

**NO FOLDER**

**LOOSE FILE**



Re Overcompensatory territorial expansion.

When  $\Delta l.v.$  is regarded as major output of xptn. system,  
so  $P = MC$ , it affects system layout, too.

More emphasis on fructifying land; less on adding to dependency on xptn.

Thus a system depending on revs. wd. be linear, to max. distance among people, require greatest use of road. Transfer rents from land to the road itself. This doesn't  $\Delta$  rev. per mile, and involves aggrandizement as well as and maybe more than max'g profits.

Hiway planner influences settlement. He tries to influence it in such a way as to  $\Delta$  demand, even if that adds to his costs.

"Demand" as he sees it is all in user charges. (Plus effect on regulating agency & of adding to his capital.)



Many roads are much more heavily used than the land they traverse. So one might easily conclude they are a higher use and should expand.

Sometimes that is true, as when blocks should be made smaller to fructify interior land.

But the terms of access are different. Roads are overused bcs. not tenured and priced; pvt. land is underused bcs. untaxed. So it is a false productivity, that of the road, a 2d best.

We need more roads ~~to~~ designed to fructify land, i.e. feeder streets; fewer thru roads.

In terms of equity, we have given access to the common road in lieu of tenure of land. Appealing to the nomad in man, rather than the builder; the wastrel, ravager and litterer, rather than the conservator.



Out let for RIMS

Bell fuel

Ed. Paul MacAvey, Steam School



List of fallacies

"What, if any, economic <sup>or other logical</sup> fallacy is contained in the following?"

"Illustrate the following economic fallacies, principles, <sup>issues,</sup> procedures, or phenomena." Discuss pros & cons."

Peak-load pricing

Amortization

Zonal pricing vs. postage-stamp pricing

Form "Assoc. of Economic Policy Analysts."

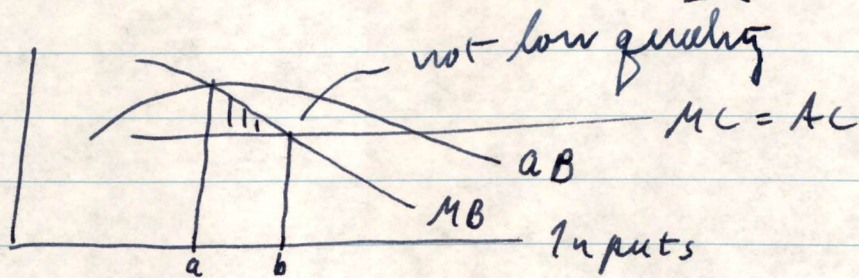


# Elements of B/C Anal

## 1. Project formulation & selection & timing.

### A. Sizing.

Max.  $B-C$ , rather than  $B/C$ . [This assumes the site is not entered as a cost.]



If you do enter site rent as a cost, then  $B = C$  at (b), and

### B. Alt. uses for site.

Study their  $B$  &  $C$ , too.  $B/C = 1$ , is the best you can do.

~~E.g. re-use.~~

Don't just do something bcs. it's good. It must be the best.

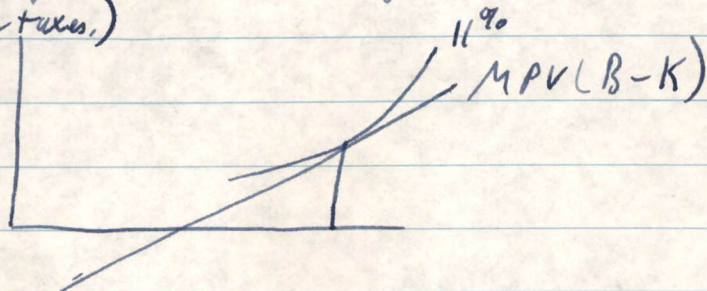
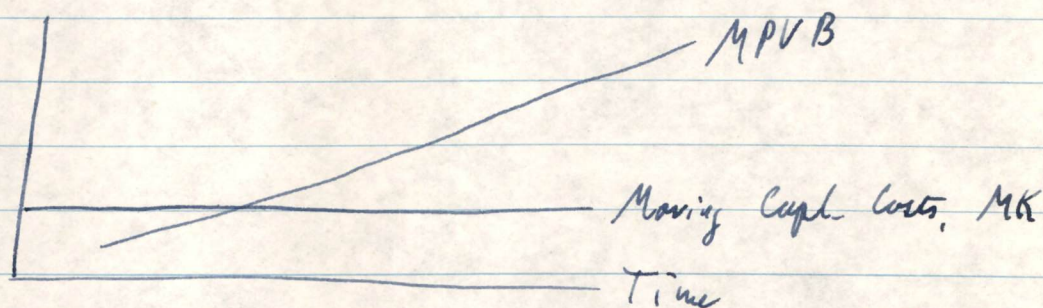
### C. Look ahead, in scanning alternatives.

Maybe save a site for a higher future use. But the annual gains from waiting must be substantial, to offset loss of current services. Discounted ~~NPV~~ NPV of future alt. ~~use~~ is what must outcompete present alt.



D. Timing, (or ripening.)

Begin when MPV grows slower than money in bank, (~~after~~ before taxes.)



Look out for ~~any~~ preemptive motive, leads to premature timing, a common fault.

E. Staging, & synchroniza.

Pick separable, self liquidating parts, build them in sequence. Costs of doing all at once are prohibitive. E.g. CVP. Avoid reduction by computer, & "I/O analysis"

The "parts" should generally be zones or areas. Bes. here, complementarity of p.w. is a max. They serve same land.

Subdivision is good e.g. All utilities at once. Plus "associated costs", i.e. prt. capl. on prt. land.

Full funding. Only do what can be fully



funded, and finished fast.

at 10%, if you let first capl. sit 7 years before used, double cost.

Since most B.C. land is crown, we've spared the worst excesses of logrolling. But still have some, plus agency rivalries. Don't let regional dev't. become unbalanced. Don't let one utility get ahead of others. Don't let public capl. get ahead of priv.

## 2. Measurement

A. Make all commensurable

That's why invented the \$. Other tradeoffs will do, also.

B. Discount ~~and~~ all to a common time.

Make everything a lump sum.

Or, everything a flow.

Either way, thus equate cap. cost & o & m costs, etc. No deprecn. formula needed - crf takes care of that



~~22 the same~~

C. Select most relevant  $i$  — a forecast  
Compensate for established bias of govt. to use  
i.e. too low, something predating infln.

Don't cf. vs. "target rates" used by cos., but actual  
experience. Money wkt. is best measure.

Note sensitivity of PV to  $i$ , as in Stanford book

D. Make benefits pay, if possible.

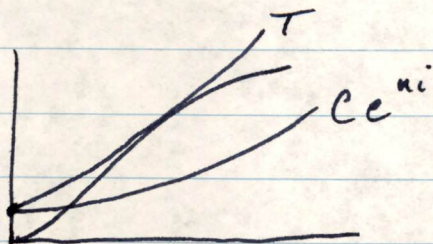


June 11, 1974, Tues. last class.

## Benefit/cost Analysis

A. Review 2 items glossed over earlier.

1. M.A.L. is  $i = 0$ .



$$T = Ce^{ni} + a \frac{e^{ni} - 1}{i}$$

To simplify, let  $C = 0$

$$T = a \frac{e^{ni} - 1}{i}$$

$$\text{Let } i = 0, \text{ and } T = a \frac{0}{0}$$

But by L'Hopital's rule, diff. top & bottom wrt  $i$

$$T = a \frac{ne^{ni}}{1}$$

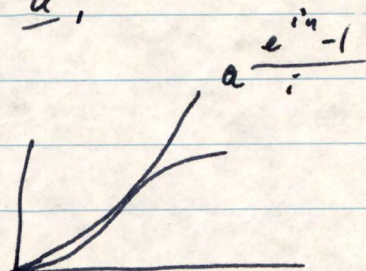
$$\text{Let } i = 0, \text{ and } T = an$$



The rotation that makes soil rent,  $a$ ,

maxes

$$a = \frac{g i}{e^{i n} - 1}$$



When  $i = 0$ ,

$$a = \frac{g}{n e^0} = \frac{g}{n} = \text{m.a.i.}$$

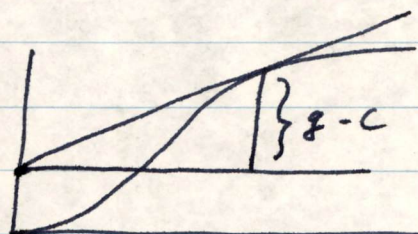
So, max. m.a.i. means max. soil rent when  $i = 0$ .

Or, if  $C > 0$ ,

$$a = (g - C e^{i n}) \frac{i}{e^{i n} - 1}$$

and when  $i = 0$ ,

$$a = \frac{g - C}{n}$$



Use of m.a.i. gives shorter rotu. than this, by ignoring  $C$ . Principle of compensating error, might even give correct answer. But not likely.

Also, if figure m.a.i. on volume, when quality shd. be in growth curve, get too short. Compensating error again.



And again, comp. error is dangerous, flakey, and capricious. Why not do it right the first time, instead. Compensating error simply means you end up not knowing why you do what you do, and simply exasperating everyone.

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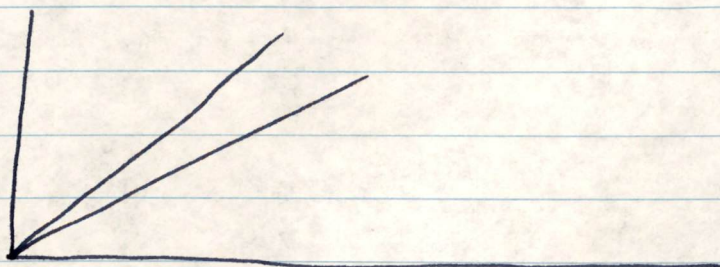
MER is analogous concept in oil & gas. Ignores value of time.  $i = 0$ .

Why is this important? ~~Bes.~~ Why is anything more input. than economizing on exhaustible res?  
 Bes. it wastes capt.

We are faced w. worldwide capt. shortage. Paramount need to ease on capt.



2. Discounting future is not sacrificing future, but doing the best we can for it. Not shortsighted

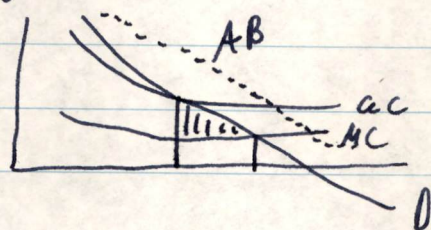


Is a way of screening out all but the best.

Same as any other price. E.g. urban rent.

3. Re  $P = MC$

Decr'g costs



a. How know if entire opn. pays?  $AB > AC$

b. Volume effects vs. distance effects  ~~$AB > AC$~~

c. How make up the deficit? Taxes are best, based on

land. max. vol/area.

d. Price discrim. is a common way of adjusting, and it usually goes wrong. Block rate structures are



common, yet they miss the mark. They reward volume per meter. To adjust to design costs, we need to reward volume per mile of line - i.e. density.

The unit on the abscissa is volume along a given line length. Block rates refer to volume per meter. This is only partially related to volume per mile of line, and often inversely.

So this is the wrong kind of price discrimination - it is not based on cost of service, but class. of demand. Those at low density may shift to equipment using electricity at ~~a~~ low rates, while the poor, at high density, might not use very much at lower rates.

Block rates are a good idea, <sup>so they miss vacant land</sup> but their rate structure should ~~begin~~ be lower for smaller lots, (and nearer in).

Better yet is a ~~standard~~ flat rate based on area ~~and distance from center~~, plus a low user charge = MC.

d. It is not the whole system that has design costs.

So there shd. be no subsidy to expansion.



And there usually is. This is the great error  
in utilities. Cross subsidy. A f effect.

Invades rents at center, dissipates them by over-extending  
network systems. Just like open access. Only worse, this  
also wastes capl.



# Welfare Ecs.

1s background for B/c Anal. of P.W., etc.

What is "welfare ecs?" Many things - "everything else".

Evaluation of public policy.

Like all ecs., it concerns choice, & decisions.

I will not try to be comprehensive. Here are some topics.

1. Regul. cost pricing

$$P = MC \text{ of outputs.}$$

Counterpart for inputs is the = regul. principle.

2. What to do with cons. & producer surplus

3. Non-market goods - marg. value, in alt. uses.

a. Open-access lands

b. "Public-goods"

c. External ecs. & disecs. Spillovers.

4. Tax policy (on crown land, licensing & royalty policy)

5. Reconciling effic. & equity.

(Defining equity — productivity ethic vs. paternalistic — materialistic ethics, vs. common rights ethic, etc.)



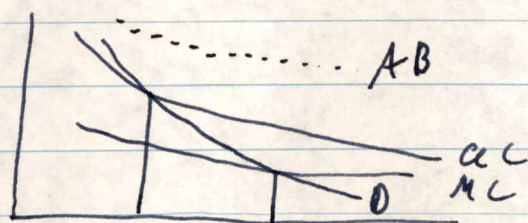
# 1. Mgmt. cost pricing.

A. Normal S & D,  $P = MC$  is optimal.

2 bad alts:

- i. Use AB, &/or AC. Too much.  
(Is Kretsch using AB for peaks?)
- ii. Use MB, &/or MMC Too little.

## B. Rectig. cost



i. Should you go to  $P = MC$ ? Yes, but — dangers.

ii. How much deficit? Top C.S.

Taxes — flat rate. They need not be a subsidy.

Block rates, declining

Price discrim. among classes  
(Newspapers get lump sums from advertisers) (also TV)  
~~Postage stamp pricing~~ ~~if~~

iii. As demand curve moves, adjust price. Flexible response to change is major need, always. Subl. influ. is our



- enemy here, bcs. it stigmatizes all AP, leads to demands for fixed prices, etc. 3

iv. Divide decig. cost system into small parts.  
Like the "profit centre" system of business.

In all es., that is a cardinal rule.  
Separate large blocks of resources into smallest units you can, for max. control.

~~How~~ Otherwise, rentable units will carry subeconomic units, and you dissipate surplus.

Like Senator Llewellyn Jordan of Idaho who asked me if Hoover Dam was no better than a hamburger stand.

Most systems, that means distinguishing volume effects from distance effects

By not distinguishing we invade rents at center and dissipate them by extending lines too far. Dissipates rent, just like open access. It's like letting everyone onto the best land — only this way wastes capt.

The A-J effect.

Postage stamp pricing, w. diff. costs of service, is form of price discrim.



2. What to do w. cons. & producer surplus?

- a. Do not use it to justify producing too much.
- b. " " " " " " little.
- c. Is best source of tax revenue. Much of it shows up in land rents.

3. Non market goods.

a. How measure value of open access lands? Knetsch re parks.

b. "Public goods" - flood control, street lights.  
These mostly are services to land.

Davidson's paper & my comments. He got carried away w. MC pricing subsidy, carried to absurd lengths.

c. Spillovers  
i. Techn. Air & water pollution,  
Congestion of roads. Depleting fish, ground water.

These are simply dimin. returns, where the ~~units of~~ variable inputs are ~~not~~ perceived as individuals rather than as a group.

When you lump them together, you



"internalize the externalities," & go back to dim. returns.

Clearly a role for govt. here, - or the very large  
part. owners.

Govt. can make small business work by doing the  
job - e.g. by regulating withdrawal of ground water, or  
fish.

Can do it wrong, by cartel  
" . . . tight" by pricing the resource.  
Or by subty. a man system, e.g. water supply.

~~Many spillovers~~

## ii. Pecuniary spillovers.

These are generally positive, cause  $\Delta$  returns.  
E.g. common use of utilities. Drawing  
customers. Complementing in use of labor. Pooling risks.

Is Vancouver too big? Positive pecuniary  
spillovers vs. neg. Techn. ones.

## 4. Tax Policy

## 5. Effic. & Equity.



Nov. 12

How to recover from sprawl.

Reconsolidate; reintegrate

How to get there from here.

How to reintegrate though locked apart

How to reverse the irreversible

On Regrouping scattered forces (ex. forces)

Undoing the undoing of our cities

How to undo the undoing

Mont. City is undone, but the undoing is still undone  
(unfinished) and can be undone



7: Monty

Wedges & Corridor. '62

Propose compact initial settlement to avoid later friction etc.

Nodes, or Corridor Cities are proposed -- as sort of pearls on a string. Station stops. (Evanston, Winnetka, Kenilworth, ---)

100,000 considered opt. pop. for nodes. Greenbelt provided.

(Fate of Greendale might be of interest.)

In genl., a good plan for specialized land use.  
Problem is implementation.

Propose limited access sewers.

" pref. farm assmt. - but based more on zoning than use. (they hedged.)

✓ Sewers are more limiting than other utilities.

↓  
They are dendritic. 3 trunks: Potomac R., Rock Cr., & Annapolis. All go to Blue Plains.

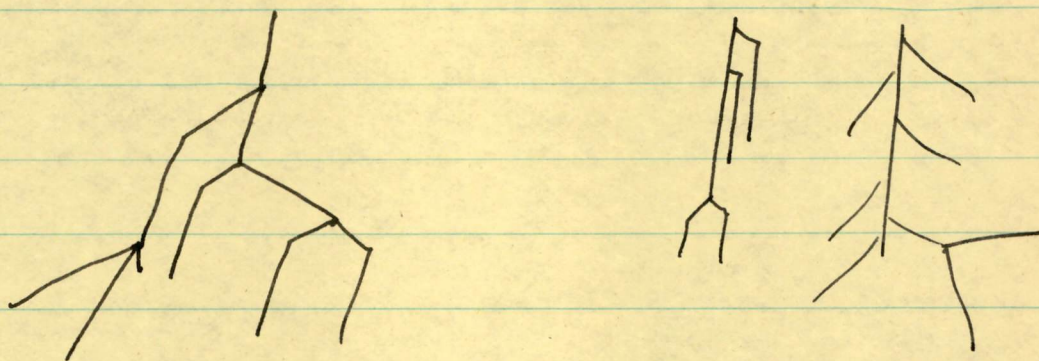


Over zoning prevails. So it is loose. & does not control.  
(or can be overridden if denied.) But it still has a value,  
so isn't completely loose.

Strong pitch for rezoning to protect wedges. Here is where  
they need to play ball, or play by ear more. Wedge concept is  
perilous. Not ready to be imposed.

They give 5 reasons for preserving wedges. Only one makes  
sense: scenic. But is no proof that this is best design for  
parkers.

The only good reason I see, they don't give: that  
mass transit must be linear. And even that is  
dubious. Mass transit can fork out.



Wedges is an error. So implementing plan is an error. It's  
a bad plan.



✓ C&W claim overzoning for small houses. I doubt this.  
If there were, why wd. Ralph Ricks or other devr. gain  
big \$ by changing zoning?

Nationwide pattern is too much large lot zoning; ~~the~~ real  
problem getting land zoned for mass mkt.

✓ They also wanted more apt. zoning, high-rise. And  
town house. I read, zoning was straight jacket. Allowed  
monotonous homog. singles everywhere; too little variety.

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Re taxes, want lower assmts. in low density zones.  
(exmpl. shld. be hi ass. in hi zones.) But want zone, rather than use,  
the criterion.

Problem w. ag. assmt. based on use -- get subsidy to  
underuse everywhere. -- or anywhere.

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Is a "Suburban Distr." in Montg., taxing, covering most of  
near-in areas

Orientation of Corr. & Wedges is toward low density,  
& protect's early comers.

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Ambivalent (double talking) re sprawl.



Some of Monty. Cty. is growing old, needs renewal.  
Rockville & Takoma Pk. had some Fed. Lib. Renewal.



762-6088, Main Switchboard, Monty. College.

Mont. City.

✓ 1. S.S. is a natural & booming center.

2. Take advantage of D.C. ineptitude.

D.C. is giving away much of role of downtown;  
even more than most central cities, by zoning.  
to grab high-rise trade.

✓ 3. Civilize the auto!

~~Being~~ To walk in S.S., or Wheaton Center, or  
Friendship Hts. is to know what it is to be a 2d class  
citizen.

"Bring <sup>the</sup> shops together; keep <sup>the</sup> autos out." Mogen.  
Chart.

✓ 4. Tax the auto. Tax the space the auto occupies.

✓ 5. Make retail zones circular, not linear. Use 2 & 3D.

"Corridors & Wedges" gives wrong idea, Focus is not on  
linear, 1-D corridors but 3D beehives. "Beehives &  
Green fields" is more like it. Foci and peripheries.



# 1 decs, Vinton lecture

## ✓ 1. New elements

- a. Cap. shortage
- b. Decline of ~~what~~ <sup>land</sup> ~~act~~ sales; demand recession.
- c. Decline of size of d.u.
- d. Bulge in cohorts in ~~1985~~ child-rearing years.
- e. Decline of basic b.r.
- f. Environment & polln. emphasis.  
Polln. traced to auto.

2. Share of land in r.e. -- higher than you think.

3. Don't be of those who know cost of everything & value of nothing, & flee from synergism.

✓ 4. "Conserve rural areas by dev'g. urban areas."

Bag of marbles vs. marbles spilled on floor

Need for linkages

✓ 5. Prof. assmt. doesn't create open space, relocates it.

Whyte & Howe vs. M.D. Low.



Present site, 118 acres, South Lawn Lane, Rockville,

6. Need dumpsters nearer pop. Mont. Cty. waste disposal crisis. Can't acquire new sites in upper Cty. (Avery Rd.; Potomac-Travilah area)
- ✓ 7. Cost of sewers is mainly collection

8. Farms threaten wildlife as much as or more than cities.  
Cities are mostly residences. Residences require livable conditions for humans that are also good for wildlife.

✓ 9. City needs local produce.

Demand for fresh local produce. Best seller today is Euell Gibbons. Imagine - to get fresh local produce today, must regress to gathering wild berries. Fun for leisurely types, but not practical for most

Farms need farm towns. Don't need urban sprawl, disrupting rural pattern.

✓ 10. About idea sprawl results from comm. pref.

11. Anomaly in fringe, size of farms is small, intensive mkt. garden is scarce.

✓ 12. Neg. cont. won't have worked; need pos. device.

Now, even truer. Neg. cont. inconceivable, where urban settlement has penetrated everywhere. Need positive forces, to Recover from Urban Sprawl.



✓ Need + forces that are firm but gentle. Measured response  
Need market forces.

Fortunately, they're with you. Just need to work w. them,  
(instead of fighting them & misconstructing them, as many planners  
do.)

✓ 13. Personal attitude.

Need to look forward to giving your life to this.  
Not something where you suddenly make it. You win or lose a  
little each year. But in yr. personal life you win  
each yr.

✓ 14. What kind of City do we want? ~~You must decide.~~  
I'd like to tell you, but I can't. But I'm  
going to anyway, bes. that will serve to prompt

You have to decide. You are deciding every day.

- as indiv. consumer

- by acts as citizen.



axial devants.

✓ 15. Rockville Pike. 3 nodes at least

a. Friendship Hts.

b. Bethesda

c. Rockville

La. Ave. axis.

a. S.S.

b. Univ. Ave

✓ 16. Auto is means to isolate people.

Places accessible only by car are costly, true — but the cost keeps plebs away.

→ Granting the yearning for seg., isn't there a better way? Yes — neighborhood specialization.

17. Why isn't basic indy. compensated for 2dy benefits?

Bes. of 2dy costs. 2dy costs are usually less, but focused on neighbors — or so they think.

"Standard perception bias" causes understate bems., overstate costs.

E.g. schools. Who wants to live near one?

But is a (weak) tendency for values to rise toward schools. UWM; Kaim mult.-reg.; Dick Phillips.

Also indl. evidence: AB e.g.

What blocks gains is short-run disruption. There



must be some reshuffling.

✓ 18. Whitefish Bay, opt. density, middle ground.

Rule of thumb: density too low for kids to play & walk to school on sidewalks is too low for residents.

19. Monty. Cty. has what many want, a Metro. govt. at Cty. level. But what has it done w. it?

20. Zoning problem on axes. Any place has comm. potential?

Not really so. Milw. shows that. Strip zoning, retail values nil. So  $\Delta$  value by lett'g retail be

anywhere is very small, while  $\Delta$  nuisance is large, and  $\Delta$  public costs is large.

But main thrust shd. not be negative. Instead, positively aid dev. of better ~~crossroads~~ hubs.

21. I'd like to learn more about what Rockville did.

22. Govt. needs to seize initiative in planning & dev.

Now, leverage of priv. ~~of~~ over public spending.



23. Monty. City. begins w. tough or unstructured situation bcs. lacks center.

But certainly has clear forces. Depends on D.C. gravity pulls down, to lower city.  
Benefits from D.C. rule vs. high rise.

Risk elements. Arlington is nearer in. D.C. might change zoning.

But can adjust optimally to risk. W. Berlin. Hong Kong. history of all times shows, risk often stimulates

growth.  
Johannesburg

Acquisition of prior rts. over stimulates.

6, (revised). Present procedure for disputes, keep probing until you find group whose political outcry is weakest. (Likely to be poor; maybe just good natured.) As unfair a system as can imagine.

Ed. buy easements (or condemn them) to surrounding land. But not practical, bcs. no one can quantify costs, trace loss of value to specific causes. (Cal. Mills Act problem.)

Most ~~Only~~ workable way is ad val. assmt of land, pick up net  $\Delta$  &  $-\Delta$  from all causes. Bcs. entire value of land is a social product.



✓ 24. See 7: D.C. Land

25. City is not a <sup>glob</sup> ~~cluster~~ of bldgs. but an <sup>articulated</sup> organism whose cells are bldgs.

Leoh Min Pei, architect who is urbanist.

Single bldg. as ego trip for ~~arch.~~ arch. is out, the <sup>heroic</sup> ~~personal~~ <sup>personal</sup> statement, ~~for~~ own glory.

Bldgs. shd. be good neighbors, not arch. prima donnas.

26. Do not bemoan sterility of our cities. Sincere opp. to create better city, fertile.

✓ 27. "Density w/o congerion," is objective of good plng.

✓ 28. Last yr.'s speaker said people won't use mass transit. As a generalization, ~~suburban~~ false.

- ex. viability depends on density.

- ex. " " " " frug. If subsidize as

much as we do auto, wd. be free & frug.

- quality of service is key. Quality means frug, primarity.

- shd. have r.o.w. Now, bus w. 50 people has no more r.o.w. than car w. one. Ridic. No practical way to accomp., but get into car. of conges. & see main cost of



street use is cong. - "new thinking", "advanced" etc.

So one bus congests less than 50 autos. So true  
autos, subsidize bus.

Also, can give row. in selected ways. E.g. signal control

- many people can't drive.

- many more shouldn't drive. We all know fate of  
old ~~fat~~ people, isolation in nursing homes. Put them away &  
try to forget.

Isolate ourselves from our children, too.

✓ 29. Place Ville Marie - what 3-D center shd. be.  
S.S. cd. develop that way.

✓ 30. Omas. Center model - visit it. Arch Rogers

31. Hi i, cap shortage, new ball game.

Time to reconstitute along compact inner lines.

Min. use of cap.

And that revolving door they call the sky (Treasury)  
(Fed. Govt)

Whereunder crawling cooped we live & die

Look not to it for aid for it

As impotently moves as you or I.



32. Do you really want renewal, or to play games?

If you do, there are ways.

33. "Mutually supportive" bldg.

"Momentum" of dev. El Dorado effect.

✓ 34. Pref. assmt. - been used.

✓ 35. Fr. Hts - why let D.C. have any of it?

✓ 36. Emphasis in planning easily becomes negative. Block that develops.

Need enterprise. Need dev. But need it where cc. of pub. services is greatest. Don't need it where leverage of priv. over pub. inv. will hurt rest of taxpayers.

Today, cap. shortage is blocking dev's. plevaty. Need do everything to encourage dev. But do so where won't throw public into teeth of cap. shortage, i.e. make public invest big cap.

37. Neal says Mont. Cty. has refused to sewer some <sup>new</sup> ~~new~~ areas in lieu of more direct prohibn. on premature subdivision.

38. Chosen growth <sup>focus</sup> ~~areas~~: Gaithersburg, Rockville, & Germantown.



39. "Staging". Or growth. One cell at a time.  
Must plan for that.

40. Enduring principles vs. Transitory conditions.

E.g., ec. in density is enduring

E.g. easy money was transitory; tight money is current.

41. <sup>Special</sup> Problem of turning Fed. employees. May not respond to  
ec. forces in most rational way. Need some direct negotiation,  
probably.

✓ 31. (revised) inverted bowl  
And that ~~rotated~~ <sup>down</sup> they call the Hill  
Whereunder at the Trough ~~we~~ <sup>you</sup> ~~long~~ <sup>so many</sup> to ~~swill~~  
Look not to it for <sup>succor</sup> aid for it  
~~It~~ <sup>stands bare & overgrown</sup> ~~stands~~  
~~As unpeopled~~ <sup>as</sup> your own till  
~~As overpromised requires~~ ~~fruits~~

42. Wn. subway is commuter-oriented, rather than  
urban. More like a commuter r.v. Unlike mass systems  
of Boston, N.Y., Chi. — but like other new proposals.  
(except Montreal & Toronto, which Wold doesn't mention.)

Densities are too low. Subway will attract &  
promote density — if we let it. Adapt to subway



✓ 43. Tomorrow I will be gone - leaving you to stay behind & weep.

44. Quote Bradford re Duxbury. Mont. Cty. exemplifies.

✓ 45. Mont. College wd. have been called a Street Car College a generation ago. Now what? Parking lot college. Enormous cost. ~~What~~ <sup>What</sup> is the inflated cost of edu.

✓ 46. Mont. Cty. will hold 1 m. people if built to present zoning.

Most zoning not used. Overzoning? Is only part of it. Under response is the other. & they go together.

✓ 47. Re large lots & estates, Isaiah had some <sup>choice remarks</sup> relevant insight

Woe unto them that lay house to house, & field to field, until there be no place, that they be alone in the midst of the land.

✓ 48. Land as insulation. It is a costly insulator. It costs the public more than it costs individuals



49. It is more blessed to enlarge than to extend  
to widen .. .. lengthen  
to complete .. .. start  
to erect .. .. expend

From extensions, congru. sprawl, Lord delivers.

✓ 50. Public sector

Keep facilities central. Good schools, e.g.

Also keep taxes central - thus assuage outlanders.

✓ 51. Pvt. sector

Lure prt. capt. inwards.

Here is where land tax essential. Simul.  
taxes center and renew it.

52. See Irvine talk  
LPPT

53. Middle course for planners, between dominance & <sup>complaisance</sup> passivity,  
is "playing ball".

~~That is~~ Playing ball doesn't mean following lead of  
prt. developers; this is complaisance.

Playing ball is ~~more like~~ working with the market.  
rather than against it. Is analogous to ~~organic~~ conservation-  
ists' ideal of working with Nature, rather than forcing Nature



into straight lines

Playing ball is sensing and computing what the wht. wants, and helping it. Let p.w. be part of the process, neither <sup>fully</sup> controlling nor fully controlled.

E.g.

Can govt. achieve this by B/C evaluation of p.w. — with benefits defined as  $\Delta$  tax rev. E.g. New Town proposed n. edge of city, requires long lines for: roads, wtr, sewer. Will it return the cost? If not, no payoff.

In perfect wht. natural zoning wd. emerge — Rutcliffe. Neighborhood specialization. "District" specialization. -- "Comm-  
ission Row"; carriage trade district; restaurant distr.; theatre distr.; hotel distr. --- nearly forgotten features of older cities when they were in full opn.

Garment distr.; Wn. lawyer distr.; "Holy Hill" distr., Berkeley. Bourbon St., New Or.; Randolph St., Chi.; La Cienega, L.A. In Chi, it was La Salle St.; finance; State St.; retail; Randolph St.; theatre; W. Madison St.; flop houses.

Grant Ave., S.F.; Fisherman's Wharf; Mission St.; beams;



Penn. Shp. distr.; Latin Quarter; Mont. St. face; Union Sq. shops;

-- Think of the great cities, the memorable, beloved cities, they have memorable distinctive districts.

What has Mont. City. to offer?

The art of <sup>regional</sup> planning has yet to be developed. It does not consist of imposing the esthetic preconceptions & personal ideas of the planner; it does not consist in giving private developers leverage over public funds.

It is to be found in process of playing ball. Sensing out where urban wants to go; & helping it get there.

Regin. City. settlement spills over from D.C., oriented there.

Planner must know diff. betw. what urban wants - ( & that means consumer, soc. consumer) - & what happens bet. urban. biased by inertia. Must know a subsidy when sees one. Need cuts

Must understand land specn. <sup>Bjorn</sup> ~~Motion~~ to hold back ripe land; & leaping to green land. & not interpret them as will of consumer.



E.g., get big devmt. where someone solved an any.  
problem: F. Hts; Rochelle.

Overall, dev. shd. have gone more central. Blocked by  
key panel, any. problem.

54. Room for improv' assmt.

Md. has good rep. Based on dispersion coeffs., '67 Census,  
single fam. hsg. 10.5%, p. 133, Monty. City.

But re ~~re~~ acreage & fam. unusually bad, for state, ( &  
usually cities follow along.)

Assmt. Ratios

|               | <u>Md</u> | <u>Wis</u> | <u>Va</u> | <u>U.S.</u> | <u>D.C.</u> |
|---------------|-----------|------------|-----------|-------------|-------------|
| All types     | 43        | 49         | 27        | 31          | 42          |
| Resid.        | 50        | 54         | 32        | 35          | 44          |
| Acreage & fam | 18        | 35         | 13        | 19          | —           |
| Variant lots  | 29        | 23         | 25        | 24          | 31          |
| C & I         | 45        | 55         | 21        | 36          | 39          |

$$\begin{array}{r} 18 \overline{) 45} \\ \underline{36} \\ 90 \end{array}$$



Bias pretty much greater than Census shows. It doesn't hit average in SMSAs. Then Mich. looks good, but Fairfield & Kowalski found scandal.

55. Arlington Cty. has superior land assets. Rosslyn has bn. pointed to as result of am. keep'g on top of what. A strong competitor for port. offices.

56. Mont. Cty. specialty, the honey estate, is out. 1969, 1st time in 20 yrs. ave. new d.w. got smaller cheaper.

57. Is a strong focused "bus. district" an asset if you can't tax bldgs?

Yes, l.v. map shows

- bus. dist. raises own values, & there is feedback
- bus. dist. " nearby values for residence & back-up bus. & storage. E.g. along side streets to Wis. Ave. near Fr. Hts.

"Bus. dist." is a good term. "Bus." includes adm., proful., wholesale, retail, hotel, finance, misc. --- & often "misc." is best of all, as in Greenwich V.



58. Hi-rise vs. ramblers are not the only choices. They are the extremes.

Wh. Bay vs. Fox Pt. is more normal choice.

Wh. Bay is opt. for Mount. City. 10,000 pop. p.s.m.,  
or  $\frac{10,000}{640} \approx 16$  pop. per acre

50' lots, 125' deep, 6,250 sq. ft. per lot,  
plenty of room.

Single fam., 2 story houses, detached.  
At 10,000 p.s.m., orig. D.C. of 100 mi.<sup>2</sup> wd. house / m.

59. Growth.

Let resid. area reach ult. density fast. Use  
capac. of lines.

But keep adding resid. areas to same center. Let  
center rise, & expand. (Keep rebuilding center.)

60. Spread is bad for all. 5 acres are being made to do the  
work of one, & do it poorly.



61. Moral of synergism is not that cities shd grow even larger; but what city you have shd. have best access among parts.

✓ 62. Friendship Hts. is not consolidated. Not a one stop center.

Is a "sprawl w-in a sprawl".

Ht. l.v. leak out in every direction. Make vast areas potentially half-eligible for intermin. dec.

Disrupt

Too many "eligible receivers"; not enough use of most eligible.  
To qualify = to make eligible.

So what will happen to this natural center?

It could soak up existing retail sprawl. Instead, Bloomingdale, Garfield, etc.

Garfield mgr. says he wants to be there, but land too high. Yet there's lots of land inside perimeter of sprawl.

"All I know is what I read in the paper."

✓ 63. Recently found lake pollen. was reversible.

L. Wn. Seattle.

Fatalism a state of mind, not a fact. MacArthur, submission to facts.  
So w. urban sprawl.

Is reversible.

Retail sprawl maybe curient. Retail bluffs. deprec. & obsolete facts.



Also, use - conversion common. D.u.s converted & merged, hi share supply.

64. A "balanced satellite <sup>center</sup> ~~center~~", F.H. includes retail, apt's, offices, frce, hotels, clinics,

65. Who gets the gravy? In F.H., old families banded together, did their own assembling.  
Is this preventing "speculation"?

All shd. share gravy by tax.

66. Money has bn. going into sewer lines. So treatment capae. inadequate; moratorium results.  
Solution: no more extension or expansion.

Solution: frce by land tax. Now, sewers underfunded for 2 reasons. 2<sup>nd</sup> depend on user charge.

1.  $\frac{1}{2}$  waiting for Fed. money

Depending on user charge ~~up~~ inflates cost by lowering electricity.

Is based on concept that you impose cost on system by using it. In fact, major cost is not that, but making service available.



It seems now that Md. bldg. moratorium sticks, while Va. is bldg. more severe treatment. (Fairfax, 7-29-70)

But check on this. It may be that Md. is using severe denial as means of avoiding sprawl; while Va. is having to serve devers. anywhere.

That's more likely. And suggests vulnerability of sewer control as means of land use control.

67. Neg. cont. Avoid throwing bldgs. back on merits of the few who own land ~~inside~~ eligible land. Don't focus hostility on developers.

68. Monty. Cty. Council blocked apts. (garden, or walkup apts. mostly) for which there is great demand. In 60s, some were built. Much controversy. Council decided to stop them — by ceasing rezoning, except where called for in master plans. (I.e. in 90% of all bldg. requires rezoning — shows how far the mkt. departs from master plans.)

Late 60s, while demand shifted downwards, Monty. Cty. zoning shifted upwards.



69. You don't want riff-raff moving in here & diluting your tax base. (But you want their money to fund yr. services!)

You've insulated yourselves from poorer people -- blacks in ghettos, ~~and~~ ~~proles~~ in Pr. George's City garden apts. & Alexandria high-rise.

You'd like to keep it that way? Then fund yr. own sewer, stop encouraging Fed. redistribution.

You'd like to remain part of U.S., help the needy? Then open up, let them in. That's the help they need more than any other.

You don't like builders putting up 'shums of Tomorrow'? ~~How~~ How else will bldgs trickle down to poor?

### "South Laurel Area"

70. Garden Apts., Laurel-Bowie area, & NSA at Ft. Meade, (P.G. City), senseless sprawl.

Apts. shd. be close in; support mass transit over short routes to compact centers.

So Monty. shd. allow - & mandate - apts. near-in

71. Some say no demand for apts. Others say w/o zoning that's all you'd have.

Each answers the other.

Frame work for talk -- pairs of mutually answering dilemmas.



72. Any landowner w.d. like apt. zoning for empty land.

Snipe is when new singles are built, and then zoning is changed.

This problem is result of apt. sprawl. Is minimized by positive containment.

73. Problem about sewage. If you ~~change~~ refuse to extend, but allow bldg. they dump in rivers.

Denial of bldg. is too harsh.

Here is where effluent charge is handy. Serve, but at high cost.

74. If you ~~grant~~ raise assmt. enough to capture full SLV from upzoning, no one will request it.

So public officials must ~~take~~ initiate. Up zone, up tax.

75. When you extend sewer to one devmt. it is available to others. That is what happened at S. Laurel area.

76. Transfer tax on r.e. sales in Md? Ask Neel.

77. "Growing pains" or imbalance of growth. Fairfax  
Minimize by synchr. pub. & priv. works.  
E.g. of Cal. I.D.s.



78. <sup>Whatever jurisdiction</sup> ~~Whoever~~ creates niches for small bus. will burgeon. Bus, small bus, gets treated so badly, elsewhere.

They say small bus. is dying. But only bus. pub. officials not making niches.

79. River Rd. & beltway - Mariotti hq. blocked.  
(They can go to FH, if land for sale reasonable.)

80. Beware the patronizing planner - he knows best.  
Must stop Hdq. bus. already enough.  
Idea that a young civil servant needs to protect a \$5 b. corp. from itself is pretty ludicrous.

81. Solid waste handling, 80-90% is collection cost. - Bower.

Same w. all processes. Hobo who guaranteed to kill ~~more~~ flies. <sup>after a good meal,</sup> Block & swatter. Now, bring on your flies.

82. Bus preemption of traffic signals

83. Paired <sup>objections</sup> ~~complaints~~ vs. skyscrapers. Mutually refuting  
a. Like heroin. Once you start, can't stop.  
b. ~~There~~ No market for them.



# Vinton Lecture.

Monty. City, Nov. 12, '70

Intro.

Pleasure to be here, lovely complex, surrounded by spacious parking lots that exemplify so well the problems we meet to discuss.

Reminds me of Comm. House I knew as a boy, Winn. — except half the town cd. walk there. Other half by bike. A nice town. Pop. density 6 per acre.

"How to Recover from Urban Sprawl".

15 yrs. ago, had to argue sprawl was bad.

~~10 yrs. ago, ~~had~~ that it existed~~

5 yrs. ago, how to prevent.

Now, <sup>too late</sup> how to recover.

{ Open space advocates now see need. 5 acres being made to do work of one, & do it badly — Whyte.

Like how to get out of VNonn; or unhappy marriage. Easier in than out. But that's today's problem.



Fatalism says too late. It's undeniably harder. But maybe we had to go thru this to persuade ourselves how bad it is.

Life is flexible, in motion, so have more changes to work with. And have some A repr. of danger areas.

Fatalism is death wish. Always too soon or too late to act. E.g., L. Erie death suddenly becomes "irreversible" — so do nothing. But L. Wa. recovered, & Erie is alive & well in FWA's plan for 1990.

That's not to say it's easy. Cap. shortage now, as cfd. w. era of rapid layout, stuck w. much of what we've got. Frozen mistakes.

But all the more import. to rectify a pattern that is prodigal of future capl. as well as past. I see lots of blood, sweat & tears ahead. Import. to have goals & conviction.



## I. Why contain

a. Not to force arbitrary planners goal on individ.

Force goes other way. (That's key to solution - let what go to work)

Was popular for a time to attribute sprawl to preference of consumer. Now, see instl. biases at work.

b. Save cropland?

Not even L.A., most extreme case; or San Jose.

Latest word from Cal., wondering how to shift crops from new lands, new wh. supply.

So certainly no <sup>his</sup> concern in Md.

City gets first choice of best farmland. & Md. not best.

<sup>disembodied</sup> Yet Md. first to go for pref. ag. assmt. Evaluation by W. H. Whyte. "I think they have been had". Or Peter House, wd. have been as cheap to buy the land.

There is damage to ag. - & cities - of another kind. Put more distance between producer & packing house, and producer & consumer. Destroy local mkt. like Comm. row in Metro., where local farms. cd. job produce.



Declining quality of produce, a problem w. wh. we're all familiar.

a bizarre index to all this is the popularity of Euell Gibbons, Foraging like cave men. A wonderful hobby, but sad commentary on food vltty.

So contain cities to keep farms closer to city. (I mean the kind that grow food, not tax shelters & cap. gain.) Not to save cropland.

c. Contain for sake of city.  
Most people.  
Most l.v.

(i) Cont. for urban efficiency.

Not mechanistic, <sup>Technocratic</sup> travesty of effie.

Output : input, both measured in human terms.

Eng. defined as man who can tell ...

That's an overstatement, but germ of truth.



Ec. effic. means build for max. use, relate to density of land use, i.e. human need.

Non-eng's effic. based on man as measure of all. ~~Not~~ Anthropocentric. Not ~~based on~~ oranthocentric -- Nuttall or Grosbeak measure of all things. Ec. effic. avoids man-is-vile school at the other extreme (from Technocracy)

Recognizes that nature worship is sometimes indirect way of rationalizing misanthropy

I shd. know. I'm a member of Audubon Society & Sierra Club (or was until a moment ago.)

Efficient city is one that maximizes ease of contact. That's what cities are for.

Many advantages, benefits of easy contact. (See list.)

1. Share cost of common facilities. Let facilities enjoy ecs. of scale.

Facilities range from the symphony to the plumbing. Let's look at the plumbing.

Is costliest utility (other than transport), & reps. the genius.



Achieve ecs. of scale.

In treatment & in distribn -- collection.

Treatment: achieve scale ecs. at modest scale.

Treatment is smaller share of cost, anyway.

14%, wr. supply

28%, sewage.

Collection is major cost

68% sewage.

35%, wr. (clitr)

Solid waste, 80-90% cost is collection.

Hobo & flies.

How achieve ecs. of scale in collection? More customers? Depends on where they are.

Not just more customers, but more w/in a given area.

Is ec. of density -- not of total system size.

Vol. effects vs. distance effects.

Put more load on line of given length.

A capacity comes at small cost. E.g. double capacity by 30%  $\Delta$  cost -- illustrative, ball park.



By contrast, double load by doubling service area:

1. Double mileage

Lines same capac. at perimeter. Greater capac. from there on in. Set to old perim., carryg half the final load, where before was the end of a twig.

Think of ea. patron havg his own domestic pipe -- all the way.

2. More pumpg & force mains.

(Re ~~the~~ everything but sewage, pressure drop w. ~~the~~ length of line, requires higher pressure; higher quality joints, etc.)

3. Lower load factor, esply at end of line.

4. In practice, in urban sprawl today, great sizing problem, poor synth. of load dev. & line extension. Often requires later parallel line, losng ec. of scale.



Apply to <sup>streets &</sup> autos? In spades. Some used to say, low density to escape from auto congestion. Seems ludicrous now we're living w. it.

Double the distance between A & B, double the miles all must travel to achieve given level of linkage.

Reduce mass transit & walking,  $\Delta$  need for auto.

$\Delta$  space requirements of auto itself, further  $\Delta$  need for auto, feedback.

Also auto turns out to be prime source of pollution.

and benefic. of unrequited munic. costs. [I wish people who worry about diluting the tax base by letting apts. into city. wd. look closer at dilution by auto.

About the only thing they don't do is go to school, and they do that, too.)



2. Cont. to help cities grow larger.

Not vaster. More people & goods.

Or, at any size, help achieve, realize benefits of that size. Unlike Mich. — collection of small towns, repetitive goods.

Unlike L.A., also -- searching for San Martin wine. Almaden & Paul Masson; P.M. & Almaden.

Corr. & Wedges pulls 100,000 out of air as opt. for nodes. 1935, Greenbelt, was 5,000.

Greendale was Bullitt.

100,000 enough? Depends what you want.

Brit. New Towns too small to be interesting, had to be subsidized ( & here, all new towns failed w. possible exception of Columbia.)

Here's what I want:

- Several Univs. to compete for me, & my kids
- Grant Ave; Fisherman's wharf; Western Addition;  
Rocci Ball
- Theatre distr. - live, of course, on & off Broadway.  
Metrop. Opera; N.Y. Lib; Metrop. Museum of Art
- Boston Symphony



- "Miscellaneous" - often best of all.
- Bourbon St. -- for the music, of course.
- Major sports. Irish Hunting, Jai Alai, polo.
- > 15 TV channels

Pacifico radio station

- Portland rose garden
- ~~Missin Bay Distro.~~
- Mayo Clinic, Presbyt. Hosp., Mass General
- State St. Dept stores
- L.A. Farmers Mkt.; Disneyland
- S.A. Zoo

- Enough friends so I can choose over I like.

- "churches"

You get the picture. I can't get that in city of  
100,000, or million

Syncretism. Advantages of being together.



~~05a~~ - 11 -

Synergism: a combining process whereby the whole exceeds the sum of its parts. Usually involves feedback. Mutually supportive.

### Synergist

Sources of urban synergism. (It is created, like the British Empire, in fits of absent-mindedness.)

1. Sharing ~~of~~ common costs. Cheaper distribution and collection.
2. Pooling risks <sup>and supplies; (headphones -- 53 firms involved)</sup> and varying load factors; diversifying and stabilizing economic base.
3. Widening markets and <sup>fostering</sup> ~~nurturing~~ specialization, linkage, subcontracting.
4. Spreading information and inspiration.
5. ~~To~~ Nurturing innovation. Allowing unpredictable combinations.
6. Whetting competition.
7. Widening choice <sup>among</sup> of goods and people.
8. Attracting routes, <sup>stations,</sup> customers, visitors, carriers, ~~the~~ load centers, etc.

9. (over)  
Summary by Adam Smith: "The Division of Labor is limited by the extent of the market."

Summary by AT&T: The Yellow Pages.

Sinks of urban synergism: ~~land~~ <sup>ground</sup> rent and <sup>land</sup> value.

Evidence of urban synergism: ~~can~~ spatial continuity ~~and~~ of land value (central or axial)



Feedback gain from  
9.1 Fostering complementary development of hinter land  
(sprawled city destroys its hinter land)



### 3. Cont. for flexibility & renewal

Need cities that retool selves quickly, meet new needs.  
Need cities renew selves, avoid becoming slums.

Renewal comes thru salvage value of land under bldg. (as value, ground rent, or taxes)

When release pressure by unrec. extinction -- artificial abundance -- ~~assume~~ assume long life during obsolescence & decay.

Flexibility we achieve now is by migration. But means heavy commitment of capt. to lines --- at densities too low to allow replant. of lines.

No plan is good enough to engrave on stone -- except to antic. change, & adapt to it.



4. Link City & country  
Farm supplies. Dump sites. (Muskogean method?)  
Accessible section.

5. Cont. for urban Community.  
Now, extreme isolation. Never were people so  
separated.

Plato - Under the influence --

Isaiah -

Bradford



y<sup>e</sup> Lord

prospered their trading, that they made yearly large  
 returnes, and had soone wound them selves out of all,  
 if yet they had otherwise been well delt with all; as  
 will more appear here after. [192] Also y<sup>e</sup> people  
 of y<sup>e</sup> plantation begane to grow in their owtward  
 estats, by reason\* of y<sup>e</sup> flowing of many people into  
 y<sup>e</sup> cuntrie, espetially into y<sup>e</sup> Bay of y<sup>e</sup> Massachusets;  
 by which means corne & catle rose to a great prise,  
 by w<sup>ch</sup> many were much inriched, and comodities grue  
 plentifull; and yet in other regards this benefite turned  
 to their hurte, and this accession of strength to their  
 weaknes. For now as their stocks increased, and y<sup>e</sup>  
 increse vendible, ther was no longer any holding them  
 togeather, but now they must of necessitie goe to their  
 great lots; they could not other wise keep their katle;  
 and having oxen growne, they must have land for  
 plowing & tillage. And no man now thought he could  
 live, except he had catle and a great deale of ground  
 to keep them; all striving to increase their stocks.  
 By which means they were scatered all over y<sup>e</sup> bay,  
 quickly, and y<sup>e</sup> towne, in which they lived compactly  
 till now, was left very thine, and in a short time  
 allmost desolate. And if this had been all, it had  
 been less, thoug to much; but y<sup>e</sup> church must also be  
 devided, and those y<sup>t</sup> had lived so long togeather in  
 Christian & comfortable fellowship must now part and  
 suffer many divissions. First, those that lived on their  
 lots on y<sup>e</sup> other side of y<sup>e</sup> bay (called Duxberie) they  
 could not long bring their wives & children to y<sup>e</sup>  
 publick worship & church meetings here, but with such  
 burthen, as, growing to some competente number, they  
 sued to be dismissed and become a body of them  
 selves; and so they were dismist (about this time),  
 though very unwillingly.



## II. How to Contain - & recover from sprawl

### A. Neg. Cont.

Truman doctrine.

Suppresses planning + thinking

Can't help us recover from sprawl at all. At best, prevent further.

Methods:

a. Costs on subdividers

~~b. Refuse~~ (but not on suckers)

b. Zoning

c. Assmt. disc.

Data on Md.

d. Pub. ownership.

Objections:

Can't help recover. Transferring exempt

Discrim. among owners.

Discrim. vs. lower class of buyers. Zone them out ( & then blame free mkt. for not providing housing for the poor.) Create artif. scarcity - sock the poor.

(Monty. has raised zoning while mkt. demand turned to smaller, cheaper d.u.c.)



Tax dodge, farm 'ure'.

Or River Hills method

Drives some desirable dev. away completely. Focuses (over)  
Most damning: it doesn't work.

It becomes a part of sprawl. Devmt. leapfrogs  
over the greenbelt - or wedge.

- Go to next City -- like Columbia. (or Ozaucha &  
Waukesha)

- Hi density zoning becomes object of logrolling  
on city or City Council.

Losers do not accept fate; & Am. political  
system not set up so they have to.

Villain in Eden ...

When there is something of value being given  
by pol. process, gets spread around.

Overzoning the inevitable outcome —  
and in scattered pattern.

Neg. cont. doesn't contain. Won't work, &  
we wouldn't like it if it did.



wrath on active agent of sprawl — leapfrog's  
dev. & errant subdivider — rather than on  
passive agents of sprawl, the holdout owners over  
whom they leap & among whom err.

Treats enterprise as tho a plague. But we  
need ent., dev. & redv. Enterprise today needs our  
help — cap. shortage.



## B. Neutral Cost.

Spatial element in utility rates.

Now, postage stamp pricing. If you've got it, you've got it & hard to deny.

Modern thinking about use of pricing of pub. services, apply surcharges for distance from load center low density.

Now, incentives for utilities are biased to spread. Magnify rate base.

Complex job, but possible. We have rate classes now. Based on meter volume.

Need new thinking, much detail.

Tax auto.

Objections to neutral cost. - too good to central owners.

I have solution. Tax them to der relieve. Secret weapon. next.



### C. Positive Cont.

Need enterprise, capt., bltz., business. Welcome it.  
In the right places. Don't give so much leverage of  
priv. over public inv., far out.

But make niches near in — & where ec. of  
pub. capt.; & max. access. (mutual -- by help,  
self to others, one gives access to them.)

The only kind that helps us recover from sprawl.

No need force in center, conc. camp. Already best.  
Works w. inst. to develop nat. advantages.

1. Spend pub. money there.

Unlike now -- seven funds dissipated over  
unpop. n-n. City.

Best schools, all services.

Models: Chas. Center; Place Ville Marie.

Now, to step out of yr. wheels in S.S. or 7th  
or 14th. is to ~~have~~ experience a moment of Truth,  
suddenly know how it feels to be a 2d Class Citizen.



2. Tax holdouts there; and avoid taxing builders there.

How? Modify prop. tax, make it a land tax.

Thus press h.o. to sell ripe land, most eligible for dev.; &  $\Delta$  what dev. can bid.

Encourage compaction.

Now, FH is sprawl w-in a sprawl.

Wide perimeter, much vacant.

Let Surfinkels says can't locate there, land too hi.  
Marriott; Bloomingdale



Mont. City

How to roll up sprawl.

Like how to get out of V.N. or  
unhappy marriage. Easier ~~out~~ in  
than ~~in~~ out. (now I've  
distracted half of you!)



Orig. owners got together, in F.H.

~~Inheritor of key lost many~~

Sold

~~Sold~~ birthright for a

man of plottage.

~~Is this better than if~~

Is unearned enrichment ok so  
long as nice people get it?

A spec. is a landowner  
you don't like.



Sent foto to N.C. Then they  
declined to pub. my article.

Can see why I'm afraid to  
send around.



John's a nice guy.

Yes, & some day it's going to  
start to show.



Mont. City. can be what you want it to be  
" " will " " " " " " " " " "

Look out what you wish for - you're likely to get it.



Monty. Cty.

Land assmt. as social audit. Social control w/o  
dictation of specifics.



When you zone out poor, you are also zoning out

- the young. Forcing yr. children to live in  
ghettos

- the elderly. Same.



If you encourage new bldgs, people fear you are attracting poor people, fiscal deficits.

If you demolish old bldgs, people object you are repelling poor people, welfare material.

These are <sup>paired</sup> mutually offsetting objections, to a point.

To make filter-down work, build for lower spectrum of mkt. originally.

Means you must allow it. Reduce capl. barriers, snob requirements, enforced consumption.

Currently, esp. mkt. cap. barrier is so great, shd. lower legal barriers.



Synopsis:

~~ALTB~~ home

Dane Cty. home

~~LRTT~~

~~MXE~~

Irvine

Cont. Pol.

SDDs.

~~LPPT~~

Penn State on wtr. (afes)

Re Davidson

IDA



## Recycling

"collection costs - by far the biggest cost item in munic. waste handling." BW, 10-10-70, p. 71.

- Steve Hawke coming up w. similar data.

- ask Blair.



# Handouts, Vinton Lect.

1. Elements of Synergy

Note 2. Data on cost of sewer service, (Rims)

3. Density & mkt. requirements of:

Mass transit

Auto shredder

Sewer

4. Cont. pol. urban sprawl

5. LPPT

6. Irvine Talks



Monty. City, Nov. 12, '70

(0-1)

## Outline

Pleasure to be here -- surrounded by spacious parking lots. Street car college? Pliz. lot college. Comm. house? Comm. complex w. on & off ramps.

Intro: How to recover

do it badly - had to establish was bad. 5 acres being made to do work for me, & then, how to prevent. (too late)  
now, how to recover.

Like how to get out of VNam; or unhappy marriage. Easier in than out.

Fatalism says too late. For some people, always too soon or too late.  
Death wish.

L. Wu. recovered; L. Eric is not dead, alive & well in plans of FWAA in 1990.

Not easy. Cap. shortage, stuck w. what we've got, frozen mistakes. But all the more urgent. to rectify a pattern that is prodigal of cap. -- future as well as past. Blood, sweat & tears - but must be done.

Why contain?

Not to force arbitrary goal on indiv. Will show force is applied for special.

Save cropland? Not even L.A. Latest word from Cal,

complaining how to mkt. surplus orchard crops from state w. proj.

Certainly not Md., whose fm. soils are so much less interesting

Yet Md. was first to buy excl. ag. zoning -- in most violent form. Cite Whyte; House. "I think they have been heard."

Damage to ag. of another kind. Put more distance between producer & cons, & farmer & packing house. Motor, destroyed Comm. row. Driven us to Euell Gibbons

Bad for city. City surrounded by sterile belt. (later)



~~Also~~

Also, shock wave effect. Calif. Excess capac. in ag.

Contain for sake of city. Most people; most l.v.

Not for artificial scarcity.

Today, prime target artif scarcity is not the farm customer. But the tenant; & small homeowner.

Cont. for urb. eff.

Not mechanistic, technocratic, cold-blooded myopic eng'g eff., narrowly conceived. That's ~~not~~ a travesty. Eff. means output where both are measured in human terms — input — more the ("An eng. is a man ---") My values are anthropocentric.

measure of all things. & I do take issue w. ~~some~~ who ~~place~~ are the man-is-vile school, w. ornithocentric view of universe. These are misanthropes hiding behind feathers of song sparrows. (S.F. talks) I shd. know — member of Audubon Society.

Efficient city maximizes ease of contact. Cities exist to bring people together. Const. grumbling about frictions, but if that were all there wd. be no cities; no l.v. <sup>no central tendency</sup> Linbarger. Widest choice. Mutual access.

Benefits of easy contact: 1. ~~Ex~~ share costs common facilities. <sup>achieve, exploit</sup> Es. of scale.

Ease of contact includes prosaic, like contact w. sewer & water.



Hobo-  
briar or p.  
flies.

All utilities, where is ec. of scale: treatment or distr.? Dist. is largest share of cost. Or collection solid waste, 80-90% is collection cost.

Is not just ~~the~~ more customers - but w-in a given perimeter.

i.e. is ec. of density - not of total system size.

Vol. effects vs. distance effects

Thus Blue Plains. Double size, more effie? No, maybe

less. But if double load ~~per~~ w-in same area, ~~the~~ small  $\Delta$  cost (l.r.)  
 $\Delta$  diam. <sup>to</sup>  $\sqrt{2}$ , <sup>= 1.4, by 40%</sup> actually less. Same r.o.w. Less friction. No simple rule, but double capax. by maybe 30%  $\Delta$  cost.  
 cf. of double load by doubling service area.

a. Double mileage. No reduced cost then.

Do lines get thinner? No. Same at perimeter.

b. Double x-section of lines at base, by treatment plant,

& more than double elsewhere --- e.g. at old perimeter, end of twig, now have to carry half the flow.

Easy way to grasp -- think of each user connected to plant by his own narrow pipe --- all the way. Bundled together in fasses

c. More pumps & force mains probably required.

If pumps involved, higher pressure.

(Re wtr. supply, certainly must pump more)

d. If higher pressure, upgrade joints

e.  $\Delta$  capax. bes. of lower load factor, due to lower density on lines, esp. outer ones.

f. In practice, <sup>i.e. under urban sprawl as today,</sup> more uncertainty poorer synth. of lines and prt. load-generation. Sizing uncertainty. Loss of scale ev. if have to lay 11 lines.



Subway. At present denities, pretty ingul. Will attract & promote denity - if we let it, & help it --- put on pressure. Tail wags big dog.



2. Cont. to help cities grow larger.

Not vaster; but more people & goods.

Corr. & Wedger pulls 100,000 pop. out of air as opt.  
In Greenbelt or Radburn era, was much less -- 5,000?

~~The~~ Greendale too small. Dullsville.

100,000 too small. Brit. new towns cursed for monotony.  
Personally I've always found bigger cities offer more.

Always <sup>gains from</sup> ~~better~~ to big layer. ~~Also~~ Also losses. Cont. lets  
you have max. bus. density allows scale w/o congr.

I'd like my city to offer the ff: several univ. to  
compete for my services, & my kids edu.

Grant Ave. & Fish. wharf, Bocca Ball

N. Y. theatre distr.; Metrop. opera; Pub. Lib.; Met. Museum  
of art

Boston symph.

Major League baseball & football & I happen to have a passion for  
Irish Hurling & Jor. alai, & I wdn't want any Dullsville w/o occasional games.  
15 T.V. channels; Pacifica radio station

Mass. Mayo clinic & Presbyt. Hospital & Boston Gen.

State St. Dept. stores

L.A. Farmers mkt.; Disneyland

San Diego Zoo. a Korean & Serbian restaurant

You get the picture. I can't get that in city of  
100,000, or 1 m.

Bos. Dist. land uses include "misc." - often misc. is best of all.

p. 5-6. Let there always be place for miscellany.







## Weaknesses.

- distrib. Discrim. among owners. ~~It~~ Apts. worth more than detached; commerce than apts.

Losers accept fate philosophy? Some prefer it, keep low taxes. Others protest. Demand & get exceptions. Result is overzoning & scatter.

To expect otherwise is to ignore hist. of political man. When something of value is being dispensed, everyone of influence demands a share. Usually every ward - depends on apportionment of power

Villain in Eden

May result in overzoning -- maybe not. But certainly results in scatter.

- discrim. vs. lower class buyers. Zone them out.

(unless logrolling & overzoning save them.) Monty. has raised zoning while demand shifted to smaller apts.)  
Enforced land cons. Price match. Murphy.

- discrim. pro. phony farmers -- tax dodge

- Most damning: it doesn't work. (E.g. Fairfax, forced to extend sewer)

Also, may get ill conceived plan. Corridors. I think wrong, bes. linear. Flies in face of geometry. 3D gives best access, not one. Hubs, not corridors.  
Why go 30 mi. north when there is unused land 2 mi west?

Need a more mkt. oriented method, more checks on soundness of plan

E.g., how know opt. density? By what gives highest l.v. in particular area. For most, is 2 story detached resids, 50-60 ft. lot, sidewalks.



[10-7]

May drive dev. clean away. Need enterprise, dev., redevel. Cap. shortage today is blocking it anyway. So encourage it - where ec. of pub. cap. is greatest. Don't need leverage of prt. over pub; but do need prt. to complete public, fructify.  
Use land as insulator. Thus planning becomes part of spread rather than containing.  
Neutral Cont. - Land is costly insulation. Costs society more than indiv.

In keeping w. modern thinking pro efficient change. Use of price incentives to apply steady, reasonable, non-catastrophic pressure.

Give spatial component to utility charges. Relate to length of line; density. Unlike postage stamp pricing. Equal rates w. unequal cost is discrim.

Involves totally new approach to utility regn. Am sorry to say, little progress has been made.

Now, all incentives are for utilities to encourage spread. Rate rate base; capture territory. Helps them milk rich territory, & max. stock of cap. they can put out at guaranteed rate of return.

RIMS -- biases vs. mass system

Complex job, but not impossible. We have rate classes now, so rate classes are possible. We just use wrong classes -- meter volume.

Base shd. be volume per unit area; and distance from load center. Ec. graduation of rates

A host of details. Some hard to control.

Meantime, reverse other policies that discrim. vs. hi density near-in. Need to compensate, not reinforce.  
e.g. end leverage of prt. over pub. int. refuse to extend until inqul. ext. pays for self. Then tax land, synchro.

Objection to neutral cont: distrib. equity. Is too good to owners of central land. Shame the wealthy.



Obj. Low state & Fed. funds.  
a. What funds? Ormai K.  
b. Get busy, change fed. programs.

invented bowl men call the H.I.  
whereunder at the trough <sup>we have to</sup> ~~no more~~ swallow  
Look not to it for succor, for it  
as ~~in perpetuum~~ understocked requires as  
your own till.

Pos. Cont

Not focus wrath on leapfrogs, subdivisions, active agent: but holdouts over whom leapfrogs <sup>agents</sup> ~~agents~~  
Isaiah an early skeptic of <sup>leapfrogs</sup> ~~leapfrogs~~  
The only kind that can help us recover from sprawl.

Make center most attractive

Not nec. build a fence <sup>center</sup> ~~city~~, make conc. camp. Already best

1. Spend pub. money on center. Best service, best of everything.  
That is where payoff greatest

Very diff. from what have been doing ... sewing fur north, letting capacity  
grow inadequate at Blue Pl. & Cabin John.  
Chas Center; Place Ville Marie.

Now, to be <sup>on foot</sup> ~~a~~ <sup>7H, whatever, or</sup> ~~in~~ <sup>a moment of truth, suddenly know</sup> ~~to know~~ what it means to be  
a 2d class citizen, an outcast ~~hardly tolerated~~ in yr. own country.

7H, a sprawl w. in a sprawl. Area now touched by his value ed.  
soak up exist's sprawl. Instead, Bloomingdale, Gunpowder, Marriott ... make more sprawl.

2. Problem of distrib. equity

Take more tax money from center

But do it by land tax. Remarkable quality of stimulating  
~~breathing life~~ most what it takes most - (no other tax  
can make that statement.)

3. Open space? Don't create it - relocate it.

Preserve rural areas by dev'g urban areas.

?s plenty of space. Bag of marbles vs. marbles spilled on floor.



p. 18

Bring the parts together. FH now broken up. So are they all. Put tax pressure on ripe land. Seinfeld wants in -- land too high. Bloomsdale, Marriott, going elsewhere ... want to get rezoning A.

Bring shops together; keep autos out.

It's not just there are too many eligible receivers. Most eligible are holdouts.

Tax the auto, yes. Tax space auto occupier, too.

Use mkt. forces. They're with you. Just wait a, then.

Synch. pvt. & p.w.



Good idea, 3 stages

Just a damn good idea.

Individ: what can I do? You do? & expect to get?

~~No sudden revelation.~~

Positive attitude

Don't suddenly make it, then go home. Win or lose a little  
ea. yr. But in personal life you win each yr.

Look out what you wish for -- yr. likely to get it.

What kind of City do we want? You will decide; you are deciding,  
every day. I've told you what I think. Now up to you.

I'm a springboard. Jump on me.

Tomorrow I'll ~~be gone -- for you to~~ going home.

I've told you what I think. What happens here depends on  
what you think.

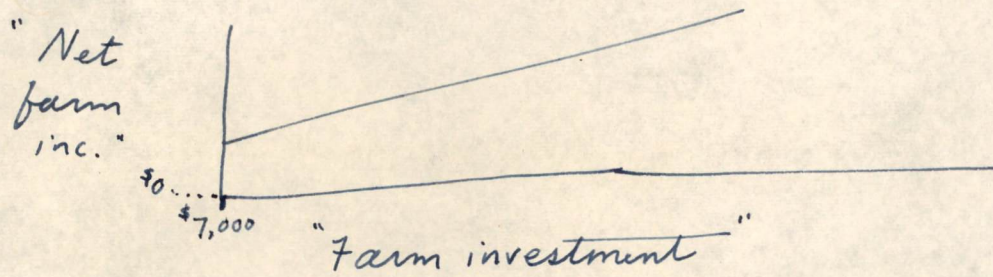


Black et al 5458

Direct evidence

p. 439, Chart 64

Accts dairy fms, Wisc. 1937-41



Above trend line is fitted from scatter, (method not stated)

They emphasize scatter, ignore trend.

In extremes, one \$22,500 fm got c. \$800, while one

\$12,000 fm got \$2,100.

$$\frac{800}{22,500} = 3.6\%$$

$$\frac{2,100}{12,000} = 17.5\%$$

Extremes of trend line are:  $\frac{900}{7,000} = 12.9\%$

and

$$\frac{2800}{40,000} = 7\%$$

p. 490 "Net farm inc."  $\equiv$  Gross sales <sup>and inventory accretion</sup> minus cash outgo, deprec., deple.

Is inc. from everything fm owns, incl. self & family.

Ordinarily excludes goods consumed on farm.

"Farm investment"  $\equiv$  ?

$$\begin{array}{r} 225 \overline{) 8.00} \\ \underline{675} \\ 1250 \\ \underline{1125} \\ 125 \end{array}$$

$$\begin{array}{r} .175 \\ 12 \overline{) 2.10} \\ \underline{12} \\ 90 \\ \underline{84} \\ 60 \end{array}$$



Black et al p. 2

So declining net farm inc. per \$ of fm inv. may well be due simply to more labor/acre on small, giving more return to income to both land & labor.

So chart doesn't prove higher net land inc. on smaller. But proves higher gross output per \$ of land & cap. (The mossa bes probly home consumed produce not counted)

p. 493, referring back to chart 64 p. 439. Correlation coeff. of inc. w. inv. is .54, meaning 27% of differences in inc. are to be assoc. w. size of business fm. inv. They emphasize great contrasts of what mgos make of their inv.s — some work's ~~above~~

pp 494-5  
"In genl, the incomes above the line are for farms who are above ave. in effc. and w. more assets than they hv. capacity to mng, some v.v.

FFA 1905 Farms above line are ~~exp.~~ farms who are op'g farms too small for their capacity; & the opp. of this for the incomes below the line. #495

Consequently one cannot safely lay down a general rule that every farm shd enlarge his farm in order to increase his income. If his income is now relatively low, but above the line, the chances are that he will do well to increase the size of his undertaking. Thousands of farms, younger farms esp., can be found fitting this description in the sections w. crowded pop-m on poor land, as in the S-n Appal-m, or even on good lands as in the Black Prairie of Txs. " But stop short of corollary, farms w. ~~more~~ land beyond capacity shd release it. & Dearden quote by final sentence saying maybe farm above line has hi eff. but low capacity.



Black

Black et al p.3

p.495 (cont's)

It needs to be stressed again that capacity & efficiency of farms are not fixed, esp. of younger farms. One of the ways to  $\Delta$  capacity is to learn to op. a larger business by actually doing it. Furthermore, a small increase in size, say from 40 to 60 acres, or from 80 to 120 acres may not increase the mgmt problems at all. Often lack of cap. is the imptnt factor limiting the size of fm op-d."

Crudely, for fun, figure M.P.s from chrt. 64.

| Fm. Inv. | Net Fm Inc.             | $\Delta$ Fm Inv. | $\Delta$ Net Fm Inc. | $\frac{\Delta \text{ Net Fm Inc.}}{\Delta \text{ Fm Inv.}}$ | $\frac{\text{Net Fm Inc.}}{\text{Fm. Inv.}}$ |
|----------|-------------------------|------------------|----------------------|-------------------------------------------------------------|----------------------------------------------|
| \$10,000 | 1200                    | 10,000           | 1200                 | .12                                                         | .12                                          |
| 15—      | <del>1500</del><br>1500 | 5,000            | 300                  | .06                                                         | .10                                          |
| 20—      | <del>1800</del><br>1800 | 5,000            | 300                  | .06                                                         | .090                                         |
| 25—      | 2100                    | 5,000            | 300                  | .06                                                         | .084                                         |
| 30—      | 2400                    | 5—               | 300                  | .06                                                         | .080                                         |
| 35—      | 2700                    | 5—               | 300                  | .06                                                         | .077                                         |
| 40—      | 3000                    | 5—               | 300                  | .06                                                         | .075                                         |

leg.

$$\begin{array}{r} .084 \\ 25 \overline{) 2.10} \\ \underline{2000} \end{array}$$

$$\begin{array}{r} .077 \\ 35 \overline{) 2.70} \\ \underline{245} \\ 250 \end{array}$$



Notes on loaned irrigation materials  
CVP DI propaganda map, my own

CVP will serve 2m acres.

Friant to serve 1m acres, save agric. there, where thousands of acres already have been abandoned, but can probably be restored with this water.

(When a farmer pays a speculative price for land, on borrowed money, he is then unable to get enough ec. rent to pay the interest and the land will go idle as he "fails". A more subtle way in which land speculation keeps land idle)

"What Price Interest Free Money?" early '48, about.

(I have a copy, only highlites taken here)

2b Coachella Valley County Water District proposing to contract with U.S. to construct water distrib. system. Lands of District will be taxed to pay obligations of said contract.

Calif. Districts Securities Commission has to approve, or at least has advisory capacity.

2a 1934, All American Canal came to district, a "vested water right in all lands within the District was recognized". ?

75,000 acres involved.

Under proposed contract it would get 8.5 acre ft/yr, Commission questions it should get that much, as this wouldn't leave enough for other lands liable for repayment under All-American Canal Contract.

2b Vested water right in lands under A\*A canal contract didn't have 160 acre limit. New contract would apply them, even as to old water.

Vast discretionary powers to Sec'y of Interior.

2b District plans to supply excess lands by letting them pump.

2b All district lands are to be taxed to pay for distrib. system, even tho they may not be served by it. (but if they can pump, they will be served by it)

The District will be getting interest free money if it makes the federal contract. (& in return it will be surrendering its power to fed. govt. Thus power to tax is power to gain control)

"They would rule the valley"

(a corporation is like a single person, limited to 160 acres. But a corp. should at least be limited according to the number of owners, if law is to make sense)

2b List of water users' organizations that will get water under "presently authorized" CVP: (excludes grasslands, individual interim contractors, & Aliso Water Ass.) Contra Costa County Water District; Arvin Edison Water Storage District; Terra Bella ID; Vandalia ID; Shafter-Wasco ID; Exeter ID; Stone Corral ID(proposed); Tulare ID; Southern San Joaquin Munic. Utility District; Orange Cove ID; Saucelito ID; Lindsay-Strathmore ID; Delano-Earlimart ID; Lindmore ID; Tranquillity ID; James ID; Madera ID; Round Valley ID(proposed). Evidently the other SJ IDs aren't included. (Shafter-Wasco, Exeter, Stone Corral, Orange Cove, Saucelito, Delano-Earlimart, Lindmore, & Round Valley, not in Adams 1929 report.)

Madera ID and Arvin Edison Water Storage District are the big ones, 164,000 and 123,000 acres.

In above list are 620,000 acres, 9,300 ownerships, or 66 acre average. 23% land is in excess. 143,000 acres, owned by 284 ownerships, 500 acres average. 70,000 acres of the excess



Loaned irrig. materials, 2

is irrigated notably Di Girogio's 12,000. Other half not irrigated is mostly poor land (I wonder).

4 ownerships above 5,000: Tejon Ranch Co 17,000; Di Giorgio Fruit Copop, 12,000; Kern Cty Land Co, 10,000; SP, 8,000. Total 49,000. Except for El Tejon, all good land is irrigated.

James Roosevelt says 20 owners under Fiant Kern Canal own 360,000 acres. Downey says is false.

Depths of depression, 750,000 unempl. in Cal. 1m were demobilized postwar, employed.

160 acre supporters seem to think it will prevent speculation by forcing big ones to sell. Don't realize small ones can speculate too. Want to make a lot of small landowners. Doubtless the 160 acre law would reduce the holdout power of the big owners greatly.

Prof. Paul S. Taylor, UC, est water from CVP gives annual subsidy of 3,200 to 8,000 \$ to owner of 320 acres. Says in Tulare & Kern, 20 owners have 360,000 acres. Downey objects -- I judge he objects to the animus of this idea, which makes him a rat.

1940, 40% Cal farms under 20 acres, too small to support a family in bad times. This from B.H. Crocheron, Director of Agric. Extension Service, UC

(NB: The type of implicit income Harris gets from his land is not taxable. Hence income tax encourages recreational land use -- just as it does recreational capital use)

Returning to Downey's table: . Excess land: Arvin Edison, 43%; Delano Earlimart 32%; James, Madera, Stone Corral, Shafter-Wasco, over 20%.

Query: why aren't other IDs served? Where are the new ones?

What Price Reclamation? Edson Abel, Ass Director, PU Dept, Cal Farm Bureau Federation. Before Nat. Recl Ass, Oct '47

Bureau, by substituting Valley Authorities for national policy, & arranging its contracts so, is getting control of water & power without any act of Congress, & with ostensible consent of IDs.

2a | Contracts made under sect. 9(e) of 1939 Recl Project Act, an Act sponsored by BR. Characteristics of contracts: floating control of water, doesn't vest in land; no opportunity to control, operate, maintain, any part of water distrib. system; (so? how about present systems, won't they stay with ids? By the way, it might be a good idea if as much of the central water system as possible were operated etc by local units, central authority supplying only necessary overall control.) 40 yr term, several possibilities of earlier termination; use establishes no vested right; must sign or get no water, is co-ercion.

"Theoretical division" of DI is unpublicized general staff, dreamed this up. (sounds good)(maybe I can get work or exert ideas there)

The language of the Act by which this action is taken is just "The Secretary, in his discretion, may enter into either short or long-term contracts to furnish water for irrigation purposes." With this authorization, the contracts were made in their present form.



Loaned irrig materials, 3

This has acted to repeal sect 8 of original Recl Act which said state water laws were supreme and water should be vested in land and use establishes vest. 1944 Flood Control Act reiterated these principles. But Bureaucracy is taking power from Congress evidently.

2a Fears that water will be distributed by political & other motives, will be spread too thin, etc. Points up the impasse to which my scheme is the answer.

Maintenance etc of distrib. systems can be turned over to users if Sec'y so elects.

2a, b, etc House Doc 146, 80th Cong 1st session, RB's report on CVP. - I have this

2c Under the old repayment contracts, evidently the users came into title of the water & the works. Now they don't. In other words they aren't getting the gift they used to. This fellow makes no effort to separate the questions of ownership and control, which are separate --- probably because by emphasizing the control question he can make more capital than by emphasizing ownership, where he is obviously wrong.

This is really the heart of land value taxation: private individuals should control natural resources, govt should own. This truth is always obscured because it is to the interest of property owners to obscure it.

Users organizations must employ superintendents satisfactory to the Sec'y of Int.

2b Orgs must deny water to landowners delinquent in taxes to org. Compels districts to ignore provisions of state law designed to "relieve distress". Good

Orgs must furnish state to Sec'y

Must get consent to change boundaries, of Sec'y; state law usually allows changed boundaries.

Sec'y can make more rules & regulations with which districts bound to comply; & is arbiter of facts in disputes.

Sec'y could demand payment from contractees even tho he gave them nothing.

None of these have force of law, but are included in contracts which users' orgs are forced to sign or get no water.

Power buyers must pay price fixed by Sec'y, charge rates he approves.

To the Fact that Bureau is going to expand in all western river basins, power & irrigation, discourages private capital. But not because of comp, but speculation. he says BR charges a monopolistic price. If so, why does it discourage competition? Of course it wouldn't have to charge such a price -- & I doubt if it ever does. This man is probly a landowner objecting to paying for what he gets.

Salt River Water Users' Ass has electric power lines. BR has paralleled them, proposed to take over the customers at below cost rates when present contracts run out.

Imperial ID wants to construct power resources at Pilot Knob, a way station on All American Canal, but BR won't allow.

In construction, BR has an "enviable reputation".

"A New Look at Reclamation" Harry Polk, pres, Nat Recl Ass, of Williston ND, Apr '48

Kaupke is Cal state director of NRA.

Fresno Cty, 628,000 irrig. acres; 10,000 pumping units; Imperial Cty, 400,000 irr. acres; Tulare Cty, 375,000.

Total gric production of ND is only twice Tulare Cty., which is 183m\$.



Loaned irrig materials, 4

Imperial Valley, 420,000 acres, 4,500 farms (c. 90 acres ave), 100,000\$ annual crop.--make that \$100m. (so Tulare Cty produces more than Imperial valley!)

Investment

Coachella Valley, 20,000 acres, 12m\$ crop. In anticipation of more water, in 1947 they planted more. (shows how anticipation of investment causes complementary investment. Bureau of reclamation case cited by Abel shows how it discourages substitutive investment, too, but I'm sure former effect is stronger)

Rockwell Bill: basic Recl Law of 1902 was being thwarted, so this bill pushed. NRA got its major objectives, of "determining the interest component feature". (which is?); and getting more complements recognized: silt, salinity control, recreation, wildlife, thus making more dams feasible economically. -i.e., getting bigger subsidy.

(Incidentally, there will be an element of rent in the water system that I proposed: for those who would pay more for what they are getting than the market price are getting the difference as rent. I must choose whether to let this difference be taken by other govt units in taxes or be taken as differential payments for water. I think the former, as the latter would distort distribution of water.)

3 changes made on floor, spearheaded by Congressman Elliott: Pay-out pd. for commercial power reduced to 50 from 78 yrs.; authorization of projects by Sec'y eliminated, must go to Congress for each one; payout pd for that portion of irrig. costs assigned from power revenues reduced to 40 yrs. Senate hasn't yet acted on bill. Bureau wants it to die, NRA wants it thru. President would veto it.

The D'Ewart Bill: In war years, farmers have paid off much irrigation cost to fed govt.

2abc

This bill introduced by NRA: recognize water rights under state law; delivering distribution systems to users when they are paid for; assure renewal privileges on 9e contracts & give option of type of contract desired; end "utility" type contracts, which put water user under complete control of BR as to farming methods.

Bur of Recl objected.. No action yet. *Pure landowner sovereignty.*

2b

"Farm loans and the 160 acre law" (it really is a 320 acre law,)

Any excess land acquired by lending agency by foreclosure may be held 2 yrs and no longer. *They don't want to sell, but to speculate.*

Carl Wente, Chmn, Statewide committee on utilization and control of water Resources, of Cal C of C, 350 Bush St, SF

S.T. Harding, prof of irrigation, UC, involved.

When the land is held longer than 2 yrs, Att'y General is to ~~to~~ start proceedings, the land being forfeited to US. DI has allowed IDs to hold "a reasonable time", but has no authority over lenders.

"Madera Faces the Facts". Statement of Harry Barnes, Chief Engineer of Mader ID, before House of Rep committee on Public Lands, Fresno, Sept 1947

If irrigation law is applied to M.I.D., years of litigation will ensue.

2ab

172,000 acres in ID, 100,000 irrig. by wells & pumping plants, 2,500 of them. c. 30% land is excess. CVP proposes to use underground storage, but if so, then how limit pumpers to 160?



Loaned irrig materials, 5

Surface storage impracticable. (according to Karrer, it is underground storage that is impracticable. Write him re this.)

About 45% of supplemental water from BR will be firm & dependable supply suitable for gravity irrigation, called class I water. Rest will be stored underground.

Underground reservoir is more accessible to some lands than others.

2b

Excess landowners will claim that since ID is forbidden to furnish them supplemental water it cannot tax them for pumping it. Legal opinion differs, BR lawyers saying can tax them, others saying no. (can say the water they are pumping is the other water, no? Of course must admit it is supplemental water then which reduces the lift)

(is it accidental that the Madera district, which repudiated, is one of larger landholdings?)

Straus says districts could assess. But this is just a personal opinion, and no such statement has appeared in contracts with US which IDs sign.

Problem of distribution ditches: shall they be built so as to exclude excess land? And if so, shall be widened to included when its ownership changes? Etc. Also, reducing ditch irrigation reduces the percolation area for getting water underground. Seepage area.

Conflicts with Cal State Law, under which all land can demand water in an ID.

"Central Valley Project", Bur of Recl

I wonder why the built Madera Canal? They could have gotten that water from north, and whole problem is to get water south.

Why the exchange? Once they have Sacramento water at Mendota why not take it on ~~north~~ south? Gravity probly, Mendota is lower than Friant. Was part of motive to get water rights from local people?

Shasta,  $4\frac{1}{2}$ m acre feet stored. (enough for 2m acres I'd say)

No power at Friant because ~~dams~~ canals take water out at a high level. (how do they drain bottom of thing?) Millerton Lake has  $\frac{1}{2}$ m acre feet.

Madera Canal in operation since 1945

Contra Cost canal irrigates 22,000 acres.

$\frac{1}{3}$  Shasta power goes to Tracy to lift water to Delta Mendota Canal. Rest sold

Revenue from power will pay  $\frac{3}{4}$  cost of initial/~~exp~~ cvp features.

2b

Initial features will irrigate  $\frac{1}{2}$ m acres of NEW land, supplement another  $\frac{1}{2}$ m. 1945-60 program will bring in 1m new acres, 1m kw too. 24 dams planned, 9 with power.

2b

Ultimate program: 48 dams, 20 large canals, double valley's irrigated area. Cost: 2b\$; revenues: 5.4b\$. This is total program, including present. Would irrigate 3m acres ~~no~~ dry before, & 8b $\frac{1}{2}$  kw. Double number of farms, add .2b to annual crop income.



Loaned Irrig stuff, 7

"Annual Report of sec'y, Modesto ID, 1930"

They get much more from selling juice,  $\frac{1}{2}$ m\$, than from assessments, ~~1,300,000%~~ 370,000. Over half latter goes into bond fund, none of former.

They keep 200,000 cash on hand, seems excessive, perhaps due to foolish laws, perhaps to fiction.

Assessed valuation of district 1930, 7.4m\$. (This for c. 80,000 irrigable acres, by Adams) Some of which in cities & towns. This is over 90\$/acre. The rate is \$4.80 per 100\$. This makes a good stiff tax. I wonder if this is whole story --? Maybe farm lands assessed much lower? Anyway there was 76,000 irrigable acres, of which 67,000 was irrigated.

I wonder if they don't figure on reducing this stiff land tax after bonds paid off? Doubtless do, & probly have done it.

Main canal & laterals, 160 miles; drainage canals, 47; private ditches, 350; concrete lined canals & laterals, 20;

Don Pedro storage capacity, 290,000 acre feet, Modesto owns 31.54%, or 91,466 acre feet.

Dallas-Warner reservoir, 28,000 acre feet.

*cf. Friant's 500,000.*

It is quite possible that population should be built up on assumption of given rate of depletion, and when it is realized that the depletion must end to do so would reduce consumption & people aren't willing so they deplete themselves into poverty. — *if they insist on keeping up cons. standards, deplete at increasing rate, until suddenly can't any more*

But why are individuals motivated to deplete? Because the processed resource will sell for more than the raw plus the labor etc, and they do not anticipate increased value of raw. Or, even if they do anticipate it, they prefer the present consumption. Of course they could sell it, so it is the market which prefers the present consumption. So a high interest rate encourages depletion. Also failure to anticipate rise of raw's value encourages depletion. The failure may be a correct one, of course.

Here is what I'm trying to get at: why do people let their capital be reduced? Because they don't give a damn. Maybe to avoid inheritance or income taxes, etc. What is income tax law about depletion? Often I suppose they don't realize for years that they are reducing their capital, thinking the land boundless. Perhaps we are wrong in our supposition that natural tendency of economy is to ~~eat~~ produce more than it consumes. Perhaps if we really valued depletion properly we would find opposite.

I dare say there are those socialists who yelp at once about oversaving and at other times about depletion. The only thing preventing depletion is tendency to create capital, or not destroy it.

3 c, b — mention that flatish land tax, as opposed to inc. or prop. tax, discourages depletion, encourages cap. formation by ceasing to penalize it. The amt of income tax reduction effected by economizing here is negligible, but principle should be applied.



Selected quotes from Dick Netzer, Economics of the Property Tax (Washington: Brookings Institution, 1966) Chapter III, "Who Pays the Property Tax," pp. 32-66.

Quotes selected by Mason Gaffney, February 16, 1972, for the purpose of showing that Netzer has not taken as hard and fast a position on regressivity as is commonly believed. On the contrary, he precedes me by five years in articulating some of the arguments I marshalled in "The Property Tax is a Progressive Tax." While my selection of quotes is avowedly tendentious, the purpose is aboveboard: to emphasize that his position is much more balanced and moderate than represented by quotes usually attributed to him.

Note also that in 1966 he regarded land as a negligible component of real estate value, but in 1970 accepted Manvel's finding that land is a high share. This would change his belief in forward shifting.

\* \* \* \* \*

Property tax incidence theory, like most incidence theory, utilizes partial equilibrium analysis, rather than a more general and comprehensive analysis of the economic cosmos. . . .

\* \* \* \* \*

. . . a general equilibrium analysis questions the effect on interest rates of taxes on capital. In effect, the reasoning would be along the following lines. The initial shifting of these taxes, via reduced new investment and higher prices for the remaining supply of capital assets, results in a reduced demand for capital in general. If the rate of saving--the supply of investment funds--is not affected by the resulting lowered rate of return on investment funds, then an important element of the incidence of the tax is on suppliers of investment funds. This will hold true so long as the supply of investment funds is interest inelastic, even if the initial tax is only on some types of assets (the case with the American property tax). Prices of taxed assets will rise, but prices of most untaxed assets will fall; there will be lower returns to capital in general. The impact on the rate of interest is likely to be small; it would be spread over the whole stock of capital.

The test of this analysis, then, is the actual interest elasticity of saving. Although examination of the evidence on this point is not a matter for discussion here, it should be pointed out there is no general agreement as to how responsive saving in the aggregate is to changes in interest rates.

\* \* \* \* \*



As for the portion which is not shifted: in the long run, differentially high local taxes on reproducible capital should have an adverse effect on local economic activity and the taxes will consequently be shifted backwards to local landowners by reducing local land values.

In general, a significant portion of taxes on buildings in cities may be shifted backwards to landowners, partly because of the competition of sites in nearby jurisdictions or other cities with lower tax rates. But there is another important reason. If the owner of a particular site has little choice of land use, he may be better off absorbing all or part of increased building taxes than if unabsorbed taxes lead in time (for example, after expiration of ground leases) to less profitable use of his site. Zoning and building code regulations, together with gross differences in accessibility within larger cities, greatly restrict the use of individual sites. In extreme cases, the existing use, antedating zoning ordinance or building code, may be the most profitable lawful use. To the extent that this holds true, increased taxes on existing structures will tend to be shifted backwards to landowners, and a large part of the taxes on new structures also will be shifted backwards.

\* \* \* \* \*

Residential and nonresidential property taxes combined are thus markedly regressive in the lowest income brackets, but only mildly regressive in the middle ranges. Before any allowance for savings in federal income tax liability due to the deductibility of the property tax, the overall tax becomes progressive above \$10,000. Federal income tax offsets eliminate this progressivity for the top income groups, converting the property tax into one which is better described as proportional than as regressive for incomes above \$3,000.

In contrast, the benefits from expenditures financed from the property tax are distinctly regressive in their incidence, amounting to a steadily declining percentage of income as income rises. On balance and considered in the aggregate, therefore, the property tax as an institution is no mean contributor to income redistribution from the richer to the poorer income groups. However, in view of the wide dispersion around the means within income classes, especially in regard to the housing expenditure/income relationship, the redistributive effects for individual households are highly uneven.

The above discussion is based on current money income. Indications are that, when considered on the basis of a broader income definition and/or on the basis of income after federal income taxes, the property tax is substantially less regressive. When measured by "normal" or "permanent" income, rather than current income, the tax similarly becomes less regressive, since the dispersion in income shrinks and housing expenditures may be quite elastic with respect to permanent income.

\* \* \* \* \*



The findings of the four studies, however, generally agree: nonresidential property taxes as a percentage of income trace a U-shaped curve, initially falling as income rises, but rising once again for the highest income groups.

In the Minnesota study, the rise begins quite soon, at the \$5,000 income level. Because the Minnesota study assumes very little forward shifting of business property taxes, business and property income is more unequally distributed than consumption spending, and taxes which fall heavily on business property tend to be progressive in character. In the other studies, in contrast, considerable forward shifting is assumed, and thus the rise in nonresidential property taxes as a percentage of income occurs only in the top, open-ended income class.

The approach used in this study to allocate 1957 property taxes by income class is summarized in Appendix Table D-1. . . .

The tax rises as a percentage of income for the top income class in all cases, . . .

\* \* \* \* \*

Comparable to analysis of the incidence of any tax, the extent of regressivity is in part a consequence of the income concept employed. Use of a broader income concept--one which includes transfer as well as factor payments--tends to reduce regressivity, since it adds proportionately more to the income of people at the lower end of the scale. Additional elements are the inclusion as income of both imputed rent on owner-occupied houses and imputed personal interest income. The first also tends to reduce regressivity, largely because many low-income retired people have large net equities in their houses; but the second has an offsetting effect.

Another measure which reduces regressivity is the use of income after, rather than before, deduction of federal income taxes. Federal income taxes are larger proportionate subtractions from the incomes of richer people. Thus, in an after-tax income comparison, property tax payments by upper income groups are divided by relatively smaller income aggregates, resulting in higher effective rates for the rich. The Survey Research Center study combines these various adjustments into a measure of "gross disposable income," held to be a "more adequate measure of ability to pay"; on this basis, the property tax appears to be a proportional, not a regressive tax, for incomes of \$1,000 or more.

\* \* \* \* \*

Therefore, for many families, present housing consumption patterns are determined not by current income levels but by income levels or expectations some years earlier. In general, this averaging of income, or lagging in other cases, might be expected to result in low income elasticity of demand observations for families with rapidly rising incomes, consuming less housing than present incomes warrant, and also for older people, consuming much more housing than would be expected on the basis of low retirement incomes.

In any event, the property tax on housing can be expected to be less regressive when the income measure or the time period spans a number of years. The consequences of treatment of both residential and nonresidential



property taxes, and of expenditure benefits as well, on the basis of permanent or lifetime income, are analyzed in a section below.

An Empirical Investigation  
in Northern New Jersey

To some extent, at least, the progressive nature of taxes on residential property for the \$5,000 to \$15,000 current income range may be no more than a result of geographic differentials in property tax rates and in income distributions. In general, the highest effective tax rates on housing are found in the suburbs of the nation's larger metropolitan areas, especially those in the Northeast. These jurisdictions tend to be inhabited by families in the upper middle income ranges. Thus, a significant proportion of upper middle income families reside in high tax communities, perhaps explaining much of the apparent progressivity.

\* \* \* \* \*

Current Versus Permanent Income

Recent discussion of the concept of permanent income in the economic literature is essentially concerned with explanation of consumer behavior. But two observations have been made of importance to an analysis of property tax incidence. First, it appears that expenditures for housing and other consumer durable goods with long service lives seem to be governed more by expectations as to levels of normal or "permanent" income than by current, more transitory income levels, an observation which seems likely enough. Second, lifetime incomes exhibit much less variation than current incomes. For a variety of reasons, many households at both the top and bottom ends of the current income distribution are in those positions only temporarily.

The first of these observations is relevant to the incidence of the residential property tax, since it concludes that housing expenditures increase considerably more rapidly than income, and thus there may be a significant degree of progressivity in the tax. . . .

Muth's permanent income analysis, using both time-series and cross-section data among cities, found that housing/income ratios rise markedly with income. Margaret Reid's very elaborate empirical work produced a number of different income elasticity coefficients for housing demand in different comparisons, but most of them were high; her "findings imply an elasticity of housing with respect to normal income of around 2.0."

Another set of data testing the permanent income hypothesis was developed in the course of the northern New Jersey investigation discussed above. In this analysis, it was assumed that a reasonable approximation of permanent, or "normal," income is the average income levels of the major occupational classes in each of the eight counties. The rationale is that occupation is the major determinant of lifetime earnings (within reasonably small areas) and that age is the principal determinant of the ratio of current to normal income. The more refined the occupational classes and the



smaller the geographic unit of observations, the more likely this is to be valid.

Figure 6 is a scatter of the relationships between normal income (defined in this way) and house value/income ratios for the nine major occupational groups in the eight counties. The cluster of dots with low incomes and high housing/income ratios in the upper left part of the figure are for private household workers. This group is the only exception to a general profile suggesting an elasticity of demand for housing with respect to normal income of something like unity. Within each of the eight counties, the occupational groups in the very highest income bracket--the professional and managerial categories--tend to have slightly lower house value/income ratios, but this is only a mild tendency.

\* \* \* \* \*

. . . despite the conceptual inadequacy of a "statistical equity" notion, the evidence on balance suggests that regressivity of the property tax with respect to income is hardly the most impressive charge that can be laid against the property tax.

\* \* \* \* \*



## Lost Arts, Effete People, or What?

The advance of technology sweeps all before it, so they say. We can do so many things now we never dreamed of before. That being so, explain these mysteries.

1. In the 19th century it was economical to reclaim land in the Delta of the Sacramento-San Joaquin Rivers. Originally it was a huge marshland. Some 500,000 acres were protected by levies, using Chinese hand labor. Salt was flushed from the soil and crops were grown on the peat soil. The fertile land paid for its own reclamation through local land taxes levied by Reclamation Districts.

Today, the same Districts covering the same land cannot afford to maintain the levies. Most of the cost is covered by the U.S. Army Engineer Corps; and more recently by FEMA (the Federal Emergency Management Administration). No more use of human energy: huge modern floating dredges do the work. Yet these three agencies together cannot afford the job. Levies keep breaking and islands keep flooding, and quite possibly the whole Delta will revert to marshland.

OK Sherlocks, what do you think happened?

2. In the early 20th century New York City built itself an elaborate subway system. Today when the population is greater and richer the City can hardly afford to keep it going. Fares are much higher, even in real terms, but the system keeps losing money. No one dreams of building any new lines; it is a question if they can keep the old ones going.

Were the old New Yorkers giants, and the new ones pygmies? Or what?

3. In 1852, a 2¢ stamp guaranteed mail delivery inside Pittsburgh within 2 hours. Two Hours! Today,... well, you know. Yet today we have sorting machinery, zip codes, mail trucks and scooters, and all the rest. What went wrong?



## MARXISM AND GEORGISM

Marxist underconsumptionism should lead to Georgism.

Marxist says that surplus value is extracted but not spent for C, therefore merchants can't sell what is produced. And therefore, the rate of profit falls, and so does the rate of interest. And therefore money and capital stop cycling, and there is unemployment and poverty.

But if profits and interest are all of surplus value, we have a self-equilibrating system, for the fall of profits would reduce the extraction of surplus value, raise C, and restore profits.

But what if high land rent is what extracts much of surplus value? Then you get underconsumption, and falling rate of profit together. Falling rate of profit does little to relieve underconsumption, the more so if rent rises to absorb what profit no longer takes.

As to solutions, the classic Marxist/Keynesian solution is to subsidize investment. But if it stimulates investment to subsidize it, it must suppress it to tax it, so what does one tax? Rent is the only source that would work.

*Comments, anyone?*



## Airport congestion, deregulation, and Henry George

Airline deregulation was supposed to prove the superiority of free markets, and compete away monopoly rents skimmed off by airlines having superior routes and schedules. Great idea: but now every time we get stacked up over a hub airport, or overcharged for an emergency trip, we wonder if this is really Utopia. We are tempted to grumble at Alfred E. Kahn, The Great Deregulator who sold us all this -- under Jimmy Carter, yet. Tell us again, Al -- we get so discouraged.

But perhaps the trouble is that Kahn didn't get enough of his way. Here is what he says now:

"We are pricing those scarce spaces at congested airports at times of peak use insanely.... The landing fee at Washington National Airport, which is among the most precious pieces of ground in the universe, is 57 cents a thousand pounds. That comes to between \$2.75 and \$6 for landing the small craft that my charter operator lands. And a maximum of \$700 or \$800 for a 727. That's crazy. No wonder you have a shortage. No wonder planes are lined up and queuing the way they do at a meat shop in Poland.

"They should be charging thousands of dollars for their landing. That would translate into maybe \$25 or \$40 a ticket. That means that the people to whom it's important to land at that very precious time and space will be able to do so without delays, weather permitting. ...."

(Interview by Keith Bradsher, L.A. Times, 22 Nov 87, Part IV, p.3)

OK, Al, now we begin to read you. Deregulation created a tragedy-of-the-commons effect at hub airports, where access is free or underpriced. Deregulation won't work right until users have to pay the rent which demand creates.

We do wish, though, he'd made more of the point that small charter craft, using half the time-slots, clog up the hubs while mass transit, serving most of the people, pays the tab. Remember the tax on airline tickets?



Next question, who should collect that rent, and what do with it? The airways are public domain, regulation preempted by the Feds -- I guess that's why they can fly over your house -- so we all have a claim on it, subject perhaps to some sharing with those who pay for building and operating the airports. (Why "perhaps"? Because cities build airports mainly to enhance local land values, and those beneficiaries should pay.)

There should be a nice net surplus for the general fund, to help abate other taxes. What does Al Kahn say now? Alas, having told us how to stop messing up the system in the present way, he proposes a new way:

"And if you then use the money that you get in that way to subsidize landings off peak or in uncongested airports, that would translate into lower fares and there would be bargains for people who don't find it necessary to use the very scarce times and places."

How sad! After such a good start, Professor Kahn has succumbed to regulator's disease after all. He would save us from dissipating rent through queuing, only to dissipate it in overexpanding. He would internalize all the rents in the air transit system, cross-subsidizing subeconomic operations from rentable ones.

This is the same mindset that leads the Forest Service to extend costly, erosive, damaging logging roads into fragile, submarginal wilderness areas just to spend the rents it receives from its good lands and timber; that leads highway departments to spend gas-tax money on new roads in the deserts; etc.

Some day some true free market proponent will sell the idea that rents from natural resources should be returned to all citizens as social dividends, so they can spend them as they see fit, not as some bureaucracy prefers. Isn't that what consumer sovereignty is all about?