

I'm helping to design a series of experiments on the properties of blockchain objects, focusing on how and when they diverge from the properties of objects in the physical world. The first step is establishing a baseline for what the on-chain objects "do" at the appropriate level of abstraction, drawing inspiration from classic experiments in developmental psychology.

Here's what we have so far:

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1100×850 115 KB

](<https://ethresear.ch/uploads/default/original/2X/c/c5927bf4b63acba9bf24951f127905bfee467c98.jpeg>)

1. The Bitcoin model in which objects are broken up in utxos
2. The NFT model in which an object is continuous but the ownership is transferred
3. The non-blockchain OSI model in which objects (packets in this case) are exchangeable, sometimes lost, and arbitrarily routed.
4. The sidechain (NFT) case in which an object disappears and reappears arbitrarily

I would appreciate any

advice or thoughts on this— I don't think that these are perfectly correct (particularly 4 and, perhaps, 2). And just to be clear, the point is to establish how and why the "digital scarcity" of a blockchain object might make it psychologically unique, given other properties. Then we will study interaction effects, permutations, etc.

I'll post the results on here if there's interest.