Ethereology: The Science of Ethereum

Micah Dameron

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Abstract

Ethereum is poised to change the way the world operates in many fundamental ways. It increases certainty, both for individuals and society, by several orders of magnitude. It gives us a single source of truth to rely on that isn't nearly as subject to interpretation as the institutions and models we're used to.

1 Facilitating Interaction

The key word is enablement. Ethereum doesn't necessarily provide humanity with a new way of operating. Rather it forcefully interjects a layer of truth between interactions we already have in our old ways of operating. The goal is not a trustless society, but rather one where trust isn't wasted on institutions that control, temporarily or permanently, offerings to certain life services.

This change will be so in-depth, and so profound, that it will fundamentally and permanently change the primary operation of institutions and individuals across society. So far-reaching and comprehensive will be these changes that the world as we know it today will barely resemble itself in 100 years. We are on the brink of societal and cultural change that is going to make the Industrial Revolution and the Information Revolution look like peanuts.

Until now humanity has made its living through conflict. Conflicts on the inside, and conflicts on the outside. Conflicts will still exist, of course. But until now our conflicts have held us back significantly, because of their power to destroy. Besides the natural imperative to reproduce and propagate oneself and one's life, there are no forces fundamentally driving the survival of the human race as a whole (let alone that of individual humans.)

Sure we have our teamwork and our ability to communicate, but that, even under the best of circumstances, these can be so flimsy as to repeatedly fail at the precise moments when the situation calls for them. This is why leadership is always a valued asset. Anyone with the tenacity to bring together the tenuous connections that bind most people into an organized whole seems to be intrinsically worth following.

None of these positive personality attributes are minimized or neglected by the operation of inherently trustworthy protocols like Ethereum. On the contrary, the actions of the trustworthy protocols allow us to automate commercial and public transactions so that information which is normally garnered trust needs can remain out of commercial transactions where it belongs.

Trust is a privilege to receive, and one's own right to give or take. Trust fosters close human relationships, and most of the things that make life worth living. Trust is an inherent prop-

erty in all positive human relationships. Trust is abused when one party gathers information from another and doesn't use that information in their best interests. This is what companies do today.

This is not to say that companies, or corporations are evil per se. They may or may not be. It depends on how they abuse the trust, and use the trust that is given to them. If we step back a few centuries to older societal structures, you'll find that there were kings and nobles, as well as other institutions, that abused people's trust. A thousand years before that, conquesting and "taking" cities was considered a victory. In reality it was an abuse of trust. A group of people have always established some sort of society, and for some reason or another, another group of people thinks they can run it better, or deserve it better, and comes and takes it over.

Those people running their everyday lives, more-or-less trusting each other to not kill each other, and some other group comes and kills them. What a disaster. What an abuse of trust. What a horrible, disgusting legacy the human race has left behind in certain epochs. There's no point in accusing any one nationality, or one people group, or even one culture. We're all guilty of it to greater or lesser degrees, and our ancestors were too. This is just the way human society has worked until now. But things are about to change–for good.

2 Consensus-Based Epistemology

For the first time in history, a chain of agreement that goes from zero to hero, and stays at hero, is possible. Imagine a trust matrix. Trust decays over time, and with increasing quantity, and decreasing quality, of human relationships. The more human intermediaries something goes through, the more untrustworthy it potentially becomes.[1]

2.1 Trust Decay

3 Practically Infallible History

This does not mean that it's entirely infallible. Practically infallible history is simply a historical record that's so reliable, comparatively, to anything we've ever known before, that it can basically be considered an infallible record except in a few outlying cases, but infallible according to the group that maintains the consensus mechanism *infinitely*.

4 New Fields of Philosophy

5 The First Truly Quantitative Economics

5.1 Crypto Economics

5.2 A philosophically guided specification, practiced and implemented in smart contract logic.

A hundred individuals or groups can put their opinions in here on how Ethereum should be, and it will generate a new specification that adheres to all the Ethereum core principles.

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[1] plot showing trustworthiness over time of a historical event or action | plot showing trustworthiness over time of a historical event or action on the blockchain | conclusion → exponential returns on every zone of human action that depends upon any specific knowledge of any kind (we are going to take off in advancement)