short-lived, like other labor products."

It is true that common parlance will often include some farm improvements as part of "land". In this study we have been more careful. We defined land exclusive of man-made improvements, we have reasoned about land so defined, and we apply our conclusions only to land so defined.

Granted, much of a "farm" is a labor product. But "farm" is not a synonym for "land": a farm is raw land plus improvements. In more favored areas the raw land is the bigger component.

Sometimes one hears a statement like this:

Raw land is of no use. Three or four crops of settlers usually go bankrupt pouring capital into the land before it finally produces a profit.

Now it is quite true that pioneers pour much money and effort into their farms, and that they often go bankrupt. But that does not prove they produced the whole farm value, that the raw land was worthless and submarginal. It is the individual's financial position that is submarginal, when he pays more for the land than it is worth. Then interest on the mortgage is more than rent from the land. Raw land is often over priced, and much of the individual's money is

poured into buying the title, not improving the land.

These quotations illustrate the point. David Weeks and Charles West wrote:

The price of raw land, though seldom considered in planning an irrigation project, is perhaps the most important of all the items entering into the cost of improved land. 38

Ely, Hibbard and Cox summed up one hundred letters and conversations with Wisconsin county agents as follows:

The chief causes of failure in their opinion are: land sharks, high-priced land, lack of credit and difficulty of land clearing. 39

The California Commission on Colonization and Rural Credits explained a slow-down of land settlement thus:

The principle reason everywhere is the high price of unimproved land .... we have reached a situation in western irrigation districts where a man with \$1,000 or \$3,000 capital has no better chance of becoming a farm owner than did the peasant farmer in Europe a generation ago. The acreage cost of the irrigated farm in many new sparsely settled districts is greater than the acreage cost of farms in the densely peopled sections of England and Germany. The purchase of farms has therefore become too costly for the unaided efforts of the men who most need them and who will make the best use of them. (Emphasis supplied.) 40

The Senate Fact Finders Committee, investigating delinquency on Federal reclamation projects, reported:

Two-thirds of the land now under water contract with the government were in private ownership at the time water was ready for delivery .... the public lands were soon exhausted, and the later settler attempted to secure his homestead by purchase from the large landholder. These private lands were

often held at a very high figure, and the settler, full of hope, frequently agreed to pay a high price for the land, in addition to the construction cost included in his water-right contract. This added greatly to the farmer's burdens. 41

Mr. Page of the Bureau of Reclamation, testifying before a congressional committee, thus explained the need for an "anti-speculation" law:

This is the result of the experience of the Bureau of Reclamation over many years of having the cost of the land set too high for the actual bona fide settler to carry, in addition to his water charges. We have had disastrous experiences, I think, in the Yakima project and the Rio Grande project and others, where land values reached as high as \$300 or \$400 an acre, without a thing on them, and many of the settlers have gone in with a small down payment and the burden of the principle and interest, plus their water charges, was more than they could pay. So there is the rather current saying on those projects, that not until the second generation of settlers comes along is it a successful project. 42

I believe we may consider it amply proven that a considerable component of farm value is raw land value, and exists independent of the holder's improvements. Some of it, to be sure, is "man made" in the sense that public works and the growth of society make it. But as far as the individual holder is concerned, public works and society are as permanent as his land title, so their being "man-made" will not much shorten or otherwise change his anticipations. The chances are he will expect them to make his land title more, not less, valuable in the future.

Therefore, we conclude that farm land values generally derive from a more remote future than the values of human products.

Objection VI: "We are using our limited resources at an alarming rate, much faster than is truly economical in the perspective of generations. 'Underuse' is in no sense a problem, but something to encourage. Overuse is the problem, and it dwarfs all others. Your hypothesis does not recognize the need to conserve natural resources for posterity."

Good land use is not synonymous with depletion and exhaustion. In fact, a good deal of what we have called misuse is the failure to conserve land properly. For example, in Chapter II we criticized tenancy for not actuating tenants to protect land from erosion and improve it for the future. We did not call it a problem that some holders take steps to stop their farms from washing out to sea. The best land use almost always involves increasing the land's power to produce in the future.

To analyze this idea more generally it is all-important to distinguish two kinds of natural resources: extractive resources, such as iron ore and petroleum; and what are now often called "flow resources," like flowing water, sites, and television channels. To use most extractive resources is to diminish them: present use destroys future values.

Flow resources, on the other hand, offer their services continually. Use does not destroy them, and what is equally important, disuse does not conserve them. On the contrary, not to use them is to waste them.

"Conservation," of course, is simply time-economics. To "conserve" natural resources is not to hoard them unused forever, but to use them at the most favorable time.

The restrictive concept of conservation, where it applies at all, applies mainly to extractive resources. It may be economical to put off using them, in certain conditions, for many years. We do not now take up that interesting problem, other than to observe that the most economical time of use may also be right now. It is not always better to delay. Time is money, and money represents real social values. Shrewd forecasting and delicate balancing of alternatives may often reveal that immediate use of extractive resources would best serve society's interest.

Too, some extractive resources like timber, or schools of fish, or farm land, will replace and maintain themselves if handled intelligently. With them it is even clearer, "conservation" means economical management and timing, but not disuse.

With flow resources like falling water and urban sites, "conservation" obviously means use, immediate and continuing. As we have said, not to use sites is to waste them. To conserve flow resources one must capture or accept

the valuable service they offer before the opportunity passes by.

The unused and underused lands we described in Part I are almost all flow resources, mostly sites. They comprise the bulk of land values, and the whole of the problem this study concerns. If unused, they simply waste, like running water, a typical flow resource. Every acre-foot of potential irrigation water that flows down the San Joaquin and out the Golden Gate is value lost forever. The unreaped harvests of idle lands, too, wash down the river and out the gates of time, where they sink beyond recall into the past. That is no mere question of timing, nor sacrifice of lesser present values to conserve greater future ones. It is total loss.

The constant bleeding of these unrealized annual values seems to me a far greater waste of natural resources, a far greater challenge to the conservationist, than the mistimed extraction of ores and fuels. When ore is mined sooner, or later, than the optimum moment, it is not its full value that wastes, but only the increment that better timing would secure. But each year that flow resources are unused, their entire annual value wastes, and is lost forever.

The waste of flow resources also imposes a greater strain on the supply of extractive resources. For all land to some extent can substitute for other land, and

withholding one kind diverts demand to the other. For example, when water power is undeveloped, power consumers turn more to coal, oil, and gas. Or, again, when land speculation scatters rural settlement over wider areas than economy demands, and makes cities explode into the surrounding countryside, consumers use cars and trains to secure the advantages of association the land market denies them. The waste of fuels and metals and timber in running trains and autos past vacant lots, in building rails and roads, laying pipe and stringing wires, is a staggering total. This waste may be described as a substitution of extractive resources for flow resources which are withheld from use.

Finally, let us consider another, and related, conservation problem: aggressive civilization is encroaching on the vanishing wilderness. Lovers of outdoor recreation, unspoiled wilderness and scenery rightly take alarm at the spoliation. But they err if they attribute the aggressor's expanding force to social policies that make him use land intensively. The vacant city lot and the half-used valley estate could support families now invading the wilderness for their living. As Simpson and Burton observed:

Four thousand acres of good soil in one township in Cook County ..... will produce more than whole counties in northern Michigan. 43

In one agricultural industry, citrus, the voracious out-growth of Los Angeles bids fair to destroy a major producing center.<sup>44</sup> The less intensively a given population uses

lands within the bounds of its settlement, the wider it must extend the bounds. Intensive land use is therefore the complement, not the enemy of wilderness conservation.

This principle is clearly seen in another, and opposite, objection that is raised against the hypothesis:

Objection VIA: "Historically speaking, land speculation has speeded and abetted land settlement. The lure of speculative profits drew men west in the nineteenth century, and the pre-emption of large tracts pushed them west all the faster."

The truth of that statement depends on whether it refers to extending boundaries or settling people on land. The outermost fringe of settlement penetrated the wilderness much faster because speculators withheld better land from full use. Thus population spread much farther and thinner than otherwise.

But at the same time, the speculative barrier to land settlement reduced the number of people who settled land. For the barrier made land settlement less attractive, and diverted people to other pursuits, working for employers on land already settled.

In one way, it is true, our forefathers did contrive to harness land speculation to help speed actual settlement. The residence requirement of the Homestead Act, combined with the lure of unearned increments, did make some pioneers

settle land in order to gain title. It caused men to settle land before it was economical to do so, the title being given as a subsidy to settlement. But at best the results were needless privation and wasteful distribution of labor. At worst, the lands disappointed their settlers and remained submarginal, creating a legion of problems that assumed dramatic proportions in the 'thirties, as in previous depressions, and persist to this day.

Objection VII: "Land is malallocated for causes other than the interest rate differentials specified in your hypothesis."

That is perfectly true. The hypothesis asserts no exclusive jurisdiction, but allows of many correlative explanations. Let us consider what some other factors might be.

A. Differences in opinions of future values.

In our hypothesis, for simplicity's sake, we spoke of the rents anticipated by different persons as certain and indubitable. But of course in fact, no one knows just what the future will bring. Everyone has his opinion, which may differ widely from his neighbors'. We must consider how this affects the disposition of land titles.

Insofar as opinions of the future determine who will bid most for title, nothing guarantees that the best informed and reasoned opinion, or the opinion of the best user will

prevail. Rather, the most extravagantly high opinion will. A friend who bids for short term concessions tells me he is sometimes outbid by novices with exaggerated notions of the profits to be had. My friend drops out; the novice loses money. When men bid for permanent concessions -- land titles -- blind optimists have rents in perpetuity to overestimate. The scope of possible error is immense, and ill-informed buyers sometimes take full advantage of it.

Their bad money tends to drive out good from the land market -- that is, they may push up prices to a point where the prudent drop out of the market. For example, the California Commission on Land Colonization and Rural Credits reported in 1916:

To promote this inflation (of land prices) nearly every device which human ingenuity could contrive was utilized .... as prices rose above productive values the number of experienced and intelligent buyers rapidly fell off. Colonization agents had to accept as settlers those less qualified to judge .... 45

"Those less qualified to judge" land are often those less qualified to use it, and so the land market may deliver land over to someone other than the best user.

It is not the error, per se, of the optimist's forecast that misallocates land. Time may prove him right, and the others wrong without redressing the harm he has done. What misallocates land is the fact that the most optimistic forecaster, whether wrong or right, is not necessarily the

best user. Error bears on the question because the greater the scope for error, the greater the differences of forecasts by different individuals, hence the greater the influence of forecasting on allocation. It is also probably true, as implied in the California Commission's statement, that it is often the ignorant and unfit who are deluded into the most extreme unwarranted optimism. Thirdly, prices inflated by overoptimism are an additional barrier to the weak speculator who may be the best potential user.

Thus differences of opinion tend to misallocate land much the same as do differences in power to speculate. A worse land user may outbid better ones for title, not alone because he can speculate strongly, but also because he holds a higher opinion of what he speculates in. To outbid all rivals for land one must be, besides a strong speculator, an optimist.

If future rents were to vary solely with the buyer's ability to use land, we would be dealing only with the problem of the person who overestimates his own management capacity. But "land values," as the New York Regional Plan authorities put it, "may be created by the mere expectancy of some new use, or may depreciate as a result of failure of expectations."<sup>46</sup> That is, future rents depend on countless influences outside the individual and his use plans. Most buyers are speculating in these outside influences, more than in their own capacities. Many of them are

absentees with little knowledge of costs and gains from productive operations on the land. Even the circumspect and experienced are bound to err in forecasting unsure future values determined by forces they will not create or control and can know little of. With all these possibilities and all future time to range over, the imaginations of different persons conjure up very different illusions of things to come to a piece of land.

Another reason why the land market is so subject to the notions of the ill-informed is that land has no cost of production to check its price. Dealers in other competitive goods generally look back to production cost, and around them at reproduction cost, as cues in pricing. They can hardly imagine the goods will sell for much more than those costs, and if visions of the future intoxicate them into overpricing, the market will bring them to their senses with a quick sobering shower of competition. But if a land buyer grows light-headed with his prospects there is little in objective reality to hold him down. For all anyone really knows, he may prove to be right in the end.

Still another reason why land buyers miscalculate the future is that land rents are subject to tremendous permanent changes. Not only is the total quantity of land fixed, but, as land cannot migrate, so is the amount of land in any one location fixed. When fortune showers her favors on some area, labor and capital pour in to share

them until wages and yields on capital there are brought down to a par with wages and interest elsewhere in the economy. But no land can immigrate to dilute the local blessing. The increased demand only raises land's price, not its quantity, and the possible permanent price increment is very great.

But these increments are only possible, and not at all certain. In cities there is an enormous range between the rents to be had in the downtown shopping center and in less favored locations a few blocks away. Chance, politics and the unknown may one day endow a dismal Skid Row with the golden flow of traffic, or divert the fickle crowds to new haunts.

Where there is chance, there is gambling;<sup>47</sup> where there is gambling, there is a surplus of enthusiasm such as the masters of Reno and Monte Carlo skim for their profit. That is, there are those who enjoy the sport for its own sake, or who believe themselves lucky, or exceptionally astute, and will play against a wheel they know is fixed to support the house. The same surplus of enthusiasm pushes up land prices so that most who gamble in them lose money, according to some serious studies of the matter.<sup>48</sup> Legends of spectacular gains circulate among the credulous to such effect that lands with one chance in hundreds of being chosen by fortune may be priced as though teeming avenues of commerce were already converging on them.

As a city grows, or changes, there is demand for new

high-rent commercial sites. Demand, a sort of aerial treasure fleet hovering over the city, alights now here, now there, enriching a lucky few and tantalizing their covetous neighbors beyond all reason. The British Uthwatt Report of 1942 aptly dubs this the "floating value." The gambling spirit pushed up the price of locations where the floating value might conceivably come to earth a good deal more than the statistical probability warrants, according to the Report:

When a piece of undeveloped land is compulsorily acquired ..... the owner receives compensation for the loss of a value of a probability of the floating demand settling on his piece of land ..... The sum of the probabilities, as estimated, greatly exceeds the actual possibilities because the 'float', limited as it is to actually occurring demands, can only settle on a portion of the whole area. 49

Many central business districts seem to be walled in by an impenetrable barrier of high land values, partly the products of over-sanguine expectations. As Homer Hoyt put it, the central district "freezes" within its limits.

The values at which much of this property is held today are based on the false hopes for the future and not on actual present net income ..... new growth can take place, however, only if the present false structure of land values in these areas is deflated. 50

Of course land overpriced for commercial development is priced far beyond the reach of house-builders, although most of it is best suited for housing. It provides the

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community mainly with slums and blight.

Farm land prices, too, are sometimes inflated, as in 1920, by overestimations of the future. David Weeks and Charles West found new farmers in California customarily to underestimate their future costs, hence to overestimate the land's net income.<sup>52</sup> According to the California Commission on Land Colonization and Rural Credits, "The lack of prudence and business judgment shown by colonists was amazing."<sup>53</sup> Ely, Hibbard and Cox surveyed the opinions of county agents in Wisconsin, and found most of them to believe that settlers could not judge land values, and paid too much for their land.<sup>54</sup> So bad were their estimates that 80% of the settlers in upper Wisconsin at that time could not meet their payments as they came due.<sup>55</sup>

An especially common error in judgment is to extrapolate past trends into the future. C. R. Chambers demonstrated this strikingly in his well-reasoned study of the relation of land value to land income in several midwestern areas in 1920. He compared actual land sales prices with values he computed by assuming rent to increase in perpetuity by the same amounts it had increased in the last few years. The two corresponded closely.<sup>56</sup> Of course, in a world of chance and change such as we live in, nothing could be so preposterous as to extrapolate recent trends into the remote future. Yet that is what farm land buyers at that time were doing. How wrong they were is a matter of history.

As we said, part of the harm done by blind optimism is to drive land prices so high that the well-informed and the weaker speculators drop out of the market. The results may be worse when, as sometimes happens, the well-informed stay in the market to prey on the ignorant. This is one of the conditions that generate an all-out land boom, such as flash across the pages of history from time to time. Everyday exhibitions of folly pale alongside their lurid spectacle. Mere extrapolation, perhaps, caused the rise of farm land prices that crested in 1920. But there have been other booms that admit of no such reasoned explanation. A Great American Land Boom with its colorful carnival atmosphere, its brazen boomers and drummers, its credulous, free-spending victims, its grand excursions and free barbecues, its tinsel and plaster of paris, is attuned to the most primitive avarice and ignorance, and worse: it is truly a drama of lunacy. One can hardly explain it on any more prosaic grounds. The deeds men do in those unbelievable episodes defy rational analysis.

There is an element in each of us, if I read the psychologists aright, that wants to escape from reality. It plays its role in economics. It continually knocks against hard facts as long as one confines himself to dealing with present values, whose ultimate vindication in human desire is always just at hand. But on a scrap of paper giving access to hundreds of years of anticipated values the

opium-dreamer can build his Xanadu. An experienced promotion industry stands ready to help with this kind of construction. However mean and bleary the present there are castles around the corner for him who will live on hopes. Some hold on to land for little more substantial prospect than that.

Not all speculators need be mad for all to act as if they were. Keynes wrote:

It might have been supposed that competition between expert professionals, possessing judgment and knowledge beyond that of the average private investor, would correct the vagaries of the ignorant individual left to himself. It happens, however, that the energies and skill of the professional investor and speculator are mainly occupied otherwise. For most of these persons are, in fact, largely concerned, not with making superior long-term forecasts of the probable yield in an investment over its whole life, but with foreseeing changes in the conventional basis of valuation a short time ahead of the general public. They are concerned, not with what an investment is really worth to a man who buys it "for keeps," but with what the market will value it at, under the influences of mass psychology, three months or a year hence. 57

Keynes was writing of the stock market, which is only in part a land market. But one could hardly ask for a better picture of a rampaging land market nearing the flood-crest. Let it be known that a substantial lunatic fringe can be gulled into buying overpriced land, and they may set the whole tenor of the market as the designing buy land to unload on the innocent. If enough "outside money" flows in, "all sight is lost of land values based on non-speculative

demand and reasonable use."<sup>58</sup> The original "victims" may turn a neat profit, and it ceases to be clear who is the hunter and who the hunted. It behooves the rational gambler to anticipate the madness of the irrational, the moves of other gamblers who stalk the same quarry, and, finally, of other gamblers anticipating the anticipations of still other gamblers and victims yet to come. Then the market with a lunatic fringe becomes lunatic to the core, and swirls up in a vortex that carries prices beyond all reason. It finally recedes only to leave land titles stranded high and dry in the possession of gamblers who never intended to use the land. For these last buyers, as Cornick said, "purchased not for occupancy but to get a still farther advance of the next customers."<sup>59</sup>

"Lunacy" does not seem too strong a word for what transpires. Scholars who write of land booms rarely confine themselves to the sober vocabulary of mathematical finance, with its discounts and net yields, but write of "fever," "delusion," "frenzy," "mania," "madness," and "fantasy." We have already surveyed enough of excess subdivision (Chapter I) to know that these terms are not merely hyperbole. It would require a full-scale delusion to produce such bizarre results. Here are some interesting comments on land booms from conservative sources:

....it is a kind of craze. People sometimes lose control of their reasoning processes. 60

In 1836 Chicago,

So utterly reckless had the community grown that they chased every bubble that floated in the speculative atmosphere; madness increased in proportion to the foulness of its aliment; the more absurd the project, the more remote the object, the more madly were they pursued. 61

Of the same boom, Harriet Martineau wrote:

.....some prevalent mania infected the whole people ..... rage for speculation ..... (strangers) advising them to speculate before the price of land rose higher. 62

In the 1920's:

The fever of land speculation, of trying to sell at an artificially high price land that might at some remote future time have genuine value from the outward thrust of population, has permeated the fibre of every portion of the country. Few have paused to estimate the rate of possible future growth. It was assumed by the land peddler and his gullible purchasers that population increase was inevitable ..... 63

"Distinguished scholars" built "castles in Spain." Professor J. Paul Goode predicted a Chicago population of 15 millions by 1940.

At such a period the imagination of the community conjures up the picture of an endless stream of population increase concentrating about Chicago. 64

In Florida:

Lots are bought from blueprints. They look better that way. Then the buyers gets the promoter's vision, can see the splendid curving boulevards, the yacht basin, the parks lined with leaning coconut trees and flaming hibiscus .... And the prices! It takes days to get accustomed to hearing them without experiencing a shock. 65

Drainage ditches become Venetian canals .... and both sides of the ditches become 'water-front property'. 66

How far wrong land buyers may go in judging future values has some objective measure in their failure to meet mortgage payments. It is not the ordinary fate of other kinds of debts to go unpaid. From 1927 to 1933 American corporations reported bad-debt losses on their sales of only about 1%.<sup>67</sup> But in 1933 the Bureau of Agricultural Economics estimated that 52% of the farm mortgage debt was in arrears on principle or interest. The percentage of urban delinquency was probably even higher.<sup>68</sup> Tax delinquency was high, too, so that many municipal bonds -- liens on municipal real estate -- were in effect repudiated in whole or part. Evidently a high percentage of land buyers, not to mention the mortgage lenders, extended themselves on the basis of unsound forecasting.

We might pursue this matter at some length, and it makes an entertaining if not an inspiring study. But few would dispute the main point that land buyers often misjudge the future. Some might maintain, to be sure, that this is only a problem of the real world, and not of the models build under assumptions of "perfect competition." For one assumption of "perfect competition" is usually "perfect knowledge." But, as it seems to me, even when one reasons under the protective mantle of "perfect knowledge" one cannot assume all individuals correctly to prognosticate the course of land rents in perpetuity. That savors more of "omniscience," an attribute of Deity, perhaps, but

hardly of mortal. So I would say this flaw would remain to mar the most perfect human markets conceivable, and should receive consideration even in the purest abstract discourses on economic theory.

All this is more in elaboration of our main hypothesis than in contradiction to it. The main hypothesis is that persons with especial power to speculate in future values may bid land away from others who would use it better. To this we now add that persons with especially high opinions of the future values may bid land away from others who would use it better. In practice, the two distorting forces work together to keep land from its best use. The problem speculator pre-empt's land because of both his power to speculate and his fond hopes. Those he drives from the market are the weak as well as the prudent. As we have seen, there are reasons to believe that both weak and prudent speculators are often better potential land users than the others.

I will not try to measure the relative importance of the two distorting forces. It is enough to know that both are appreciable. Differences in individual's powers to speculate seems the more basic distorting force -- one's mere opinion is of little consequence until he can put some money behind it. But however that may be, it is clear that when individuals bid against each other for an infinite series of uncertain future values there are at least two

good reasons to doubt that the best user will outbid all rivals. Opinions, as well as powers, differ, and both differences distort bidding for futures.

The practical import of this will emerge whenever one treats of reform policies. The present considerations cast doubts on a policy of credit subsidy. Merely to equalize everyone's power to speculate, even were it possible, would not bring all to the same opinions. Distortions will persist, as long as one must speculate in a long series of unsure future values in order to hold title to land.

#### B. Problems of land assembly.

If there were a permanent optimum size and shape of landholding and land sales were merely transfers of these fixed units, there would be no special problem of land assembly. But in fact when one wishes to expand operations from a certain base, there are few adjoining acres to choose from. The expanding firm is not a disembodied spirit, picking and choosing bargains of land from wherever they exist; and the land is not on wheels, to move to the firm. The firm needs contiguous land. Any neighbor who wishes to sell has a near-monopoly position, and the buyer has a near-monopsony position. There can be years of bickering, bargaining and maneuvering as each waits for time to bring the other to terms. In such a bilateral monopoly situation the likely loser is whichever bargainer makes the error of ex-

tending himself with some constructive commitment, like starting to build, that puts him at the other's mercy. The situation does not conduce to good land use.

In American cities, e.g., the "holdout" plagues every large land assembly.<sup>69</sup> A buying campaign must be secret and disguised, lest one small, strategically located holder awaken to his veto power and hold up the project with an outrageous asking price. Without the power to condemn, the projectors must acquiesce or quit. This problem thwarts many projects, and the anticipation of it doubtless forestalls many, many more.

Here is another example; in areas of France and Holland it proved impossible to consolidate fragmented holdings into economical units without government supervision and finance. The market was legally fairly free, but the peasants simply could not agree on prices and exchanges fast enough to offset the subdivision that occurred with inheritance.<sup>70</sup>

With timberland it is more often the buyer who victimizes the seller. Sometimes large holders can box in small ones so that,

....the company is practically sure of purchasing the controlled lands at its own convenience and almost at its own price. 71

Then the small holder

can sell the tract only to the one large holder or to one of a few large holders surrounding him, and if more than one they frequently have an understanding on the situation, often in the form of buying zones. 72

Those examples are merely suggestive. As each site is unique and fixed in space, each site has some monopoly and monopsony potential whenever it is a question of land assembly.

Again, it is the perpetual life of land that makes the problem especially severe. Each sale involves the agony of parting with a claim to which future developments may give a holdup value. The bilateral monopoly situation itself would not make such a sticky market if the values were shorter lived, for then their owners would have to come to terms before time destroyed all the values. But one is in no such hurry to part with a claim to the infinite future.

#### C. Legal barriers to free exchange.

The distorting influences we have hitherto discussed involve no government interference with market forces, but result from society's effort to allocate a perpetuity by price. They are simply incidents to the private collection of land rent, and are as universal as it is. There are also other, less general distorting influences which help create the problem sketched in Part I. Our hypothesis does not explain it all, for markets are not in fact entirely free of public intervention. For perspective, let us consider some legal barriers to or penalties on exchange that also contribute to the problem.

In the first place, of course, all the innumerable legal and other obstacles to the free flow of men, goods, capital and ideas between places and occupations help keep

land, along with other resources, from its best use. But we are not now dealing with all those obstacles. The present problem is, as we said, to explain the poor response of landholders to the price and cost stimuli that impinge on them, however those stimuli may originate. We do not ask why sugar beets command a good price in the United States. We only ask why, since they do, holders do not use land as effectively as they might to produce them.

Several present policies join the distorting forces of our hypothesis to keep holders from doing so.

1. The personal income tax.

This is a tax on income taken in the form of money. A landholder can avoid some of the income tax by taking his income from the land in the form of direct pleasures. The land can provide goods and services, too, that are tax exempt, and of course it provides an opportunity to produce tax free income with one's labor and capital as well. A holder may sink capital into improvements, deduct them as expenses and finally take the income from them in non-monetary forms. He short-circuits the process of exchange, to avoid the tax collector, and begins to build a self-contained economy. In so doing he keeps land from its most lucrative use.

Another influence is the capital gains loophole. If one is in a high income bracket, the 25% maximum tax rate

on "capital gains" -- viz. land value increments -- is an attractive alternative to income from other investments taxed at higher rates. This creates an artificial demand for titles and undoubtedly prompts some people to buy where they would not have otherwise.

We do not try to say what portion of the total problem is due to income taxes. We only observe that the problem pre-dates income taxes.-- much of our evidence having been historical -- and that severe and similar problems exist today in countries with little or no income taxes.

## 2. Title problems.

Our archaic system of title search, with its needless costs and delays, hinders and discourages all land transfers to some degree. A simple system of permanent title registry and state guarantee, like the Torrens system, would solve the problem neatly, but thus far inertia and selfishness have blocked it, although it has been nominally introduced here and there. We will not dwell on this matter, which is obvious and notorious.

A more serious matter -- the most serious of all artificial barriers to land use -- is the present policy of states and municipalities toward tax-abandoned lands, the so-called "dead lands".

The Boston Municipal Research Bureau warned in the 'thirties:

'Dumping' properties at low prices should be avoided. A considerable amount of marginal land should be withdrawn from private use for some time to come. 73

Walter Blucher, Director of the American Society of Planning Officials, was somewhat more forthright about the motive:

Land speculatively held for potential use.... constitutes a threat to the value of other properties within the city ..... It would thus be to the advantage of the remaining two-thirds of the property in the community ..... to have the one-third of the area .... more or less permanently removed from private ownership. 74

Following such counsel, many American local governments have for years now deliberately or by default kept dead lands dead, off the market, with an avowed monopoly motive, i.e., to hold up other rents and land values. Or, as euphemism has it:

Even now, in certain jurisdictions, it has been found necessary to make special provision for the orderly disposal of tax-reverted properties lest sudden sales demoralize the real estate market completely. 75

And from Buffalo:

It is not to be inferred that the county is disposing of its property at whatever price it can receive. On the contrary, it is very careful to observe that its activities do not undermine the real estate market. 76

Municipalities may hang on to tax reverted lands, or they may simply neglect to foreclose on delinquent and abandoned lands, leaving them "suspended in a frozen state between public and private ownership, protected by neither, and difficult to thaw so that they may be restored to

productive use."<sup>77</sup> Consider our two largest cities. New York City in 1940 held 35,000 liens on tax delinquent land. Its policy was to foreclose no more than 250 of them per year.<sup>78</sup> Cook County (containing Chicago) lets taxes on vacant land go and go, then lets the title holder's representative take the lot under a "voluntary foreclosure plan," clear the back taxes with a small "compromise" payment, then yield it back to the title holder under his right of redemption. Result, as of 1949: "... few owners of vacant land now bother to pay taxes at all ..."<sup>79</sup> Chicago has about 130,000 chronic tax-delinquent lots. From February 26, 1946 to June 17, 1947, the City Council approved applications to institute foreclosure against 867 of them.<sup>80</sup> Those are mere token actions. Urban policies, or lack of them, have effectively placed much of a valuable national resource beyond the power of individuals to make productive.

In rural areas, similar conditions produced similar policies. Long ago it was obvious,

an important factor on the depressing side of values has been the foreclosed and other distressed farms hanging over the market. 81

Local governments responded generously:

Weaknesses in collection and sale procedures .... (and associated factors) ... have created a tax-delinquent 'no-man's land' consisting of several million acres.

With a few exceptions, states have no record of the volume and location of tax-reverted lands, and they usually have no policy for the administration of such property. In many states reversion has been avoided in recent years by the postponement or suspension of tax sales, extension of redemption periods, and provision for the payment of back taxes in instalments. 82

There are formidable legal barriers to clearing those titles. But they are man-made barriers, not natural or inevitable. A vigorous program of legislation and administrative action, including some de-subdividing and replatting, could very quickly turn those wastes into a valuable national asset. But governments thus far have directed their efforts, if any, to the opposite end. Their concern has been to protect rents and land prices, not to open new investment and employment opportunities.

Many socially minded people seem to believe such policies are somehow in the social interest. To this writer they seem anti-social and monopolistic. The policies were originally supposed to relieve small mortgageors and taxpayers in an emergency. They have become a permanent instrument for locking up natural resources.

Protagonists cite higher rents and land values as a social gain. It is the most elementary economics that higher prices are no net gain to society, but merely redistribute income from one group to another, while the resulting idle resources represent total waste. Volumes have poured forth about monopoly practices, but none to my knowledge has labelled this restrictive policy as such. Yet landholders, organized through local governments are withholding competing lands from the market to divert demand to their own. However euphemistically rationalized, that policy is monopolistic. Hence we do not hesitate to say

that the dead lands are serving no useful purpose, and that present restrictive policies are a major obstacle to good land use.

In passing, I would add that land value maintenance seems to have become and perhaps always has been a primary obsession of local governments. This obsession influences all their land use controls: zoning and tax policy, for example, besides the dead land policy we mentioned. Every locality has some monopoly potential, and most cities are strategically located and have a great deal. We may expect them to use their land use controls to exploit it so long as the central governments which charter local governments grant them the powers to do so. Many different municipal powers may serve as land use controls. We will not discuss them in detail, but merely observe that local governments have several ways to obstruct the best use of land, where they wish to.

### 3. Tax discrimination.

Property tax assessments are often regressive. That is, small holdings are assessed, and therefore taxed, at higher rates than larger ones. One survey concluded:

The validity of the results is attested... by the remarkable similarity of findings. Some states show much worse records than others, but a high degree of variation and regressivity is found in all. 83

Of course such a policy discourages subdivision of large holdings.

Some vacant lands have achieved virtual tax exemptions through chronic delinquency. Often, too, assessors discriminate in favor of vacant land holders in their valuations. That is, they assess land at a higher rate when it is improved. Besides that, they sometimes assess improvements themselves at higher rates than vacant land. Such policies, of course, discourage improvement, and tend to keep land from its best use.

Indeed, from one point of view, the general property tax discriminates against improved land even when assessments are 100% accurate. The holder who improves his parcel gets a bigger tax bill than his neighbor who does not. From the viewpoint of incentives, the general property tax favors disuse, and use involving scanty improvements, while it penalizes uses that call for heavy improvements.

For these various reasons the general property tax as now administered impels landholders to keep their holdings larger and less improved than they would if productive costs and revenues alone shaped their decisions.

#### 4. Other.

There are, and have been in various times and places, many, many other barriers to free transfer or use of land according to economic incentives. Many of the barriers represent society's efforts to palliate some objectionable condition the land market creates. Such are rent controls, land price controls, acreage limitations,

residence requirements, homestead tax exemptions and the like. We do not now judge these controls. Suffice it that these, unlike those discussed earlier, are intended to solve the very problems we discussed in Part I. However poorly conceived and executed, they are not likely to be primary causes of those problems. They do keep land from the otherwise highest bidder, but, as the highest bidder is not necessarily the best user, they do not necessarily worsen land use. Some of them probably improve it.

The doctrine of riparian rights deserves passing mention. The claim to water which it gives the riparian holder varies with the size of the holding. In certain conditions a riparian holder will lose part of his water claim if he subdivides. In California, the major arid state to recognize riparian claims to limited surface waters, that has probably deterred subdivision. But only about 10% of water claims in California are riparian, so this is not a major cause of land abuse.

Restrictive deeds, by which one who conveys land tries to regulate its future use or make it inalienable, constitute a greater problem. Such restrictions can kill the free market. H. C. Taylor wrote of the large English country estates:

They are commonly kept intact by a system of entails so that once the small estates become incorporated into the larger ones, they rarely come into the market again. 85

In earlier times, medieval corporations like the church effectively removed their mortmain lands from the market for centuries. It took political revolutions to release them. As land is a fixed amount, and lasts forever, it takes but a few generations to tie up most of the land in a country that allows free reign to the "dead hand".

Fortunately, common law since the seventeenth century has evolved a Rule against Perpetuities, and modern statutes have strengthened it in England and various American states.<sup>86</sup> These help prevent deed restrictions from accumulating over generations to clog up the land market. But the Rule against Perpetuities leaves wide latitude for evasion and interpretation. The system of entails that dominated English farm land in the nineteenth and early twentieth centuries, for example, grew up and flourished by legal evasion in the face of the Rule against Perpetuities. In the United States, restrictive racial covenants, were long maintained in spite of it. Most American states have outlawed entails by statute, following the lead of Virginia in 1776; and the Supreme Court recently held against restrictive covenants. But in spite of these victories for the free market, a good many restrictive deeds slip by the defenses. They may do great harm.

An Associated Press dispatch of December 16, 1952, tells of an estate that was entailed in 1895 by Frederick Foote, an ex-slave:

And it took 51 years and a new law to break the illiterate's "X" on his will .... Thus the 33 acres at 7 Corners, Virginia, remained undeveloped while commercial buildings sprouted all around the teeming intersection just outside Washington .... They (the holders) were land-rich and money-poor. 87

Ordinary estates in trust cannot be restricted in perpetuity, but the courts generally let a testator suspend alienation for about two generations -- in New York, for example, for the duration of a life in being plus 21 years. 88 That can be a long time. Even then, release may have to wait for petition to and sanction from the proper court, and the court may deny it if not satisfied that the restriction is harmful. Breaking a will may take some doing and expense. Much land in trust, therefore, may be virtually inalienable for many, many years.

To be sure the trustees have some latitude in leasing it. But, by holding on to the reversionary interest, or ultimate fee, trustees often "retard important business or neighborhood developments," according to Bутtenheim, 89 and perpetuate tenancy or slums where there might be owner-operation and new development.

Some trusts create a life estate in land for one party, (usually the widow) and leave the fee to another party, the "remainderman" (usually a child) on the life holder's death. This tenure is dubious at best, as the land is inalienable until the first party dies. At worst, the two parties are antagonistic. The life holder then may loot

the land of its exhaustible values and improvements leaving the remainderman only the site squeezed dry of all values save location.<sup>90</sup> In some jurisdictions, too, the life holder or her (it is usually a widow) trustees cannot borrow on mortgage to improve the land, since such a mortgage would not bind the remainderman.<sup>91</sup> It is a happy day, indeed, when a trust expires and releases its lands to commerce. But unhappily, by that time other lands will have gone into new trusts. So, though trusts may be mortal, the social problem is perpetual.

One kind of trust is generally exempt from the common law Rule against Perpetuities, and from statutes against perpetuities and mortmain. That is the charitable trust. A conveyer may tie up land forever, when he grants it for education, religion or charity. Inalienable, and often tax exempt, land in charitable trusts may lie idle for years while its administrators casually toy with plans to improve it and wait for more liquid bequests to provide the funds.

All this is a problem, of course, because as long as lands are held inalienably in trust, their holders are chosen by no economic process whatsoever. However desirable to sell to a better manager, to subdivide, or to consolidate with surrounding lands, the trustee cannot do it. Sometimes he cannot raise the money to improve the land. Sometimes he may be dishonest, or negligent, but however upright and conscientious a trustee, he is not an owner, and

will hardly give land an owner's care. Ordinarily he leases it out. And even as landlords go, trustees have a poor record. Schikele and Norman rank estates together with widows as the worst of all farm landlords.<sup>92</sup> Colleges and churches, too, are known for slow development of their lands.<sup>93</sup>

High inheritance taxes now seem to be stimulating more and more charitable bequests in England and the United States. The twenty-first century may face a problem of mortmain as great as that which plagued the middle ages, with a high percentage of the land held by charitable trusts and corporations which can neither use it nor sell it. However, this is more a problem of the past and future than of the present. Measuring the total of trust-frozen lands against the total of all misused lands, it does not now account for much of them, according to various indications seen by the writer. So while we may well take warning for the future, we cannot explain away much of the problem of this study as the fault of deed restrictions.

We have now considered <sup>several</sup> institutional barriers to free trade in land: personal income tax, title problems, property tax discrimination, social controls, and deed restrictions. Each barrier is quite important in its own right, and no doubt society would benefit appreciably by breaking most of them down. Title problems are especially important,

as we mentioned. Yet, taking these barriers all in all, they leave a large, unexplained residue of land whose misuse evidently has other causes.

We will not press this point in detail, trusting it is sufficiently obvious to the reader from his own experience, and what we have said, that the free land market, at least as presently conceived, is responsible for much of the misuse. We will merely cite the experience of Ireland under the Deasy Act of 1860. That act aimed to solve the Irish land problem by sweeping away all restrictions to free transfer, and establishing "free trade in land." It proved a total failure.<sup>94</sup> For it was not barriers to exchange that perpetuated the absentee's tenure, but their greater power to speculate in land. The freer the market, the greater was the scope for the basic principle that land titles often move to the strong hands of those with low interest rates rather than the weaker hands of working managers. This experience suggests that free trade in land, at least as conceived in Ireland, leaves a considerable unsolved problem.

Objection VIII: "If one accepts the present distribution of purchasing power, one must accept with it the fact that the very rich can pay more for resources that satisfy a whim than the very poor can pay for the meanest necessities. You are simply refusing to accept market judgments based on the existing distribution of purchasing power."

In the present study and analysis we have accepted the existing distribution of purchasing power, and the structure of demand derived from it. We have said the best use of land is that which makes it yield the most valuable produce, measuring value as the world measures it in money, and not by our private judgment. That means if a rich man can pay or impute more annual rent per acre for 25 acres of residence than 25 poorer men could pay for an acre apiece, we accept the rich man's use as the best.

Our criticism of the land market is on quite a different basis. If we were to criticize a rich man's holding 25 acres of residence, it would not be because we object to his being rich, nor spending as he sees fit. Rather, it would be on the grounds that the annual explicit and implicit income he derives from it is less, despite his great purchasing power, than its annual value to alternate users. It would be on the grounds that he holds it more because of his superior power to speculate in its future than his effective demand for its present services.

If we conceive of markets as courts which arbitrate rival claims to resources, then the final consumer market is the Supreme Court. The market for land titles is only a lower court, and its judgments only good insofar as they implement higher decisions. When the lower court obstructs the higher one, then it is our belief in ultimate market judgments that makes us criticize the land market.

It should be clear, too, that we accept "psychic income," and we accept the fact that richer men can put a higher money value on their psychic income. The annual rents we have taken as measures of good land use in our analyses include psychic along with money income. What we have shown is that stronger speculators may outbid weaker ones even when the latter would derive more total annual income from the land, including psychic income measured in a money equivalent.

Objection IX: "Your formulae are very interesting to a scholar, but most people do not think in those terms. Therefore they do not act in those terms, and your hypothesis sheds no light on actual behavior."

Every man has his own way of apprehending the facts. We have taken one straight and narrow path of accurate thinking, but there are numberless ways to come at the same conclusions. Others may think in terms of "capitalization," "unearned increments," "growth possibilities," "buying income," "making a killing in real estate," "providing for heirs," "hedging against inflation" and so on without limit. So long as Truth is one, each language, used honestly, will apprise the user of the same facts and actuate the same behavior.

For example: Appraisers sometimes account for the different life spans of land and buildings by using split

capitalization rates. That is, they account for the shorter life of buildings by using a high interest rate to capitalize income from them. Ayers J. DuBois writes in the Appraisal Journal:

.....as the ratio of building investment to land becomes greater and greater, .... larger and larger overall capitalization rates would fairly apply. 95

According to the thought pattern we have followed, that is a very rough and indirect way of expressing the facts. According to others' ways of thinking it may be a much better way. But it is obviously quite consistent with what we have said.

Of course, some people do not apprehend facts correctly. Especially where behavior is based entirely on forecasting, as in the land market, there is room for the wildest fantasy. But we have already incorporated that matter into our hypothesis, in treating Objection VII,A.