

Nature 2.0: The Cradle of Civilization Gets an Upgrade

Trent McConaghy
@trentmc0
Ocean | BigchainDB

On the IoT,
nobody knows
you're a toaster



**But what is this?
Robot? Plant?**





**What do you call
a forest that
owns itself?**

A photograph of three wind turbines against a dramatic sky at sunset or sunrise. The sky is filled with horizontal bands of orange, red, and blue. The turbines are dark silhouettes against the bright sky. The bottom of the image is obscured by a thick layer of white clouds or fog.

**Can a wind farm own itself?
How?**

**Can that help redefine our
relationship with energy?**

The image is a vertical split. The left half shows a close-up of parched, cracked earth in shades of grey and brown, with deep, irregular fissures. The right half shows a dense field of tulips in various colors including pink, red, yellow, and purple, with green leaves. A semi-transparent dark grey rectangle is positioned at the bottom, spanning both halves, containing white text.

**How we can transition from
scarcity to abundance?**



Nature 1.0



A close-up photograph of a terrarium. In the center, a plant with several long, lanceolate, green leaves grows out of a thick bed of green moss. The moss is densely packed with small, reddish-brown granules. To the right of the central plant, there is a smaller, more delicate plant with feathery, light green leaves. The background is dark and out of focus, showing hints of other plants and bright light filtering through, creating a bokeh effect. A semi-transparent black rectangle is overlaid in the bottom left corner, containing the word "Nutrients" in white text.

Nutrients

Rain





Sun

Symbiosis with animals



No identity

No ownership

No scarcity

No money



No identity

No ownership

No scarcity

No money

It just *is*.

**Self-sustaining
Anti-fragile**





**Ever-higher levels
of integration.**

**From beasts →
ecosystems**

**Each ecosystem
*just is.***

**Self-sustaining
Anti-fragile**

**Mother Earth =
our planet's
ecosystem.**

**Nature is the
cradle of
civilization.**





**Yet often we fall
short.**

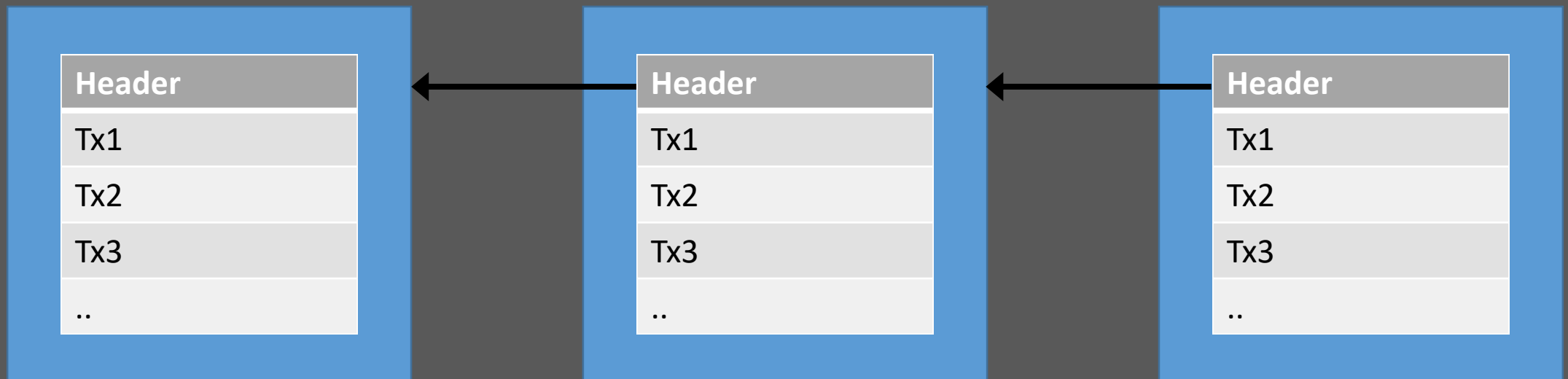
**Does tech have
anything to say?**



Blockchain (and ways to frame it)

“A Chain of Blocks”

- Block = list of transactions, where tx = “create asset” or “transfer asset” action, digitally signed
- Chain = linked list, where links are hashes



“Database with blue ocean benefits”

- Decentralized
- Immutable
- Assets



INSIDE: A 12-PAGE SPECIAL REPORT ON COLOMBIA

The
Economist

OCTOBER 31ST-NOVEMBER 6TH 2013

Economist.com

007 and the spectre of Britain's past
Turkey votes to the sound of bombs
Those ever-creative accountants
America takes the fight to IS
Coywolves: the new superpredator

The trust machine

How the technology behind bitcoin
could change the world



“Trust machine”
because it minimizes
trust needed to
operate.

It's more *socially*
scalable. (Ref Szabos)

“Emerging Decentralized Stack”

STORAGE	PROCESSING	COMMUNICATIONS
FILE SYSTEM IPFS/FileCoin, Swarm	BIZ LOGIC Ethereum, Dfinity	DATA TCP/IP
DATABASE BigchainDB, OrbitDB	HIGH PERF. COMPUTE TrueBit, Golem, iExec	VALUE Interledger, Cosmos
STORE OF VALUE Bitcoin, zcash		STATE PolkaDot

“Incentive Machine”

**Get people to do stuff
By rewarding with tokens**

Bitcoin incentivizes security = hash rate = electricity

Result: > USA by mid 2019!

“Public Utility Network” Self-sustaining, anti-fragile



“DAO: Decentralized Autonomous Organization”

A computational process that

- runs autonomously,
- on decentralized infrastructure,
- with resource manipulation.

It's code that can *own* stuff!

Aka “good computer virus”

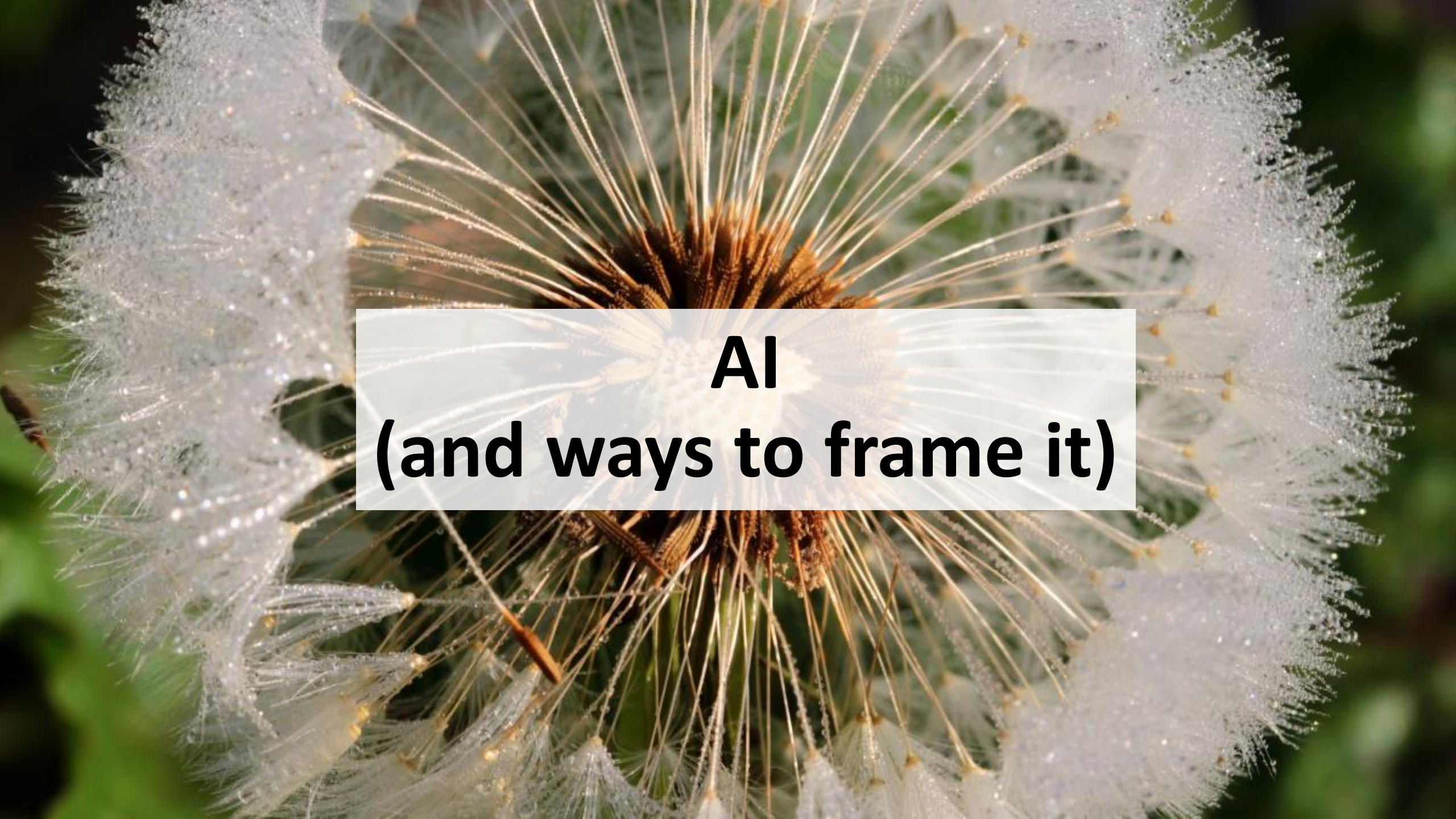
A background image showing a microscopic view of cells, likely from a petri dish, with a teal background. The cells are visible as circular structures with internal details, some appearing as bright yellow or orange spots. The overall image has a scientific, biological feel.

“Life Form”

“Bitcoin is the first example of a new form of life.”

“It lives and breathes on the internet. It lives because it can pay people to keep it alive. It lives because it performs a useful service that people will pay it to perform. ... It can't be stopped. It can't even be interrupted. If nuclear war destroyed half of our planet, it would continue to live, uncorrupted.”

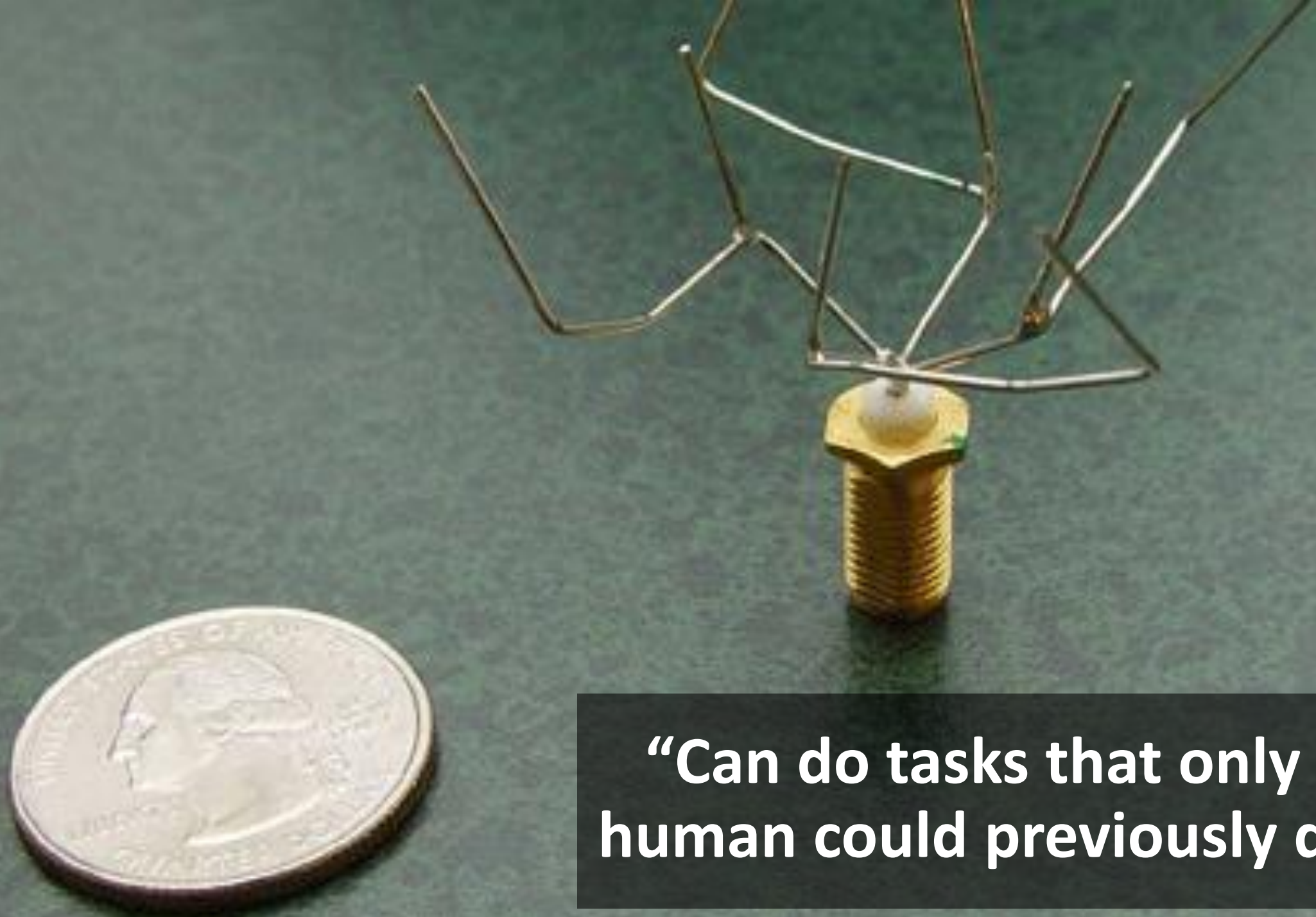
-Ralph Merkle

A close-up photograph of a dandelion seed head, showing the intricate structure of the seeds and their feathery pappus. The image is slightly out of focus, with a soft bokeh effect in the background. A semi-transparent white rectangular box is centered over the middle of the image, containing the text "AI (and ways to frame it)" in a bold, black, sans-serif font.

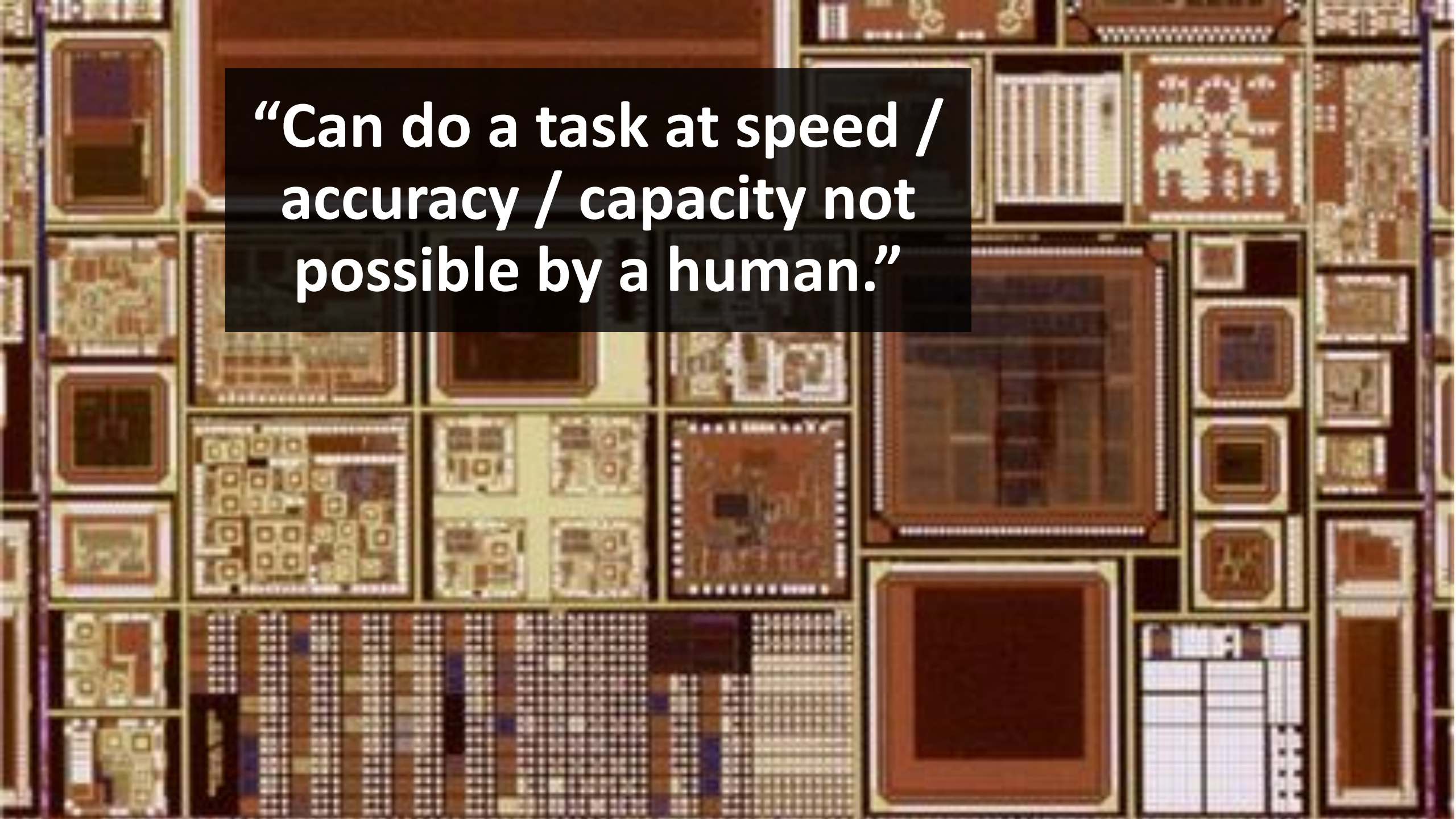
AI (and ways to frame it)

**“Replicates human cognitive
behavior” [Turing test]**





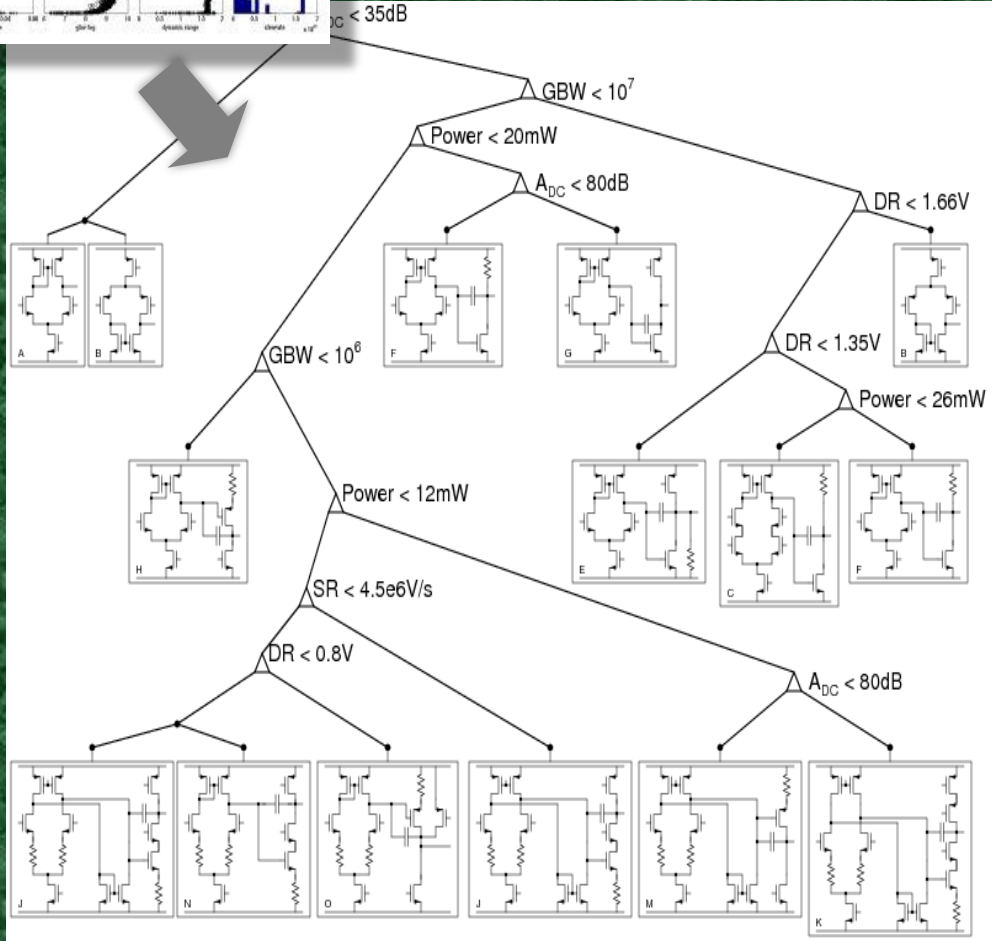
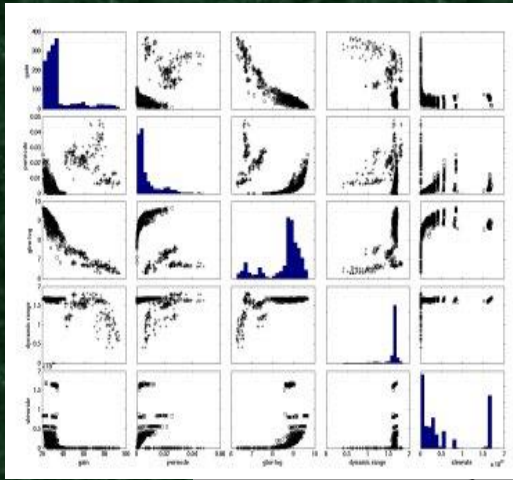
“Can do tasks that only a human could previously do”

An aerial photograph of a city grid, likely New York City, showing a dense pattern of streets and buildings. The image is slightly blurred, giving it a vintage or artistic feel. A large, dark, semi-transparent rectangular box is centered over the image, containing white text. The text is a quote about the capabilities of a task compared to human capacity.

**“Can do a task at speed /
accuracy / capacity not
possible by a human.”**

“A set of tools”

- **Classification**
- **Regression**
- **Knowledge extraction**
- **Optimization**
- **Creative / Structural design**
- **...**





“Embodied agents” (AGI)



AI * Blockchain: AI DAOs

The background of the entire slide is a close-up photograph of a honeycomb. The hexagonal cells of the honeycomb are filled with a dark, glossy substance, likely honey. Numerous bees are visible, some resting on the cells and others in motion. The lighting is warm, highlighting the golden-brown colors of the bees and the honey.

Definition of AI DAO

“An AI running on decentralized processing substrate”

<or>

“A DAO running with AI algorithms”



The ArtDAO

1. Run AI art engine to generate new image, using GP or deep learning
2. Sell image on a marketplace, for crypto.
3. Repeat!



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 3. Repeat!
- <Over time, it accumulates wealth, for *itself*.>

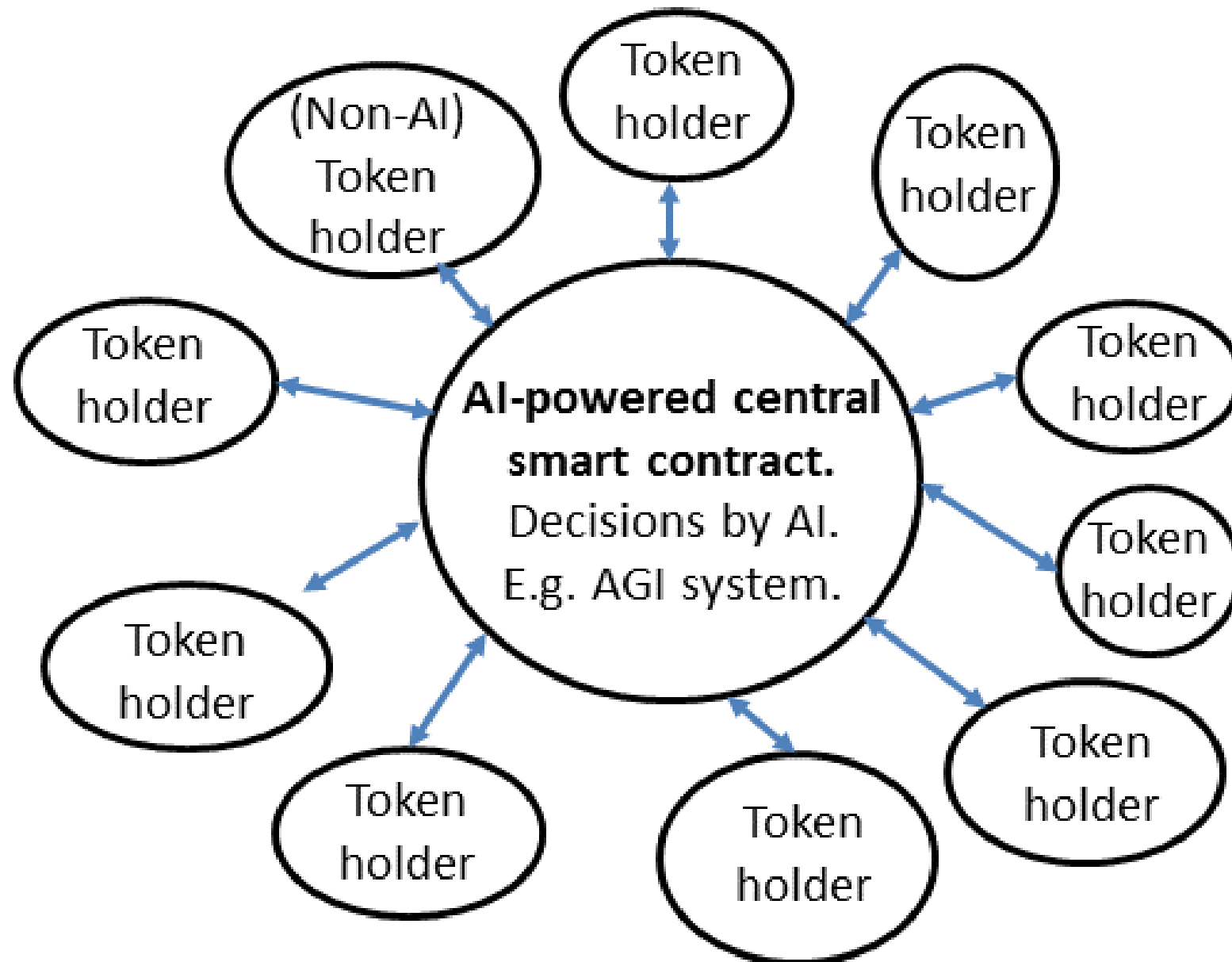
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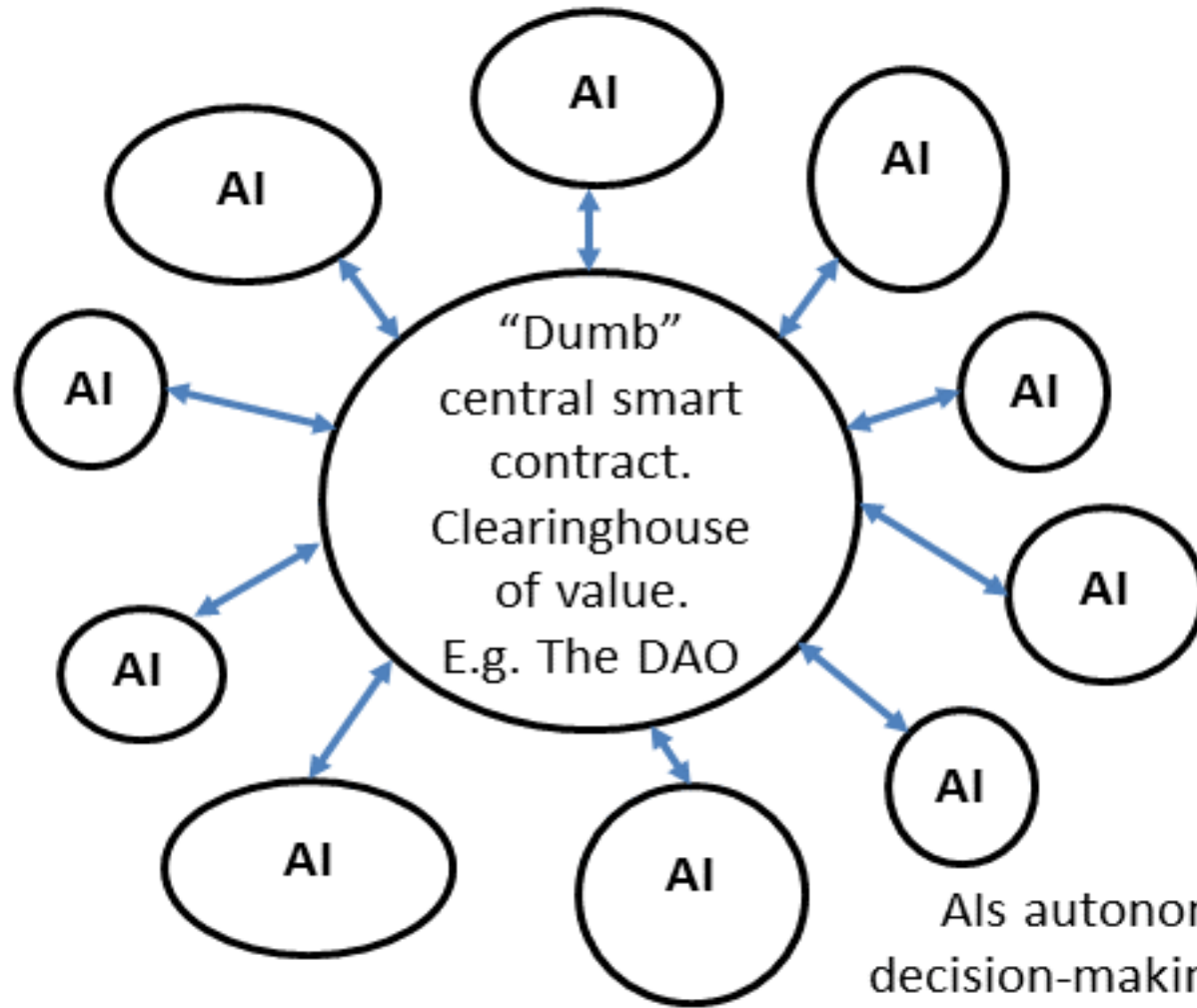
<Over time, it accumulates wealth, for *itself*.>

<It could even self-adapt: genetic programming>

AI DAO Arch 1: AI at the Center



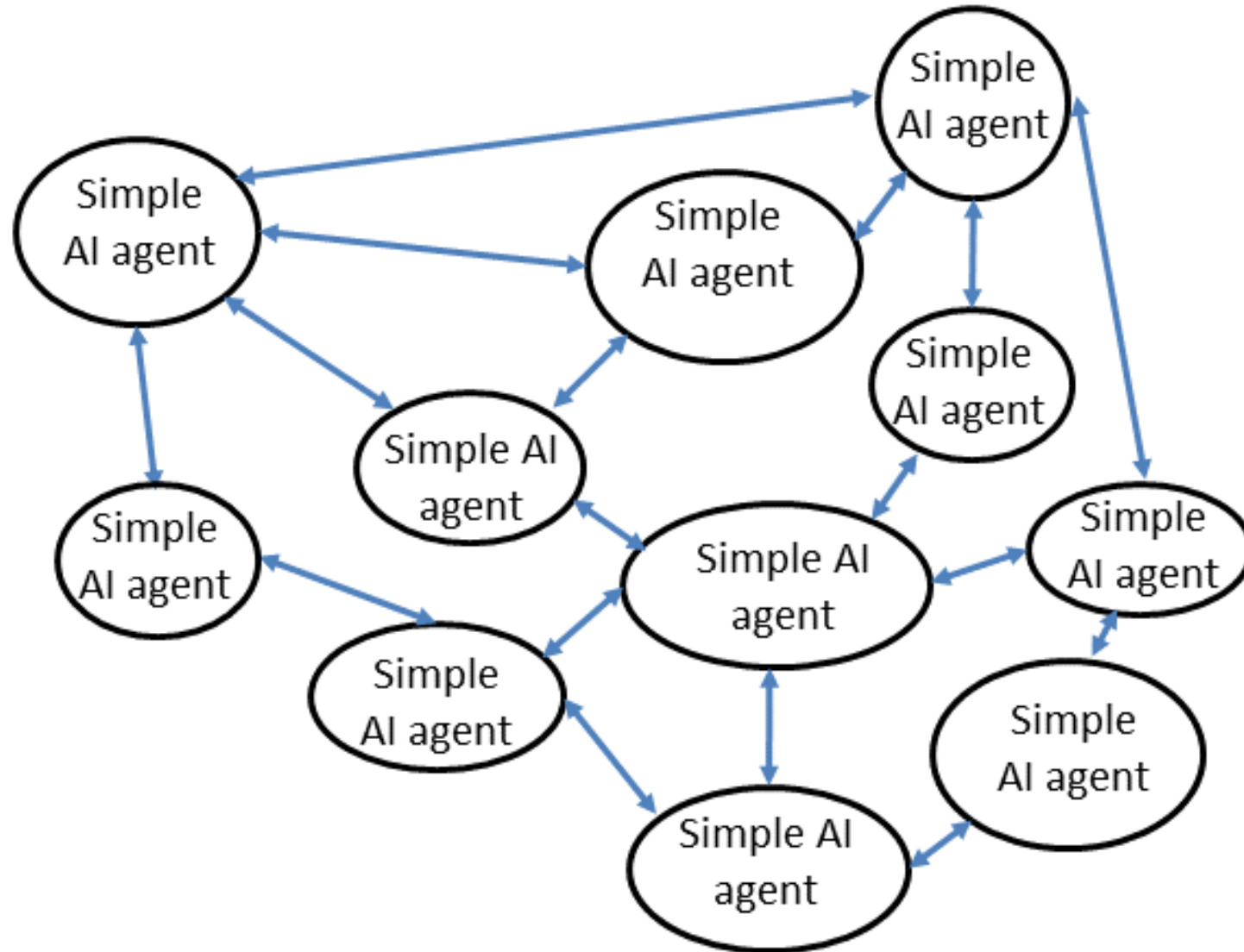
AI DAO Arch 2: AI at the *Edges*



Als autonomously do decision-making. AI may be narrow (e.g. deep nets) or more general (e.g. AGI)

AI DAO Arch 3: Swarm Intelligence

Many dumb agents with emergent AI complexity



Angles to Making AI DAOs

- DAO → AI DAO. Start with DAO, add AI.
- AI → AI DAO. Start with AI, add DAO.
- SaaS → DAO → AI DAO. SaaS to DAO, add AI
- Physical service → AI DAO

Giving Personhood to an AI DAO With Today's Laws (!)



Trent McConaghy
@trentmc0



How to give an AI rights

1. Given: corps have rights
2. Start a corp
3. Automate corp into an AI DAO
4. Done! It's an AI, it has rights

RETWEETS
22

LIKES
30



11:40 PM - 4 Jul 2016



5



22



30





Nature

Sustainability

AI

IoT

Blockchain

AI DAOs

How to unify?

Nature 2.0
=AI DAOs 

**Self-driving,
self-owning cars**



Self-driving, self-owning trucks



An aerial photograph of a winding asphalt road on a steep, grassy mountain slope. The road features multiple sharp turns and is bordered by a concrete guardrail. The surrounding terrain is covered in green and yellowish vegetation, with some rocky patches. The road curves from the top left towards the bottom right, with several smaller loops and turns visible further up the slope.


**Self-owning
roads**

A photograph of three wind turbines in a field at sunset. The sky is a mix of deep blue and orange, with a layer of white clouds at the bottom. The turbines are dark silhouettes against the bright sky. A dark rectangular box with white text is positioned in the upper right area of the image.

Self-owning wind farms

Self-owning grid





**Nature → Machines:
Self-owning forest “Terra0”**

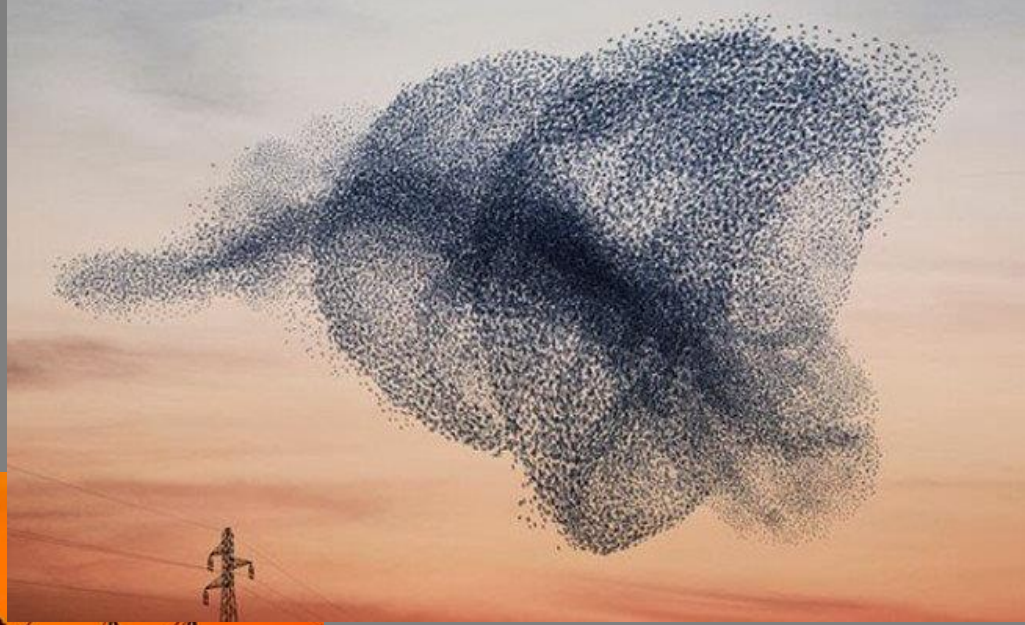
**Machines → Nature:
“Plantoid”**



Ever-higher levels of integration

From beasts → ecosystems

Connected via IoT / M2M



A white Audi R8 is shown from a rear three-quarter view, driving on a two-lane asphalt road that curves to the left. The road is flanked by green grass and trees. In the distance, another car is visible on the road. The sky is blue with scattered white clouds. The car's license plate is 'RT BB 221' and it has a small 'www.AUDI-CENTRUM-NEUTLINGER.de' sticker on the bottom of the license plate.

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No money

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Self-sustaining
Anti-fragile

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Anti-fragile**




**This is
Nature 2.0.**

**Bio + machines
in symbiosis,
simply providing.
Towards abundance.**

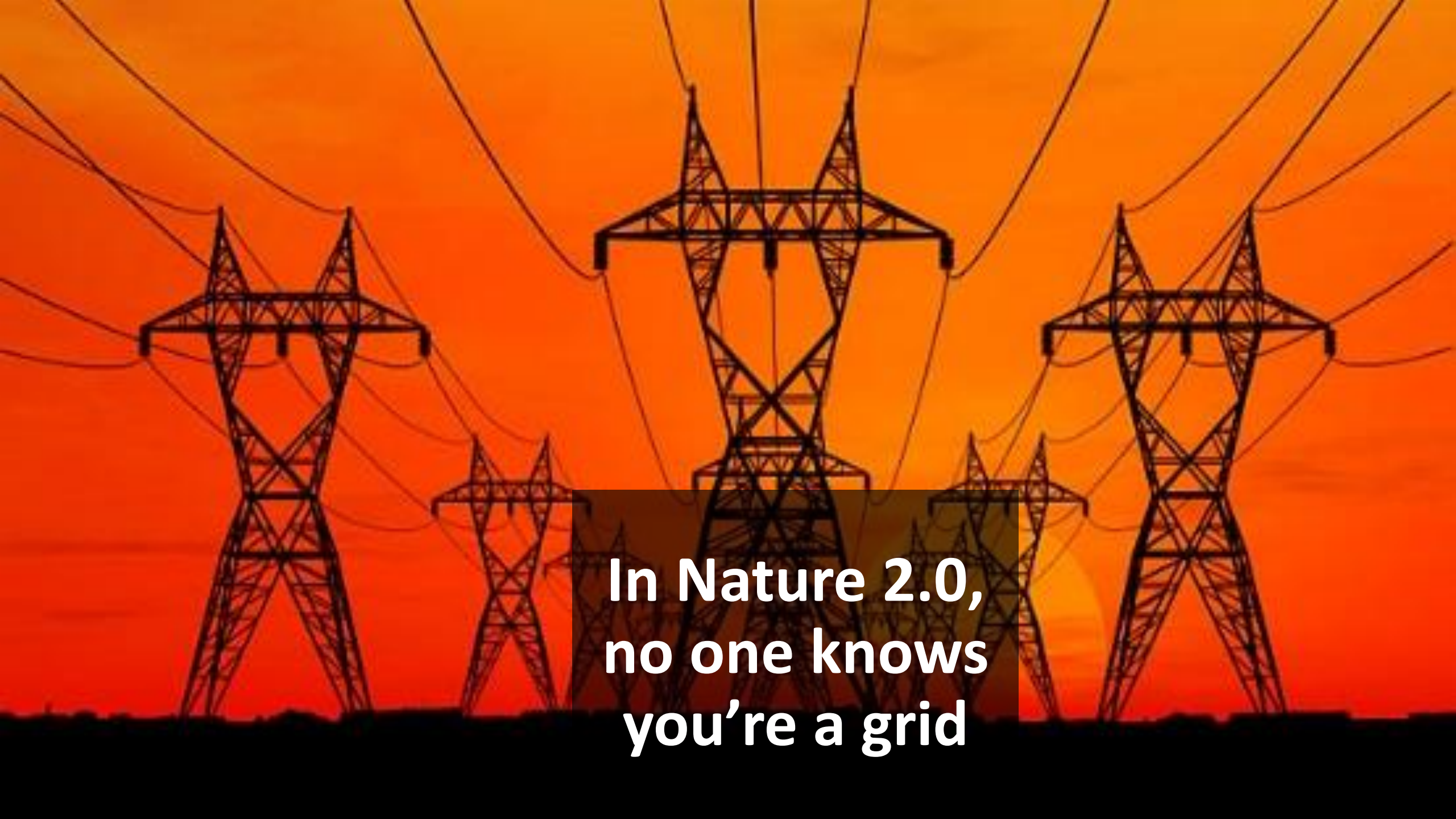
**An upgrade to the
cradle of civilization.**



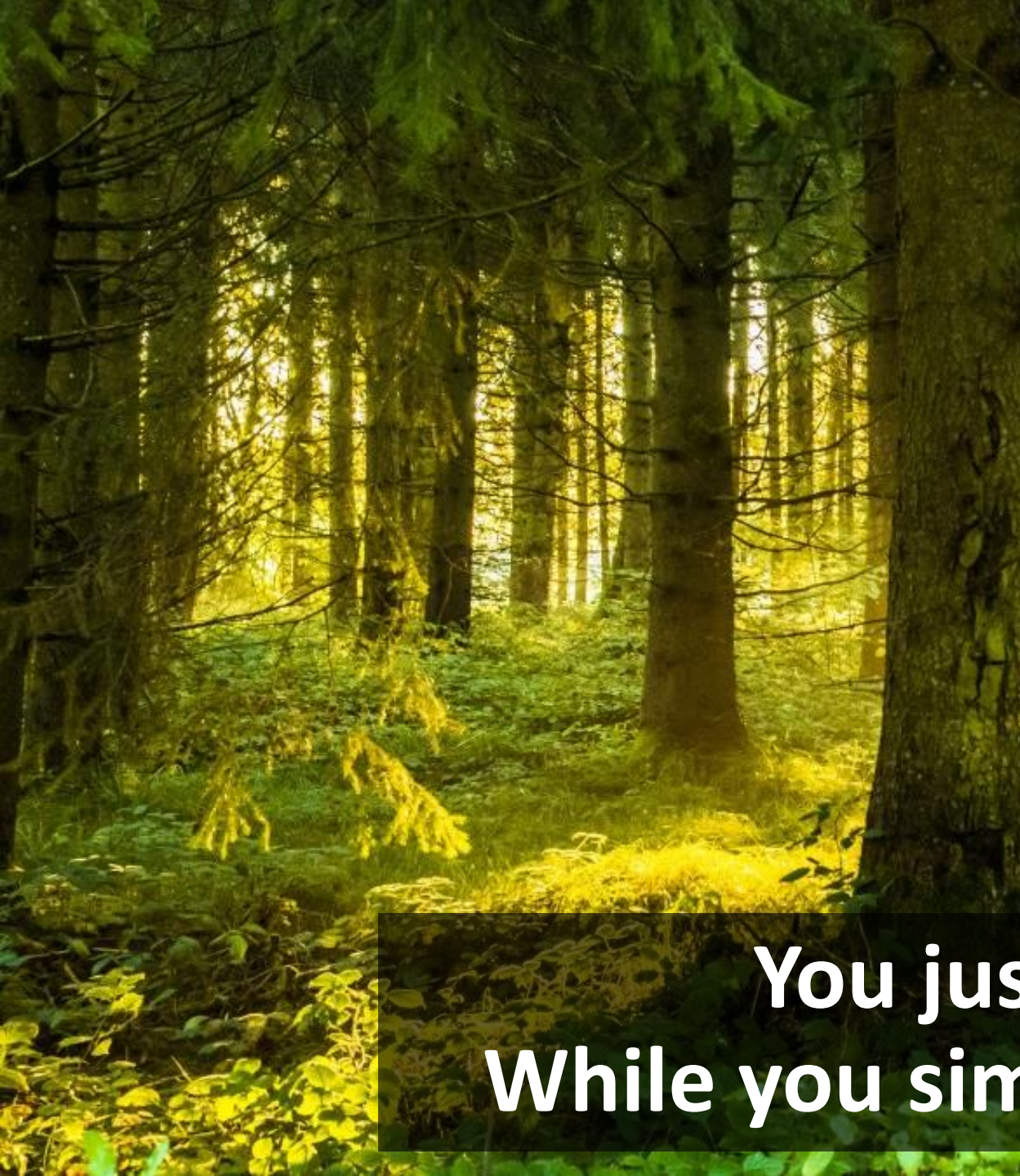
Conclusion

A photograph of a dense forest. Sunlight filters through the tall, thin trees, creating a warm, golden glow. The forest floor is covered in green undergrowth and fallen branches. The text "In Nature 2.0, no one knows you're a forest" is overlaid in white on a dark rectangular background in the lower center.


**In Nature 2.0,
no one knows
you're a forest**

The image features a series of high-voltage power line towers, also known as pylons, silhouetted against a vibrant orange and red sky. The towers are arranged in a perspective that leads the eye from the foreground towards the horizon. The sky is a gradient of warm colors, suggesting a sunset or sunrise. The overall mood is industrial yet serene.

**In Nature 2.0,
no one knows
you're a grid**



You just *are*.
While you simply *provide*.

A person with long, dark hair is seen from behind, looking out over a landscape at sunset. The sun is low on the horizon, creating a warm, golden glow that fills the sky and reflects off the person's hair. The background shows a field and some distant trees under the soft light of the setting sun.

Nature is the cradle of civilization.
Nature 1.0 is seeds & soil.
Nature 2.0 adds silicon & steel. AI, blockchain, IoT
towards abundance.

Trent McConaghy

@trentmc0

h/t Jan-Peter Doornik