

Progress ●

Class 5 - Liberty

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Thus far

1. Progress: human standard of living can and will be improved by purposeful human action
2. The IR as the most important breakpoint in human progress
3. Science as 'capital' used to produce progress, with unusual institutions
4. Cities: weak ties, shared resources, knowledge spillovers...but also incumbent constraints

In the famous 2007 article by Jensen about Kerala fisherman, he notes how they used cell phones to gain access to more ports to catch fish if the price was higher. Note the topics we discuss today: local knowledge (the fisherman knows what he has, how the ocean is producing today, whether she has a wedding early the next day to attend and must go early and so on). And also: capabilities (the cell phone allows the fisherman to achieve more of Sen's freedom by reducing constraints on action with the information), liberty on gender/family/household grounds, and more

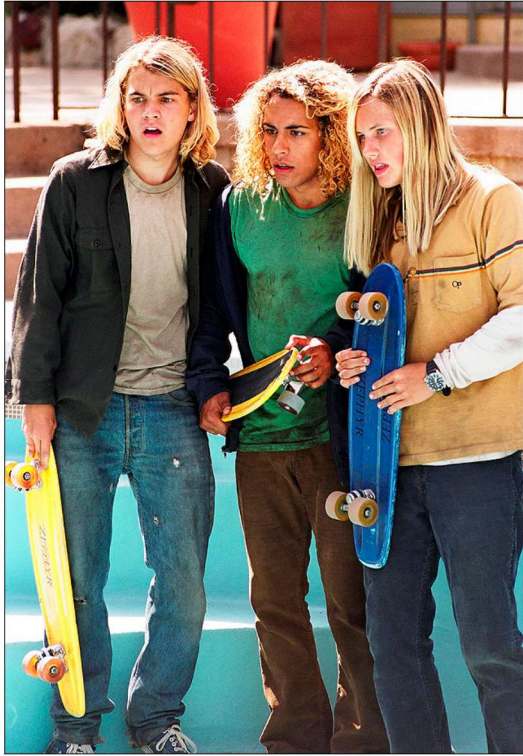


3/34

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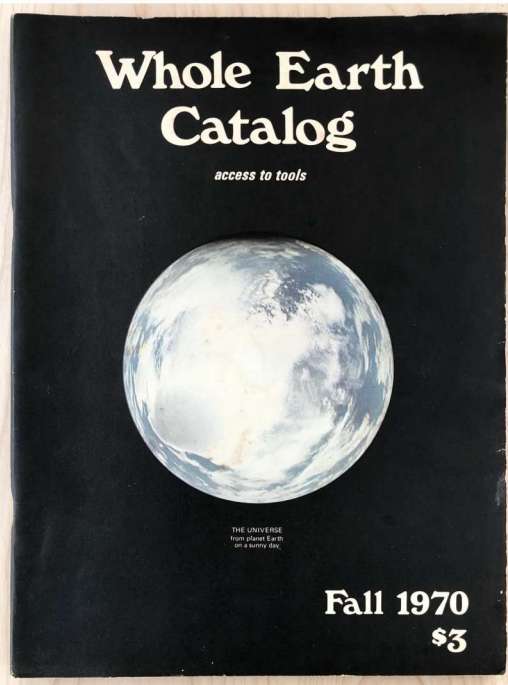
How might we define liberty?

There is no great definition of liberty. Many, from JS Mill ("pursuing our own good in our own way, so long as we do not attempt to deprive others of theirs") to our writers today, have tried to give a definition. The big gaps are between "positive" and "negative" liberty (absence of constraints from orgs, society, govt.). Let us be open in the class and consider the specific question: is liberty by any definition critical for progress, and why?



Where do you expect more progress?

Skateboarding (invented in California), Jobs and Woz at early Apple, Bell Labs 1950s institutional scientists. It may seem crazy that the culture on the left contributed more than the one on the right, but that is Brand's argument: the counterculture of California - a total rejection of authority and "old norms", is what allows for wild outcomes.



"Stay hungry. Stay foolish"

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Stewart Brand's Whole Earth Catalog, Ken Kesey's "Further" bus, and Jaron Lanier (who named and largely inspired modern VR). Brand worked with Kesey and Merry Pranksters on their acid tests, and campaigned to have the first picture of the "Whole Earth" released. This picture "gave the sense that Earth's an island, surrounded by a lot of inhospitable space. And it's so graphic, this little blue, white, green and brown jewel-like icon amongst a quite featureless black vacuum", so yeah, he was a hippie!

The quote at the bottom from the Whole Earth Catalog, not originally from Apple. Kevin Kelly, founding editor of Wired, worked for Whole Earth. "WELL" a virtual forum in the 1980s, was founded by Brand. Legends! But also, this culture of hippies, how important was it for the technological and cultural progress we saw in California? You can see, as in Brand, how linked the two are in many ways. And can you imagine a guy like Lanier moving up in the straitlaced business worlds of New York or London or Beijing?

Highly recommended: <https://conversationswithtyler.com/episodes/stewart-brand>

1. *“Access to computers should be unlimited and total.”*
2. *“All information should be free.”*
3. *“Mistrust authority – promote decentralization.”*
4. *“You can create art and beauty on a computer.”*
5. *“Computers can change your life for the better.”*

Levy, Hackers, 1984

In particular, 'mistrust authority - promote decentralization'. Doesn't this sound like "Move fast and break things", or a crypto manifesto, or an AI manifesto? This sentiment has been around in California a long time: it also sounds like "turn on, tune in, drop out" and not coincidentally.



Engelbart's SRI demo in San Francisco shows the mouse, the GUI, windows, video conferencing, hypertext, file linking, etc. Engelbart read "As We May Think" while in the Navy, but wanted more civilian benefit from tech. Moved to Ames as a military wind tunnel expert before absolutely blowing people's minds with this demo in '68. But also note: this seminal moment in Silicon Valley came from an ex-Navy man who arrived there with the military and sure looks straitlaced, and who was working for military-funded SRI and where many folks working with him went on to work for the very influential but still "old economy" PARC: Xerox's Palo Alto Research Center. So somewhat "high liberty" West Coast, but not exactly Timothy Leary. Perhaps what is going on is that the cultural milieu that Engelbart is in - that decentralized new things are worth doing, that existing institutions and technologies are insufficient - permeated into even more "square" researcher's thinking? We will discuss this more in our class on culture.

Liberty: Mistrust authority – promote decentralization?

(Is the hippie story really true though? We'll see later this term when we discuss ambition...)



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Frederick Terman, dean of engineering at Stanford, pushed to create modern Silicon Valley tech industry and spinouts, first HP in a garage + military work in the 1930s and 40s, then Shockley comes out (randomly, from an economic perspective! his mom who lived there was sick) with Shockley Semiconductor, then the Traitorous 8 -> Fairchild -> Intel, Xerox PARC moves out there to access talent, and on and on (we'll discuss the role of cities soon). Terman sure isn't a hippie. But also, recall, all these folks went West to avoid the NYC suits! And "science advances one funeral at a time", recall, from Planck, so perhaps even the straitlaced folks who come to a "do what you want - mistrust authority" world become a bit more open to doing things in new ways, hence progress. Note that this definition of liberty is not so much about the role of government or the state, but about a general permission structure to do new things. Your liberty may be constrained or assisted by many agents beyond just the government!



*...in a system where
the knowledge of the
relevant facts is
dispersed among
many people, prices
can act to coordinate
the separate actions
of different people.*

Hayek, *Use of Knowledge in Society*

Friedrich Hayek (Nobel in Economics, 1974)

Enormously influential - maybe the most influential economics article of all time. Literally changed how economists spoke about the benefits/costs of socialism, especially at Cowles. Helps lead to influential Mont Pelerin Society and many of the modern ideas about markets. Hard to overstate how inevitable socialism seemed - it was "modern"!



11/34

The socialist calculation debate (this is Chile's unused Cybersyn planning room): consider the argument of Oskar Lange to just let the Central Planning Board respond to surpluses and shortages by adjusting prices. Where is this likely to go wrong? What types of products? New ones, perhaps, ones requiring foresight and planning? Ones where the people have heterogeneous tastes?

Stafford Beer, the cybernetician who helped plan Cybersyn (and lived in Toronto, and gave the '73 Massey Lecture ("Designing Freedom") while doing this!) hooked up to a computer hundreds of telex machines to try to transmit information in a "rational" way across the whole system. This was what Hayek was arguing against! See Eden Medina - Cybernetic Revolutionaries for more detail.

The marvel is that in a case like that of a scarcity of one raw material, without an order being issued, without more than perhaps a handful of people knowing the cause, tens of thousands of people whose identity could not be ascertained by months of investigation, are made to use the material or its products more sparingly; i.e., they move in the right direction...I have deliberately used the word "marvel" to shock the reader out of the complacency with which we often take the working of this mechanism for granted.

Hayek, Use of Knowledge in Society

Prices are signals, not just incentives!

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Again, signals, not just incentives! On what to produce, and what makes people happy or satisfied, the relevant information is held in billions of heads. How can we use this? No way society can know all this. So we do use coordination sometimes - firms have board rooms. But markets work not because each of these board rooms get things right, but because of minor local variation in response to prices all over the world by people who do not know the ultimate cause of the price change (and don't have to know). Hurwicz, another Nobel winner, proved that the price vector is the *minimal* amount of information that can coordinate economic activity.

Liberty: Improve welfare by letting us draw on local information to coordinate

(Though of course Hayek also saw substantive, deontological roles for the freedom to transact, as in [The Road to Serfdom](#) and [The Constitution of Liberty](#))

Note that this is not the hippie argument, but an argument that liberty is good for progress because of a constraint on how well a non-liberty economic system can utilize information. For the hippies, the liberty is itself the benefit, and perhaps for some types of innovative activity it helps speed them along.



Waldsterben



James C. Scott

German scientific forestry in late 1700s planted trees in rows, with high value crops, easy to harvest, maintained so all could be chopped in an area at once. Result: amazing for first rotation. But second crop was terrible. Why? Biomass on the forest floor, undergrowth, animal and insect life, etc. are all really important. The state made "legible" only a portion of what mattered. James C. Scott was an anarchist - his "anarchist squint" notes the role of progress outside what is made legible by the state.

To understand Scott,
give me your favorite
measure of progress
and tell me why you
think it is good

Everyone always lists something that can be easily measured, like GDP, HDI, maternal mortality, and so on. But of course there are many hard to measure ways to see progress. Scott's argument: the state can only "see" some things, bad enough, but then tries to shoehorn individual behavior into "legible" activity, harming liberty. Consider, e.g., Native rights in Canada. The state sets up schools and medical centers, but does so in the context of towns, in the context of reserves. This clearly limits some types of liberty that were previously available.



Paris before- and after-Haussmann. Why the change?

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Partly to reduce cholera and clean the city. But partly so the military can easily monitor the city! (Caveat: how important the troop movements were to Hausmann's plan is a giant debate among historians, so we won't take too strong a stand.)



Is any local lost here?

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Of course not - the straightened streets are not to help Uncle Jamal find Cousin Abdul's house. They can do so even on the winding lanes (in this case, of Sana'a). But on the other hand, maybe it is less healthy? Paris was disgusting pre-Haussmann!

Mein Herr looked so thoroughly bewildered that I thought it best to change the subject. "What a useful thing a pocket-map is!" I remarked.

"That's another thing we've learned from *your* Nation," said Mein Herr, "map-making. But we've carried it much further than *you*. What do you consider the *largest* map that would be really useful?"

"About six inches to the mile."

"Only *six inches!*" exclaimed Mein Herr. "We very soon got to six *yards* to the mile. Then we tried a *hundred* yards to the mile. And then came the grandest idea of all! We actually made a map of the country, on the scale of *a mile to the mile!*"

"Have you used it much?" I enquired.

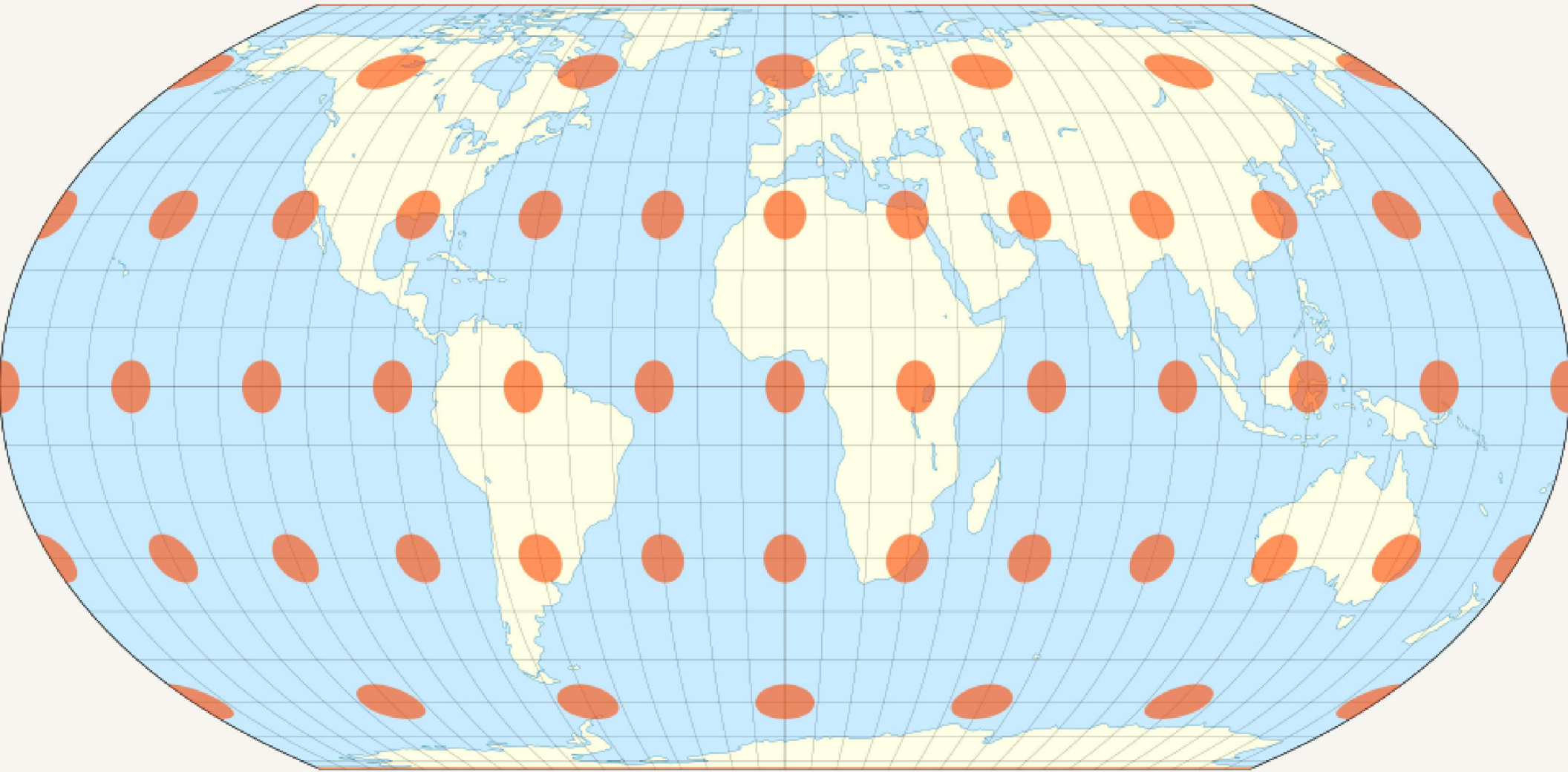
"It has never been spread out, yet," said Mein Herr: "the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well. Now let me ask you *another* question. What is the smallest *world* you would care to inhabit?"

From Lewis Carroll, which influenced Borges.

"The Map is Not the Territory"

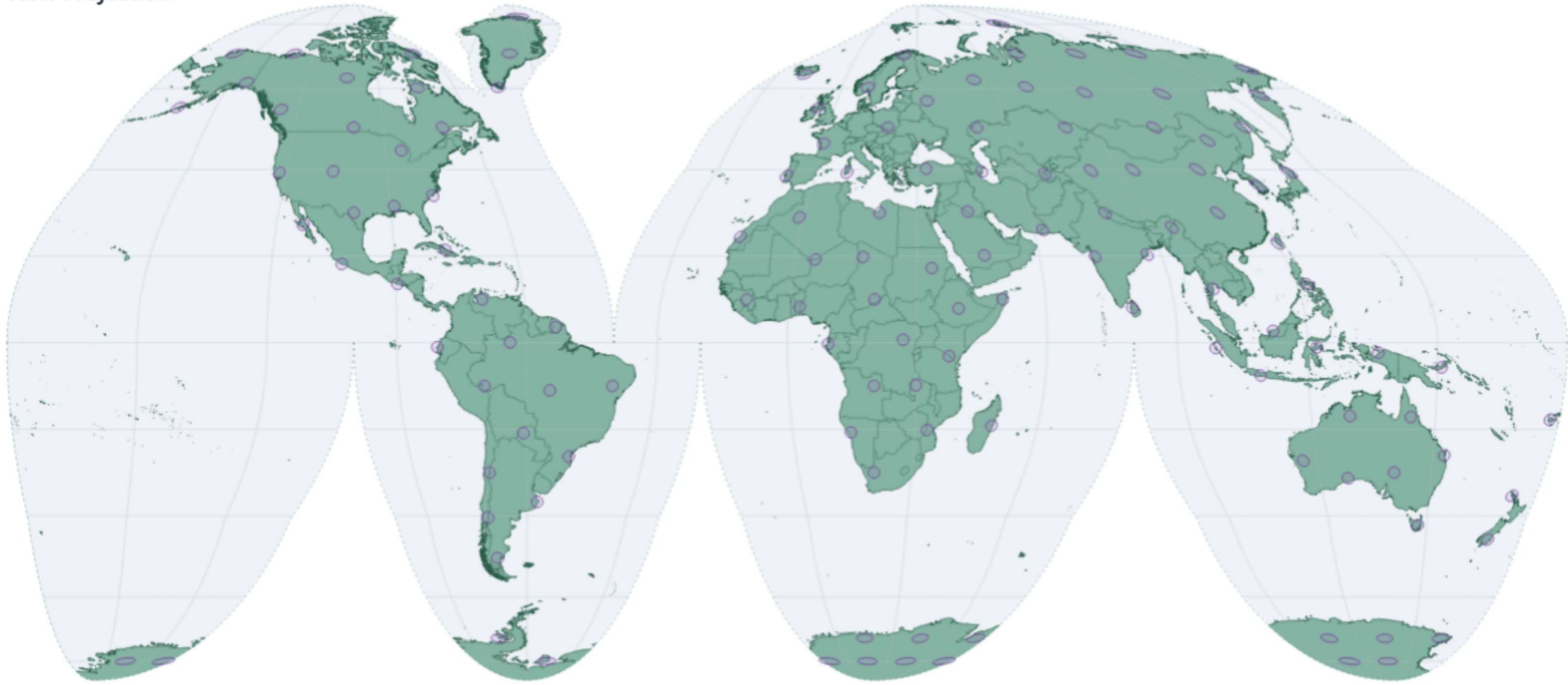
But the state must make things legible and in order to do so they restrict liberty.

"A particular tree reappears as an instance of a certain size class of tree; a particular plot of agricultural land reappears as coordinates in a cadastral map; a particular job reappears as an instance of a category of employment; a particular person reappears bearing a name according to the new formula": the state tries to map what it can, but can never understand all of Hayek's local knowledge in a way useful enough to make policy.



The UN's new "Equal Earth" projection - countries are the same relative size as they actually are, but their shapes are distorted. There is no way to put a sphere onto a flat plane without distorting one or the other.

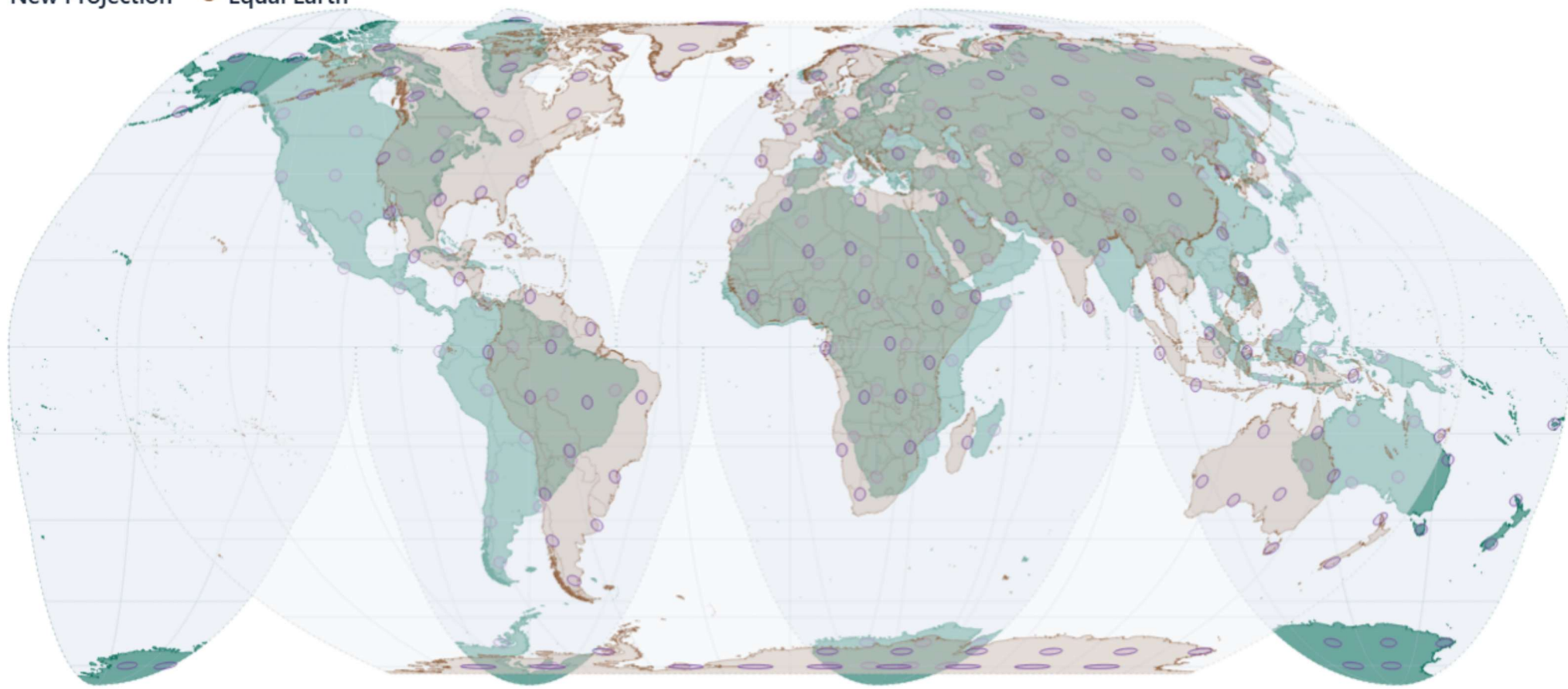
● New Projection



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This is a projection I invented. Which do you like more? Why? Does it depend on the use?

● New Projection ● Equal Earth



These are both equal area with no E-W tilt. My projection has less angular and shape distortion. Mercator has bad area but is better on shape. You can pick! The point is, they don't represent the same thing. And even more so - we labeled countries here. Why not biospheres? Why not migration routes? Why not things that are hard to measure? Scott will tell you why - state legibility.

Liberty: The ability to act outside control imposed by the "legible" state

But how important is this right? Even Scott admits that, say, halting cholera with the Haussmann scheme is beneficial, as are last names. So how much progress is halted by the need for the 'legible state': any examples?

Maybe important? E.g., you used to not need a passport. Much easier to coordinate with others to perform activity in that world! But perhaps that legibility can help - let's see what Sen and recent China would say...



Amartya Sen, Nobel Prize in Economics (1998)

A legend, raised in Dhaka, actually named by Rabindranath Tagore!



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What does liberty tell us about Kader Mia, who Sen saw stabbed (he later died) during Hindu/Muslim violence while working in a Hindu area when Sen was a child? Sen thinks, well, he only came to work because he had to feed his family. The lack of the "liberty to choose not to work that day" got him killed. So let's consider a broader conception of liberty than avoiding coercion from the state (in either the hippie, Hayekian or Scott senses).

For Sen, liberty is the removal of constraints on what humans can do.

This is both "freedom from" and "freedom to", but also freedom is the means and the ends of development

The means AND the ends. Freedom is valuable in and of itself (see following slide). AND freedom, defined in Sen's way, is the precursor to economic growth.

How are starving and fasting different? You eat the same amount and type of food either way...

Just counting the "end consumption bundle" clearly conflates these two things.

Consider, as argued by Fogel and Engerman, a situation where slaves and freed ex-slaves have identical levels of consumption. Is their development equal?

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Some controversy on this economic fact, but for the sake of argument assume it's true (that slaves in 1864 were fed enough to be strong at work, while in 1866 they were just poor, winding up with similar consumption bundles in both cases). Clearly, for Sen, ex-slaves in 1866 are in a much better position as far as "development". Why? They are more free to make their own choices.

Sen: freedom expands 'capabilities',
what humans can do

Safety, education, free speech, free
markets: all in this set

More liberty is good in and of itself
(progress!) and helps lead to
material progress

Capabilities are Sen's famous idea, developed by him and a few others (esp. Martha Nussbaum). Liberty expands when you are more able to achieve the human outcomes you want, via things like being safe from violence, being educated, being able to speak freely, work in the job you want, and so on. Sen argues that an expansion in capabilities is the outcome we ought care about, that it is valuable in and of itself, and that it helps lead to later economic growth.

Liberty: the expansion of capabilities

Put another way, without free speech, or education, you can't write a poem like Tagore (progress in and of itself - people value thinking freely and well!). But you also can't get material growth since free speech and education are inputs. How sure are we about the second?

A caveat is that it is not empirically true that you can't get economic growth without expanding the capabilities of your citizens. Sen's argument is partly one of valuing liberty for its own sake (willing to pay for the right to speak freely, so expansions in liberty by definition expand progress).



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Chongqing at night. The obvious issue with "is liberty necessary for progress" is, like, empirically, we have counterexamples. This is not the highest liberty place in the world. It's not, in many but not all ways, even high-liberty compared to Chongqing in 2005! But perhaps in the Sen sense, it does have growing liberty, since educational attainment is up, danwei-work arrangements are down, and so on.

Most would say that China is not a paragon of liberty in the above definitions, so how did this work?

An explanation from Ang:

Variation (find possible things to do)

Selection (keep doing the good ones)

Niche creation (adapt to others)

Do you need **liberty** for these?

Similar to Mokyr's argument about the Industrial Revolution, Ang argues you can get economic progress at least without liberty for all citizens. Instead you just need a society where a portion of folks are able to explore new ideas, good ideas are expanded, and an ecosystem of different good ideas can be kept. Chinese political promotions and decentralization are in this set, especially prior to Xi, where local leaders had a lot of autonomy and good outcomes along many of the measures Sen cares about help get you promoted (and get you rich!). So to me, Ang's argument is that "enough liberty is necessary, but maybe liberty beyond that is not necessary for at least some progress". See also Sen on China: investments in education let China grow after '79 in a way that India didn't...but India didn't have the Great Leap forward. Which matters more from a "freedom to" standpoint.

So, a survey. You are asked by a friend (or policymaker!) "how important is liberty to progress?"

Let's vote: 1-5, where 1 is "not at all" and 5 is "I imagine the most important factor we'll discuss this term". We'll keep track of these votes as we go!

Next Week

Great Man/Woman Theory

Might progress just be the result of specific individuals or small groups driving things forward, rather than "institutions" or abstract concepts? How would we know?