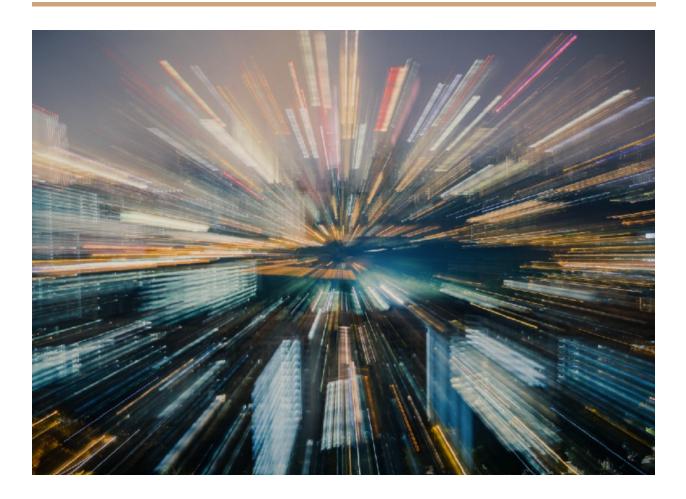
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EMERGENT UNIVERSAL ECONOMIC MODELS

The Future of human dynamics



Introduction

Human civilization is very clearly reaching a point of critical mass when it comes to technology and how it transforms culture and the economics that is therefore driven forward. The conversation around the practical aspects of generative artificial intelligence (Chat GPT, Q Star, Bard, Claude, Genesis, Firefly, and others) and their ethical implications is massively trending. The political conversations around it are slow

to catch up but will soon take over once the general public feels their impact, which is likely to happen in the next two to three years.

What is not being spoken of is the need for new economic models that can integrate the enormous and continuous shifts in trade that will occur, as we continue to implement more efficient manufacturing and logistics. Things like 3D printing in hub regions, the automation of transportation, augmented and virtual reality, and new creativity-based industries will all disrupt capital markets as well as social systems due to what we could call "meta-scarcity", which is to say, "the scarcity of scarcity"; In effect, we will lack the scarcity to maintain predictive power over the future. This is because when technology is capable of optimizing for creativity, people come up with new demands, and when new demands are supplied as quickly as they arise, no one is capable of knowing what kind of trends the market will take, yet it is necessary to try as public discussion could beneficially shape the economic landscape.

What are the effects of abundance historically speaking? When resources are abundant, new industries emerge and societal norms are impacted. Extrapolating from where we are now to what has been termed "the technological singularity", it is clear that beyond such a point we will have no ability to predict what kind of change in culture, politics, and economics will occur- unless we choose to create new forms of political structures and economic models that weren't possible to us before but are rendered possible due to these technologies.

This is why I propose that we will see an emergence of brand-new economic models that perhaps radically divorce from the ones we have today (capitalism & socialism, mainly). There is no reason why experimentation will not be able to take place, giving us many more to try- the precursor to this is crypto-currencies. These new models could, in theory, act as an ecosystem wherein people can choose to participate in different types of markets at will, seamlessly producing and consuming between them. This means that the value of any given economic model might be judged based on pure output or high quality (resulting in demand). This basically means the value is set by vote of consumption. Given enough demand accrued from a given model then, many of them may become universal economic models used by the global population. By universal here, I mean that most or all humans naturally participate in the exchange of products and services within these new forms of economy. A good example here would be memes (although not directly monetized, they are still universal).

Human behaviour and new economies

There is already a lot of speculation going on here, and the abstract nature of the technological impact on culture demands that we stay general, but it could be worth exploring possible dynamics further. For example, what kind of "outputs" are we talking about? I mean what kind of new products and services will be possible to produce? The field is wide open to imagine the possibilities based on the technologies we are now building. Another question from there is what will "high quality" mean? This is next to impossible to answer. My reason for believing this is because the super-abundance of the basic means of survival will force markets to invent new forms of scarcity to keep the flow of networks and communities alive. We could call these "scarcity economies".

Here we get more philosophical; People function as nodes on a network, deriving purpose, morality, and pleasure from the production and exchange of labour and resources, its organization, value judgment, and its consumption. If these things go away, individuals become extremely isolated (as we are already seeing now) and so they begin to either self-destruct or create new forms of communities that come with their own economics (Instagram as a community running on the economic model of "status hierarchy" for example). If one accepts the definition that "economy" is simply a term for the inherent dynamics of human relationships, then we can say that this will never go away as long as humans don't radically evolve into something else: They will continue to create new ways to connect with each other.

Going even further down this tangent, we would have to ask: What kind of scarcities can we find to create an economy? From what we see online now, people use **status**, **entertainment**, and **attention**. *Status* here means achieving a high degree of skill in something that is not a necessity, such as video games. People appreciate watching others play a game they are proficient at, to the degree they will pay to watch them on a platform like Twitch for example. They are willing to pay for the privilege of watching someone who can do something others can not. This can also be mixed with entertainment as well, creating entire comedy shows between players in an open-world game such as Grand Theft Auto for example. As for the "attention economy", I mean people have begun paying others to simply watch them live their lives on social media platforms like plenty of fish; This means people find value in being able to watch someone in their bedroom doing nothing- They pay to *give their own attention* to someone who is monetizing their privacy, allowing thousands to be the fly on the wall.

This says a lot about how flexible the human's ability to find value in social relationships really is.

This is all just online, however- We should really think about how many economic models will emerge in base-reality as well. Already in places like Japan and several countries including the U.S, there are "cuddle service companies" offering human, physical contact to those who need it for one reason or another. There is another independent contractor in Japan known to be a "rentable person" who simply accompanies lonely people on walks, for shopping, or even funerals, and charges extra for conversation. These things may seem bizarre to us now, but could very quickly become all too commonplace if technology continues to isolate humans from natural connection. However, it could be the opposite as well, being as immersive and ubiquitous tech could render itself seamless, allowing us to connect even more than what has been possible in the past. One thing is clear though, the trends we see all point to the need to find new forms of scarcity to preserve value and its corresponding meaning.

If I were to venture into guessing what the next few "scarcity economies" would be, I'd have to say **identity**, **purpose**, and **novelty**. These are in high demand and in low supply according to the top of Maslow's hierarchy of needs; Self-actualization, in other words, is taking on new economic possibilities due to our basic needs being met. Ignoring the chaos of current trends causing strange poverty spikes across varying markets (the housing crisis in Canada for example), we must bound forward and look at when abundance will stabilize the markets to the point of stagnation. People who have more time on their hands are already paying for self-development in a myriad of different ways, even at the cost of lost opportunities to make more money. This means they are valuing their mental and spiritual health more and de-prioritizing their financial abundance. Given this continues (which is likely if politics solves the universal basic income problem), then people will create entirely new economies or industries out of "self-actualization". Whatever helps one achieve their own identity or helps them identify with someone else will take on more value. Anything that gives a person daily purpose or helps them integrate a universal purpose will become very popular. With an arbitrary amount of free time, people will increasingly seek novel experiences as well. This means we will see a major rise in cults, which could potentially be very dangerous, or prove to be a new renaissance.

The integration of multiple universal economies

The next question is naturally: how will we integrate such economies? Will it be possible to place a value on all such types of products and services across various economies and have them represented by one currency or will there be multiple currencies for each economy respectively? If the latter, how will we determine the exchange rate value? Is it possible for it to rely on purely subjective judgment? If one consumer wishes to buy 10 of currency X by exchanging it for 20 of currency Y because they personally value the goods and services this way, there will be a need for a framework that allows people who agree on this valuation to find each other and check the value of the currency exchanged against a database tracking the scarcity of the goods available in that economy. This becomes complicated because several producers could suddenly choose to limit their products/services to artificially increase the price when another economy has crashed- Would this need to be regulated? And all this relies on the assumption that demand is always going to be proportional to scarcity, when scarcity itself is also based on the value given by individuals in a world where their basic needs are abundantly met. This means people will constantly be trying to increase demand to go along with their scarcity, which is always the case anyway.

What could make one or all such types of economies universal could purely be their very ability to generate scarcity though. The simple rule here would be: the harder it is to obtain a certain experience, the more value will be placed on it by vote of consumption. This could be what regulates the exchange rates, in so far as the currency from one economy is comparatively worth to another. An "identity economy" for example, has intrinsic scarcity therefore higher value because it is unique and not as easy to reproduce. Of course, generative A.I can always recreate anything but regulatory software like that of non-fungible tokens would apply. Comparing it to an attention-based economy for example, the value of its currency could naturally be lower to that of an identity economy due to it having less scarcity as it is much easier to produce- unless supply dramatically decreases while demand remains constant, people will always value it less.

To contextualize this relationship between such economies a little, imagine being paid to allow up to 2000 people to watch you working out at the gym and up to 4000 to watch you sleep at night (numbers you set yourself). This is easy money therefore many others will be contributing to the supply. This said, the currency's value will be lower; Let's say this particular service earns you 100 of currency X, and you want to buy as many of currency Y as you can (representing the identity economy). On a specific day, the blockchain says you are capable of buying 50 Y for your 100 X, giving y twice the

value of X. Now you take your 50 y and buy a unique 3D meme that you can send to your buddies in virtual reality, but only 3 times. You send it, and they get to experience it. Imagine the famous meme of the guy staring at a hot girl walking by while his girlfriend flashes him the most jealous look, only in live-action with captions over them and maybe some music and narration.

Now, how this experience could be valued next to watching someone eat their food for an hour for example (This is real, it is called "mukbang"), has to be left up to the two parties exchanging services, therefore the currencies representing either experience take on a discreet value with every transaction made. This would get recorded in the blockchain ledger and would update the value of both currencies exchanged accordingly.

This means there is virtually no way for any one group, person, or government that can possibly cause inflation. But let me explain how the update would be calculated. Being as "Mukbang" in this hypothetical case is a product of an attention-based economy (currency X), the value would have to be based on how many viewers are allowed in on the session. As for the 3D meme's currency (an identity-based product with currency Y) would have to be measured based on its scarcity, (the amount of times it can be played). The differential value between them comes from the free valuation agreement of both parties exchanging the products. This means that if the owner of the 3D meme is willing to accept 20 X for 2 plays of his meme, this would proportionally change the value of the currency attached to his meme (dictated by how many transactions it has) versus another scenario when he would choose to accept 40 X instead. Therefore he might end up giving the mukbang vendor 20 Y versus 10 Y in the first scenario. The exchange therefore goes like this: The mukbang vendor wants to exchange a 1 hour session with only 5 viewers for 2 plays of this particular 3D Meme. Both parties agree to exchange the mukbang service for the meme product at the rate of 20 Y for 40 X, meaning the mukbang party ends up with 20 Y in his wallet and 40 X less, plus 2 meme plays. Conversely for the meme party, he gets 40 X in his wallet, minus 20 Y and a 1 hour mukbang session. Each party can then spend their respective currencies as they see fit with new parties. Another purchase option could be that the 3D Meme vendor does not want an exchange but simply wishes to sell. In this case, the mukbang vendor would purchase 2 meme plays for 20 Y or the equivalent in any other currencies the meme vendor wishes (provided the mukbang party has it and is willing) at the general exchange rate during the time of transaction. This would mean the meme vendor ends up with 20 Y or 40 X and the mukbang party with that in deficit plus 2 meme plays.

Addressing the implications of emergent universal economies

There should be many questions arising in one's mind here: Why is there an exchange of currencies along with the products? How does one accumulate capital or value in this case? What happens if the vendors flood the market with availability for their products and services at high prices?

Addressing question 1: The reason for this is to allow for the maximum amount of subjective value added to be accrued according to each individual consumer in the marketplace while maintaining an objective exchange rate between economies to track the overall value of each one. This is necessary to ensure people are not just bartering, taking away scarcity and therefore meaning. If one can produce enough, high-quality scarce products and services, experience all the ones that satisfy them, and retain the prospect of accumulating currency, then community structure is maintained- But this is not possible without an objective valuation of currencies because participation in the economies would otherwise remain meaningless.

Now whether the consumer behaviour and marketplace decisions changing the values of these currencies on this granular level renders the fluctuations of currency value much too volatile to make this kind of economy "ecosystem" work at all is unknown, but with each new iteration of economic models in history, it is clear that we have always expanded a greater range of possibility and resulting liberty through efficiency. We wish to do more and have more, go further, and feel better. This requires us to be more efficient so as to incorporate more axes of freedom and this is what changes the economic model and how it functions.

Through the technology of coin stamping, we tapped into the efficiency that comes from fungibility. Through the technology of writing and math, we tapped into the efficiency of record-keeping and logistics. Through stock markets, we tapped into the efficiency of value creation. Each new technology has allowed us to change the nature of our economies- and so the technologies of blockchain, NFTs, and others will change our economy drastically, given the superabundance generated by A.I and automation. This time around, we will tap into the efficiency of "scarcity production" and value tracking. Somehow, it will directly reflect the state of humanity and how fulfilled it feels. We will no longer see "economy" as a separate idea from human life itself because "money" will come to represent relationships more than it does raw output and corresponding value.

This brings us to the second question: How does one accumulate capital or value in this case? Well, each subjective agent in the market will determine the value of their

accumulated currency via the very decisions or purchases they make. If one feels that a certain product is not worth more than amount X, they will proportionally receive quality X from someone in the market who agrees, therefore more can be saved. This is how free markets already work, only they are bound by the costs of production and therefore have a certain threshold price. With this threshold becoming much lower via 3D printing (cost of raw materials becomes the only expense) and virtual exchanges with no overhead costs but the time it requires to produce, each individual person will become their own economy of sorts, determining how much currency they want to accumulate versus how much they want to participate in the community. Imagine designing an original handbag and selling the 3D print file to one customer versus selling it as a model to many for example. This will have an impact on how much time you want to spend working and what price you want to fetch, but you will be entirely free to choose these values because none of it will impact your quality of life on a basic level. You could decide to sell only 5 for an outrageous price until you find a buyer who will, with equal freedom, choose to value your handbag at such a price because it adds value and meaning to them. This will become more commonplace as products become widely accessible. The good news is that which retains natural scarcity will also increase in value, demand, and therefore price as people begin to afford what there is less supply for (aged wine made in Greece or a Japanese silk dress from the 16th century for example). This makes humanity rediscover and appreciate the value and quality of human-made products alongside the abundant ones produced by modern technology.

This leads us to that final question: What happens if the vendors flood the market with an availability for their products and services? Some things will be artificially supplied, due to the nature of the products; To use the 3D meme example again, one could create 5 billion NFTs for it and set the price way too high for each unit. The free market dynamics apply here just the same: Demand will be driven down. If the price is lowered and it becomes popular, the value naturally drops. And being as scarcity is what takes on much more value than before, people will strive to create the best products and services possible to make them exclusive, and will therefore be rewarded by the very value the market dictates. We already do this today: artists strive to create art that people will consume (giving them status) and pay a lot to consume it (value). The difference in this kind of economy however, is the size and quality of the community each producer attracts to themselves- They will essentially be creating their own markets, and judge their value by how big and interesting these markets are more than how expensive the products and services within them are. Having a community of people who value and trade your work will become the objective standard or currency. In this way, human activity becomes intrinsically connected to value.

Conclusive thoughts

What makes these universal economic models *emergent* is the exponential growth of technology and the corresponding freedom that underpins such models; Continuously having more possibilities to experience and manage naturally requires new models, making economies exponential as well. This is why we are likely to see them emerging with their own currencies, their own rules/conditions of exchange, and their own problems.

How this turns out is anyone's guess, but it does not take away from the fact that it is crucial to think about the very real truth that the economy is to be divorced from the pragmatic and be propelled into the existential. By this I mean there will be less economic behaviour based on survival and much more based on the virtual realm of the mind. Barring any tyrannical control over raw materials (which could become difficult or irrelevant due to *molecular nanotechnology), we are likely to enter a new dimension, impossible to imagine.

*3D printing will not stop innovating as we will likely always strive to reach something called "femtotech" (the manipulation of matter on the scale of 10⁻¹⁵ m). Until then, we will have at least reached *nanotech* which allows us to build things with enhanced properties therefore with less need of quantity in some cases.

The thought experiments we come up with about possible economic models today could help shape the actual economic landscape of tomorrow; It is very important to do so if we are to avoid reverting to antiquated models that would, as a byproduct effect, cease to develop the technological benefits we require to sustain humanity's needs as the population collapses. This essay has, therefore, been in the spirit of beginning a discussion around the economic impacts of technology and is meant to encourage more people to engage in it.

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