

Thought Experiments

I was just discussing with a friend a thought experiment I put together years ago during a debate on whether or not inequality is a prerequisite to economic exchange.

The claim I heard from some economists was that you can't have trade without inequality. While I believe inequality is inescapable, natural, not undesirable, and an inevitable outcome of freedom and prosperity, I don't think it is *logically* necessary in order for mutually beneficial trade to occur.

I emphasize logical, because thought experiments can be useful for finding errors in reasoning, but they are almost never useful for finding better explanations for the real world. I think I can construct a thought experiment that reveals that inequality is not logically necessary for win-win trade, but that doesn't do much to improve understanding of the world. In the real world, everyone is unequal, period. We differ in taste, preference, ability, biology, etc. Even small divergence leads to different subjective valuations which is the major driver in gains from trade.

The point of the claim the inequality is needed for trade is to reveal that, far from being a danger to be feared, it's a necessary part of human flourishing. That is true. Still, I don't think it is *logically* required for trade to occur.

Here's my thought experiment:

Two perfectly identical people live on an island. To survive, they need both fish and berries in their diet. Both have identical preferences for types of work, and identical abilities at fishing and berry picking.

In 1/2 a day, one can collect 100 berries, and in 1/2 a day one can catch 2 fish. So each individual splitting the day between berries and fish will end up with 100 berries and 2 fish, for a combined total of 200 berries and 4 fish.

But there are more abundant berries high up on the mountain. The catch is it takes an entire day to get there and back, leaving no time for fishing. And there are more fish deeper in the ocean, but it takes an entire day to paddle there and back leaving no time for berries.

The two identical people could specialize. One spends the whole day fishing in more abundant waters and catches 6 fish. One day one spends all day in more abundant berry bushes and picks 300 berries. They can trade and end up with 150 berries and 3 fish each. Both individuals have gained (50%!) from the trade due to the division of labor.

This does not require either individual to become more skilled than the other at one task. They could alternate each day who does which and still win. Division of labor and specialization coupled with trade is a better outcome than self-sufficiency even for two completely equal individuals because of the uneven nature of production itself. Each unit of time does not produce an identical outcome, and duration spent at a task may affect the marginal productivity, even without new skills gained or new capital employed.

See, trade is beneficial even in a world of perfect equality!

The problem is every assumption in the thought experiment is far fetched beyond belief. It can reveal an error in the logic of the original claim, but not its reality. Trade always arises between unequal partners because no two people are equal in the real world. Even identical twins stranded on an island aren't. Even engineered clones under my scenario wouldn't be, because in reality they would enhance their skill with more time invested in one task than another.

Thought experiments are not "gotcha" moments for real world claims. They may be mild rebukes of the certainty of the logical necessity, but they are so divorced from the real world, and so stripped down of variables that they allow the real world to contradict them all the time.

Just ask those economists who couldn't discover any logical way lighthouses could be funded without government so they declared it an impossible wish, even while the very lighthouses outside their window were currently funded without government. Thought experiments are fun and occasionally useful, but more often arrogant, blinding, and dangerous.