

criticism of location theory, limitations

Isard, Walter. Location & Space-economy London: Chapman & Hall

Chapman & Hall Ltd., '56.

gaffe #1

p. 202, assumes "cost fun. relating to land use A are invariant w. distance from the core." This is not for simplicity but he is aiming at generality. & altho in reality costs do vary due to terrain, they "do not vary in a regular fashion from any w. distance from any given pertinent focal pt."

So clearly his concept of costs does not include expanding the site. But central land is dearer & wd raise AC & MC.

p. 243 - 53. "Ag Location they embraced & gurgled."

Notes that Brintmann, Lorch, & Rern all assume const. intensity. Isard discards assumption, p. 244.

But retains assm. of prodn. fun invariant w. distance. p. 244.

Showing a residual lack of form on gn. of how much land to use. Not relating scale to intensity. A intensity allowed, but not change of lot size. Also, why does he still distinguish ag. from indl. location?

Latter still dimensionless?

p. 247 he has mgnt rents of 2 industries = at boundaries.

And one firm may be an industry. He's getting warm.

Intensity falls off w. distance from mkt.

He never specifies fun. of rent is to min. exptn cost

p. 183 refers to ~~high~~ high central rents as diseconomies, like Weber.

Thus his inadequacy is in not showing role of rent

p. 184 Discusses ex of scale of pur quarta, but not disticks,

thus misses this aspect of fun. of rent. Maybe I sh. emphasize it more, too. Gooson, 184 ff., to discuss all kinds of ex, makes them

gaffe #2

gaffe #3

Isard, 2
entirely fns. of city size w/o regard to intensity.

This is "urbanization economies." Dimensionless firms.

p. 188 Traditional dualism in location theory. Thiessen for ag, Weber for indy. But p. 193 they include it

p. 190, ~~return~~ Again, cost curves for firm excludent. Curves borrowed from Dumn. So are s.r. Doesn't consider l.r. expansion of firm. So my "slot" criticism is warranted. Elsewhere Isard does consider effect of xptn costs on intensity along a continuum. But not fn. of rent promoting intensity.

p. 193, ff. Dumn, Isard shows how higher land price causes substituting of other inputs for land. But doesn't relate to xptn savings. Dumn has land prices rise & Δ intensity as ~~the~~ sub. other inputs for land.

Taken from Dumn, p. 30.

Again, while he lets firms grow more intense, his main advance is to let them do it over a continuum. Still shows no relation to xptn costs.

"Now you see it, now you don't."

Accepts xptn rates.

Lacks policy focus

Rationale for rent is largely it reserves sites for those who benefit most.

Lösch

Lösch speaks of "points" of location. Isodapanes etc. too are clearly loci of points. This is even more striking than fitting land uses into slots. In Ch. 4, "Industrial Location Thy."

Ch. 5 "The Thy of Ag. Location."

Gets rings, Thünen rings. How can get lines between rings w/o intensity? By assuming intensity: "ptas yield E centners per ha." p. 38. Is no provision for intensity changing w. price of output or inputs.

Several times refers to "spatial order" of uses. Strictly ordinal.

pp. 247-48 Land goes to highest bidder. Lots, whose size doesn't come into gn. Again, p. 253-54

p. 248, points out his own assumption re industry as located at a pt., actual dimensions wd. distort his hexagons.

(So "ring" thy. goes w. "ag location", conceived as subject to diff. principles from industrial bcs indy. is dimensionless.)

Get ag rings, but indy just at opt. pts)
(Ag. rings are promising, but intensity not allowed to change continuously; & effect on xptn net not discussed.)

In fact, cannot ignore dimensions at center. Dimensions become smaller, but no faster than land becomes more valuable, & traversal costs higher)

p. 250, correctly criticizes of the cost thy for treating 2 countries as points.

Ratcliff, R.U. Urban Land Ecs N9: McGraw-Hill, '49

p. 372 rent due to "savings in xptn costs". Doesn't ~~any~~ mention

Ad use of xptn.

Here Ratcliff, citing also Haig, does relate rent to xptn costs.
But only the effect of xptn cost on rent, not v.v. Is sketchy.

Doesn't say savings relative to what point.

But this is something Hard doesn't do.

Weber, Alfred. Theory of the Location of Industries. Chi: UC Press, 1929.
3d Impression, 1958. Xtd w. Intro. & notes by Carl F. Friedrich.

p. xxi (by Friedrich) Thünen assumed fixed intensity. Friedrich notes
assumption not valid.

p. xxviii Fr. says Weber called rent at center a deglomeration
factor. If so, huge error. Fr. rpt, p. xxix, says if l.v. didn't rise,

agglom. wd. be greater.

Weber does say so, pp. 131-34

Another cost that Δ s w. distance from center is advertising. In fact some econs hv. seemed, by selecting this in preference to other aspects, to attach primary importance to this factor. So says Isard.

E.g. Bldg, '48 ed., pp. 111-21

Crunkln, Chaps 5 & 6

L. Abbott, Vertical Eq., AER 12-53 : 826-45

Dorfman & Steiner, Optimal Advertising, AER 12-54 : 826-36

"Traditionally, the analysis of urban land-use patterns has fallen outside the ~~map~~ realm of location theory." Isard, p. 200. He gives an appendix here to Ch. 8 on urban land use, but w. min. substance.

Hoover, Location theory & shoe & leather, p. 24, "transport costs are generally less than α distance ..."

~~Hoover~~ op cit p. 26 Even if xptr costs are α distance, central lands produce more per acre, therefore their rent per acre is more affected by xptr costs per unit of output, and $\therefore$ rent gradient is steeper near center.

Bigpt. seems to me that as you move from center, % Δ xptr costs falls rapidly. Lot 2 pays twice as much as Lot 1, but Lot 11 only 10% over Lot 10.

His reasoning is that these lands, conceived as farm lands, are producing for a central mkt. & central ones have more mobile inputs/acre

because price is higher.

When land "quality" is good in sense of flat, friable & fertile, land may sub. for labor & be used less intensively. But when good in sense of central, land can only sub. for xptn inputs. (one of which is land, incidentally) which it does by being used intensively, hi gross output, hi turnover.

In Ratchiffe I do not find any hint of idea of land rent
✓ as constraint on occupying space & exptn costs. I wonder
whence that idea?

Try Haig, AGE 40: 422. and Wendt-Ratchiffe debate ff.

Wendt, Theory of Urban LV, LE 8-57

p. 231 re Haig thesis Wendt has good point That merely reducing differential rent by better xptn inside given perimeter need not reduce Σ l.v. Will reduce some & Δ others. (Impact of any given Δ xptn is uneven. If downtown is for pedestrians, better bus service will tap new mkt for downtown, but not lessen critical value of best downtown sites. Will take customers from peripheral subcenters.

Whether net Δ or $-\Delta$ l.v. depends on external ex in 2 areas, A_g vs $-A_g$ returns, etc. Presumably, tho, on balance wd. be net gains.

Now gen. is wd. they be expressed in higher l.v. or higher wages & i.r. Problematical, depends on intensity of land use. Probly Δ effective supply of land, but maybe offset by Δ real quality.

Wendt doesn't touch on above, but raises good pt, much depends on aggreg. land supply. If new xptn brings in new land supply may well Δ aggregate urban l.v. -- & also lower unit values. Also Δ unit values at center, which benefit from new customers (this is just an extension, tho, of the fixed perimeter case).

Ratchliff Commentary on Wendt, LE, 360-62

Ely was first to say Lxptn wd. reduce urban l.v., & this makes it suspect, was probly part of his anti-George campaign.

Ratchliff seems to miss point re aggreg. supply, p. 361, argues on basis of reduced differentiation.

Garrison et al. 1959

p. 61 Haig, 1926, is still considered to have provided basic theory of urban land use. Later writers have just restated him.

Hoover not thinking of public costs of exptn, shown by his assuming
dec. cost per mile.

Public or fixed cost Δ s per mile, less as leave center, but miles ~~of~~
of higher AC less narrower. (& less used)

Leg. Distr. Nets.

Beckmann et al, Studies in E. of Xptn.

a thought: They take location of origins
as given, min. xptn cost.

My contribn then is to have p system
affect location

Location theorists give us no
criterion how far extend nets.

Weintraub, Sidney. PRICE THEORY. NY: Pitman Publishing Corp., 1949.

Chap. 12, "Spatial Interdependence," pp. 270-38.

Discusses several issues in space analysis, citing Hoover & some others. But never gets into rent, or why firms are separated from each other by space -- which is because they occupy space.

"Firms are separated from each other by space for the reason that firms occupy space. The function of rent is to constrain this occupancy to that area whose ~~benefits/area~~ marginal benefits equal or exceed the inconveniences imposed on others." This is the principle of which I find no clear statement anywhere.

Weintraub discusses competition in zones of indifference between firms; deduction of xptn cost from demand curves -- but nothing about rent implications of this.

His emphasis solely on price behavior offirms. Effect on competitive behavior.

But the unit is the firm, a disembodied spirit of no dimensions. Location, but no dimension. Function of rent is not discussed even as it affects location; much less dimension.

Warntz, Wm. Toward a Geography of Price Philo: UPa Press, 1959

p. 26, credits Lösch w. treating "both aspects of space-economy theory, i.e., location of activity & spatial price equilibrium", vs. Hoover, whose work, like Weber's, is "partial."

So Lösch is widely acclaimed as the master & generalist. If his contrib. to "spatial price eqm." ~~is~~ doesn't include matters, they probly aren't anywhere.

p. 36 et passim "space potential" --- the accessibility of locations to useful things. E.g. land most accessible to most wheat output has max. space potential for wheat ~~storage~~. --- lowest price should prevail there.

Note "potential". The latency concept.

There is commodity supply space potential; & demand potential. Contours for each, etc.

[It is curious, space econs cite Thunen etc, but regard classical econ. as wholly dimensionless. Yet Ricardo & rent were hardly that, — tho it is true Ric. seemed to emphasize fertility. Yet the very phrase "margin of cultivation" implies space, as element in declining land potential.

Thünen may > later ones, by integrating Ricardo, & emphasizing uses occupy space.]

Warntz is just showing variation of prices over space. Nothing on fr. of rent, or even on location factor.

Thunen's xptn notes from E&U p. 67

15-383

Antenna
from city

Price -A Price -A of
-A Price

0

1.5

5

1.313 .181

1.136 .177 .01

.968 .168 .009

.805 .163 .005

.656 .149 .014

.512 .144 .005

.374 .138 .006

.242 .132 .006

.116 .126 .006

.000 .116 .01