Where some see a dark forest, we see a new frontier

Attempting to

solve MEV

is similar to stating “we’re solving markets!” It presumes a final solution to a problem saying “this is where it ends,” rather than gesturing where it begins. It is the modern equivalent to laying out a Medieval

[Mappa Mundi

](https://en.wikipedia.org/wiki/Mappa_mundi)

as a complete, neat geographical representation of Earth.

When in history has there been a single, unified representation of the world? Not only is the planet a sphere, but countries regularly contest today’s borders and also the past. Depending on the eye of the beholder, and their local context and beliefs, the world’s map looks very different.

As we accelerate into the information age, pressure to compress many representations into one singularity will only increase. This is as true for talking in politics, as it is for trading in markets; both are information games with dizzying economies of scale and scope. As game players, the challenge is to be the fastest to the information frontier. As game designers, the challenge is not to define the frontier as a single, unified, monolithic frontier—vulnerable to one winner who takes all—but to instead collapse it to many frontiers that voluntarily compose into larger networks while retaining local sovereignty—in other words, decentralized power. One frontier is earth. Another is our solar system, and the galaxy, and so on. No position shares the same view on the stars, though all views together form a more complete representation.

The Past

In the past, we’ve framed the MEV problem as a choice between decentralization (utopia) and centralization (dystopia).

This framing misses the core issue at the center of the MEV industry. Monolithic game design versus pluralistic game design. Monolithic game design means creating systems with increasing returns to scale. These generalized systems aggregate data and activity and constrain it within a single game with a set of rules defined by a finite set of individuals.

Monolithic game design concentrates power. Monolithic game design is anti-decentralization. Monolithic game design leads to finite games with value redistribution problems instead of infinite games with value creation problems.

Redistribution is inherently zero-sum, rendering politics the only viable game to play. Such attempts view the world as static and refuse to see the inherently dynamic nature of the systems we inhabit.

When looking back in history, the worst solutions are those invoking egalitarianism, because of course egalitarianism is a revolt against failed elitism, yet covert elitism in itself. It is a snake eating its own tail. We believe there is a better way to build the future and it lies deep in the reframing of the issue.

Between the monolithic utopia and dystopia lies a third option;

the creation of new games that lead to better problems.

Better problems push the boundaries of knowledge, they require us to look further beyond, change our frame of reference, and have the courage to explore the frontier.

MEV must be reframed from a wealth redistribution problem to a wealth creation problem if we hope crypto to one day reach the promised land.

We should not be asking ourselves “how do we create a system that minimizes MEV” or “who should get the MEV”. We should be asking “how can MEV make crypto more useful” or “how can MEV be used to create better mechanisms”.

The New Frontier

If a game has sufficient or potentially infinite depth - people will keep on playing. We are problem-solving machines that continue playing until the problems lead to satisfactory new problems - if they do not, we will turn to something else.

In 2022, I introduced the concept of the

MEV Supply Chain

to illustrate where the MEV industry was going and the challenges that lay in front of us.

The supply chain describes the MEV landscape as being composed of actors with individual objective functions (users, wallets, searchers, builders, validators) interfacing with each other through common interfaces (intents, transactions, bundles, and blocks) in order to come to consensus on the future state of the blockchain.

The insight that sits behind this simple abstraction is that all consensus systems are made of two things: message interfaces and constrained solutions. It's all messages and solutions.

By fragmenting the monolithic MEV Supply Chain, we can introduce a pluralistic Transaction Supply Network composed of local games which optimize for total wealth creation.

The conversation around decentralization often fails to recognize that the concept of global consensus is inherently centralized. Finding consensus requires negotiation over contention. It is a political act by nature. Political actors leverage information access, either through exclusivity (elitism), or speed (latency) to achieve their agenda.

Achieving decentralization likely requires reducing the surface area of global contention, not increasing it. Having local contention resolved through local consensus instead of global consensus.

Frontier Research's singular focus is on developing this network of diverse games. We seek to create a playground where many parallel systems coexist and compete on the value they create. Only then will crypto achieve greater utility for the world.

May the games that create better problems win.