

Compute Is the Soil

By GANDALFO

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In 2008 a coworker introduced me to Henry George. That coworker became one of my closest friends, and Henry George became an obsession I never shook.

The short version: in 1879 George published *Progress and Poverty* and asked a question that still bothers me. Why does poverty advance alongside progress? We build railroads, cities and factories, and wealth explodes. And somehow the people doing the work don't get ahead, and sometimes they fall behind.

His answer was land. He didn't mean land as dirt. He meant land as location, everything that nobody made. When a town grows, the ground under it becomes more valuable. The owner didn't cause that. The town did, along with the new road and the neighbors. And yet the owner collects that value as rent, for as long as he holds the land, simply for having shown up early.

George's remedy was almost boring. Stop taxing work and building, and collect the value of the land itself instead. That leaves people free to make things, and it makes sitting on what nobody made unprofitable.

The freer the markets and the land, the freer the people. I believed that the first time I heard it, and I still do.

The objection

The most common pushback I get doesn't say George was wrong. It says he was right about a world that no longer exists.

It goes something like this: “Land mattered when the economy was farms and railroads. Today the economy is software. Software doesn’t need land. Nobody’s getting rich off acreage. They’re getting rich off code.”

It’s a reasonable thing to believe. It’s also a spell, the comfortable one: land doesn’t matter anymore. Its twin is the idea that the cloud weighs nothing.

There are two answers to it, a small one and a big one.

The small answer: land never left. Strip out the buildings, and the land of the lower 48 states was estimated at roughly \$23 trillion in 2009, according to a Bureau of Economic Analysis working paper.¹ For a more personal test, ask anyone trying to buy a first house in Utah whether land stopped mattering. If you’re the one who can’t afford it, it isn’t just you. It’s arithmetic.

The big answer is one I only saw because of my work.

What an engineer sees

I write software for a living, and sooner or later every engineer runs into the same wall. The wall has nothing to do with intelligence or talent. It’s infrastructure.



The Summit supercomputer at Oak Ridge National Laboratory, Tennessee, 2018.
Photo: Oak Ridge National Laboratory. CC BY 2.0.

To build anything serious now, we need compute, and there are exactly two ways to get it: build our own or rent someone else's.

Building our own means chips, buildings, power contracts, cooling, a grid connection and a lot of capital, which rules it out for almost everyone. So we rent, by the hour and by the token. We build on ground we don't own and under terms we don't set, and the prices tend to rise right when what we built starts to matter.

That's when it clicked for me. I thought I was looking at a new economy, but it was the old one with better renderings.

Compute is the new land. I don't mean that as a metaphor. I mean the structure is the same, and if we ask George's questions, we can see how well they fit:

- Who owns the scarce input?
- Who captures the value when demand rises?
- Who pays, and do they have a choice?

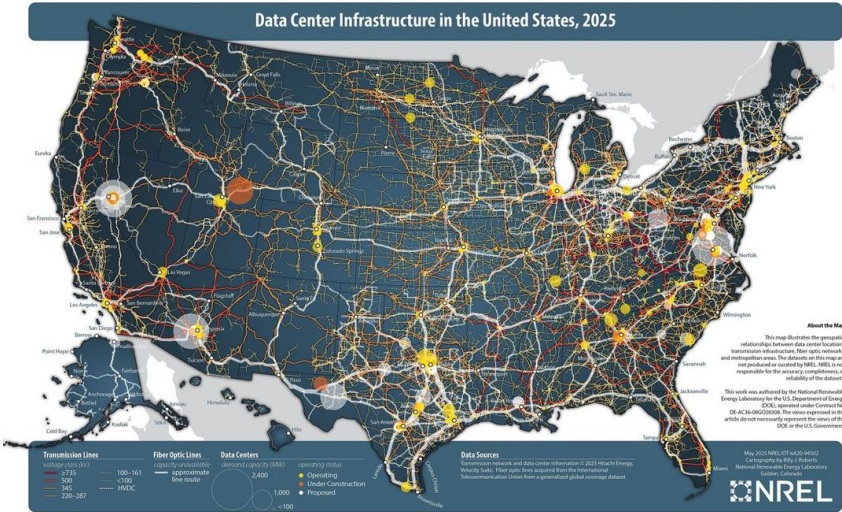
When everyone else's work makes AI more valuable, the ground it runs on becomes more valuable too. The owners of that ground didn't create that value. We did, every developer and every user. And the owners collect it as rent. That's George's whole theory. It just moved.

I'm not exempt from any of this. Every engineer I know is a tenant, and I'm one of them. Every time I ship something, whoever owns the soil gets paid first. He doesn't even have to read the release notes.

And the soil is literally soil

Here's where the spell breaks: compute isn't weightless. It sits on land, and it runs on electricity and water. Follow any chatbot down far enough and you hit a power line.

The International Energy Agency estimates that data centers used about 415 terawatt-hours of electricity in 2024, around 1.5% of the world's consumption, and it projects that figure more than doubling to around 945 TWh by 2030. It also notes that nearly half of US data center capacity sits in five regional clusters.² That isn't a cloud. It's a map, and a map is a question about land.



Map: data center infrastructure in the United States, 2025, showing data centers by power demand alongside transmission lines and fiber optic routes. National Renewable Energy Laboratory. Public domain.

Then there's my own backyard. In May 2026, Box Elder County commissioners approved a 40,000-acre data center project in Hansel Valley.³ In October, KSL reported on a water-rights application tied to the project. It proposed changing water from irrigation use to supply the data center campus, which the application says would include eleven clusters of data center buildings and a 7.5-gigawatt gas-fired generation facility.⁴



Interstate 84 in Box Elder County, Utah, looking toward Hansel Valley and the Hansel Mountains, March 2019. Photo: Chris Light. [CC BY-SA 4.0](#).

Put plainly, water that has gone to farming would go to feeding machines, and fields would turn into circuitry. That isn't an image I made up for a banner. It's a water-rights application.

So no, land didn't stop mattering. It just got a new tenant. Compute is the new land. In Utah you can drive out and see it.

The stories we tell ourselves

"Open source fixed it." Open weights are a real gift, and open source is the commons. But a commons you can't run is a museum. The weights are free, but the soil they run on isn't.

"Competition will sort it out." Maybe. But with land, competition among tenants doesn't lower the rent. It raises it, because more people building on AI means more demand for the same scarce ground.

"It's just the market." It is, and that's the point. George wasn't against markets. He was against confusing the return on work with the return on owning what nobody made. The first is a market. The second is a toll booth.

I don't mean any of this as a complaint. The compute barons aren't villains. They're doing what landlords have always done,

and they're good at it. Whether they're bad people isn't really the question. The question is whether we want the most important resource of this century to follow the oldest rule of the last one: whoever owns the soil owns the harvest.

Neither team's talking point

This is usually where someone asks which side I'm on.

The left hears "rent" and wants to nationalize the data centers. The right hears "tax" and stops listening. George doesn't fit in either box. He was for free trade and free enterprise, and he was on the side of the people who do the work. The one thing he opposed was getting paid for owning what nobody made.

We can love markets and still notice that a toll booth isn't one. We can want more data centers built, faster and cheaper, and still ask who collects the value of the ground, the power and the water they sit on. None of that is a contradiction. That's the whole position.

So what follows?

I don't think the answer is to seize anything. George didn't want to abolish private property in land. He wanted the community to collect the value the community created, and to leave alone everything people actually built.

Applied to compute, that turns into questions I don't think anyone has answered well yet:

- What is the "land value" of compute, the part nobody built? I suspect it's things like grid connections, power allocations, water rights and sites next to cheap energy.
- When the public grants those, why does the public see so little of the rent?
- What would it take for a small team to own its ground instead of renting forever?
- What does a shared grid look like, one that keeps the commons runnable and not just downloadable?

I have opinions on each of these, and I'll argue them here one at a time, with receipts. I'll also be wrong about some of them, and when I am, I'll say so.

A modest close

None of this will make anyone rich. Fair systems rarely do. What it might do is make building pay again. The people doing the work would keep more of what they make, and the people who own the ground would collect a little less for having shown up early.

George asked why poverty advances with progress. My suspicion is that we're about to run that experiment again, on a much bigger field.

His question, updated for the new land:

When the machines get smarter, who gets richer: the people who build on the soil, or the people who own it?

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NOTES

1. William Larson, "New Estimates of Value of Land of the United States," BEA Working Paper, April 2015. The estimate is about \$23 trillion (2009, current prices) for the contiguous U.S. plus D.C. <https://www.bea.gov/research/papers/2015/new-estimates-value-land-united-states> ↑
2. International Energy Agency, *Energy and AI (2025)*, Executive summary: ~415 TWh and ~1.5% of global electricity in 2024; ~945 TWh by 2030 (Base Case); nearly half of US capacity in five regional clusters. <https://www.iea.org/reports/energy-and-ai/executive-summary> ↑
3. Spencer Wilkinson, "Box Elder County approved the largest data center in the country. Now what?", Utah Public Radio, 6 May 2026. <https://www.upr.org/politics/2026-05-06/box-elder-data-center> ↑
4. Garna Mejia, "Stratos Project water application reveals new details on massive data center," KSL.com, posted 16 Oct 2026, updated 17 Oct 2026. <https://www.ksl.com/article/51637099/stratos-project-water-application-reveals-new-details-on-massive-data-center> ↑

PHOTO CREDITS

1. Summit supercomputer, Oak Ridge National Laboratory, 2018. Oak Ridge National Laboratory. [Wikimedia Commons](#). CC BY 2.0.
2. [Map of data center infrastructure in the United States](#), NREL, May 2025. National Renewable Energy Laboratory for the U.S. Department of Energy (NREL, NREL/OT-6A20-94502). [Wikimedia Commons](#). Public domain. A map, not a photograph. NREL notes that the underlying datasets are not its own.
3. [Hansel Valley from Interstate 84, Box Elder County, Utah](#), 2019. Chris Light. [Wikimedia Commons](#). CC BY-SA 4.0.

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This essay was first published at computeandpoverty.com/essays/compute-is-the-soil/ on November 1, 2026. That page is the canonical version.

The figures behind it are worked through at computeandpoverty.com/compute-rent/.

Henry George's *Progress and Poverty* (1879) is free to read at computeandpoverty.com, or to download in full.