Cryptocurrencies: The New Species

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I. INTRODUCTION

The sphere of cryptocurrencies is a new and unique one that represents a potentially huge volume of future trade, investment, and other revolutionary fiscal applications. Currently, the most widely known is

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Bitcoin, but there are other serious players in the game such as Ethereum, NEO, and Ripple, to name just a few. Cryptocurrencies extend beyond the pre-established limits, and thus do not fit easily into the existing paradigm. In fact, their scope is so vast, it is almost impossible to predict their future impact. It is a bit like attempting to estimate the possible size and magnitude of an unknown type of fully mature tree from its tiny infant seed. So, perhaps we should not limit our imaginations too much with rapidly redundant frameworks and limiting definitions.

The objective of this article is to widen and expose the field of interpretations and understanding of cryptocurrencies while providing some stimulating, inspirational thoughts regarding the unprecedented opportunities and dilemmas cryptocurrencies face.

This mini-thesis has been written almost like a stream of thought, rather than a concisely researched document. This is because it does not attempt to meet all the criteria of empirically proven research. As such, some of its statements are unproven, unquantifiable, and unquoted.

Currently, complete examination is impossible because cryptocurrency, and the blockchain technology supporting it behind the scenes, is a rapidly evolving organic phenomenon—it is swirling, moving, and adapting. At this stage, it is impossible to predict accurately what will global simulations. He is a regular contributor to the World Bank doing business reports from 2015 through 2018. He has written articles and delivered speeches pertaining to digital security, bank law, and mass phenomena. He received his LLM in the United States, Global Business Law in 2012 from Suffolk University Law School in Massachusetts, his degree in Legal and Political Science, Hungarian and EU Law, in 2009 in Hungary, and his International Business Certificate in 2008 in Pennsylvania. He was a scholar in Vienna, Constanta, and Bangkok, Thailand. In addition, he would like to say thanks to the Nova Law Review.

3. See Bolt & van Oordt, supra note 1, at 1, 5–6.
4. See id. at 1; Ogilo, supra note 2.
happen even in the short to medium term future. But one thing is for sure, this technology is game changing and will have a big impact one way or the other.

II. BASIC QUESTION

“Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal.”

What is cryptocurrency from a legal perspective? Is it money? Is it an asset? Is it capital? What kind of legal category does cryptocurrency fall under? Each jurisdiction uses different legal terms to describe and categorize cryptocurrency. The case law shows a huge variety regarding outcomes, as well.

However, the problem here is that cryptocurrency works globally, not locally. It knows and respects no borders. Based on the author’s opinion—plus wording of different legislation, case law, and the jurisprudence of different jurisdictions—the used, relevant, and possible categories are the following: Money, currency, virtual currency, digital currency, digital cash, digital unit, “as if [they were] cash,” cryptocurrency, private money, legal tender, unit of account, medium of exchange, money of account, clearing account, foreign currency, not a currency, payment instrument, e-money, e-money institution, investment firm, payment service, payment service provider, civil association, payment system, information society service, information society service provider, financial instrument, security, financial security, transferable security, share capital, equity, copyright, intellectual property, intellectual product, intellectual right, property right, asset, intangible property right, intangible asset, intangible right, share, movable property, movable asset, right, intellectual work, pecuniary value, goods, property, commodity, virtual commodity, electronic service, electronic money, “alternative private means of payment,” yield, voucher, bill, money order, account files, accounting income, legal claim,

See id.
Matthew 6:19 (King James).
Id.; see also Timothy Bierer, Hashing It Out: Problems and Solutions Concerning Cryptocurrency Used as Article 9 Collateral, 7 CASE WESTERN RESERVE J.L. TECH & INTERNET, no.1, 2016, at 79, 89–91.
McKenna, supra note 8.
See id.
and res.\textsuperscript{12} One conclusion of the above vast categorization process is that we need to understand the cryptocurrency phenomenon better, instead of just


https://nsuworks.nova.edu/nlr/vol42/iss3/4
creating justifications and objections for each existing legal category and term.13

The category-based approach is extremely interesting in its diversity.14 However, we do not really get closer to finding the answer to this most very modern of conundrums.15 The truth is that categorizing something as amorphous might be extremely useful in on-going litigation; however, it does not really help us get the answers we require to our very apparently simple question.16 We need to understand the phenomenon instead of categorizing it merely in arbitrary legal terms.17 It means we need to get out of the jurisdiction of the isolated, closed loop of the legal system, and expand the horizons.18 This kind of approach is absolutely necessary to make sense of the bigger picture.*
III. BASIC DILEMMAS: THE VANISHING CURRENCY OF PENNSYLVANIA—STOCKED IN SPACE AND TIME

It is likely that only a few older Pennsylvanian local citizens would probably know that until 1793 the official currency of Pennsylvania was not the Federal Reserve issued United States Dollar (“USD”), but rather the Pennsylvanian pound.19 Before the USD, as defined under the 1792 Coinage Act or Mint Act,20 plenty of local currencies were in circulation.21 The abovementioned Pennsylvanian pound was certainly not a unique case in the North American territory; there were many different currencies used.22 Currency varied and could vary by states, territories, counties, and even cities.23 However, with the exception of the occasional community currencies, these genuine local alternative currencies are no longer in existence today.24

At their height, nobody thought of these currencies as fragile and temporary—they were just accepted without question.25 What else could better prove their value; just think, at one point in time, people robbed and murdered each other to steal other people’s Pennsylvanian pounds.* Goods and property were purchased, people were paid, and debts were settled all in good old Pennsylvanian pounds.26

This was the money they worked hard to earn.* People hid Pennsylvanian pounds under their floorboards, sewed it into their mattresses, pillows, and sofas.27 When people dreamed of becoming rich, they imagined having large pots brimming with lots of Pennsylvanian pounds.*

22. See BORAWSKI, supra note 19, at 3; The History of American Currency, supra note 21.
24. See Grubb, supra note 19, at 1779; Moers, supra note 24, at 10.
The Pennsylvanian pound had an accepted value and it was a legitimate currency; however, its usage was severely limited in geographical terms—it was not legal tender in other neighboring states or counties. Or, if it was accepted, it was done under punitive exchange rates.

The questions then become: What makes a sustainable currency? How long can one stay viable? Why do some currencies fail? What characteristics are needed for a currency to be accepted in a neighboring state? What causes one currency to proliferate and another to remain isolated? Do they spread like trends, fashion, or memes? Does a currency behave as a cultural-political export product?

The example of the Pennsylvanian pound and USD shows that some currencies disappear and can be replaced and quickly forgotten about. So, it seems that some currencies just die out while others remain and even prosper. This pattern looks true for government-backed fiat currencies, cryptocurrencies, and other currencies. The legal tender is determined by space and time.

A. The Turbo Car Cards Dilemma

Turbo was a brand of chewing gum popular in the 1990s. The gum had collectable inserts, which featured the images of various vehicles along with their top speed, horsepower, and engine size. Everyone at school would avidly collect these cards.

The faster the maximum speed of the vehicle, the more valuable it became. So, a very fast sports car might easily be exchanged for six medium range cars. Moreover, many times that exchange alone was insufficient because the buyer was also required to do the seller’s homework as part of the transaction arrangement. The car cards trade was so intense that it occurred at all times, even during lessons. Cards were exchanged all

28. Grubb, supra note 19, at 1779; Moers, supra note 24, at 5.
29. See Grubb, supra note 19, at 1779–80; Tunguz, supra note 26.
30. See Grubb, supra note 19, at 1779–80; Borawski, supra note 19, at 24.
31. See Grubb, supra note 19, at 1778–80, 1783.
32. See Bolt & van Oordt, supra note 1, at 1, 3; Moers, supra note 24, at 11, 15.
year round come rain, snow, or shine.* It never stopped.* Yet, no one outside of our school had the slightest clue about this thriving daily market.*

Incidentally, it should also be noted that not everyone was that interested in the Turbo card trade; the younger children were unable to understand the game and the older pupils were already into other things.* However, it was completely inconsequential to us that they did not partake in the bustling trade.*

The Turbo cards were not recognized or regulated by any specific authority or body.36 Acceptability of them can be defined by: The time, for us circa 1993; space, the confines of the school in the city where I lived; and milieu, third grade—mainly male pupils.37

Let me tell you that I would not complete anyone’s homework for a Turbo car card today.* While the car cards there and then were unquestionable currencies, we clearly would not have been able to use them as currency at the local corner shop even at the peak of the craze.38

Of course, it depends on preferences and interpretations of what the Turbo chewing gum cards tells us.* How similar is a car card to a fiat currency, a cryptocurrency, or something else?* The above example perfectly illustrates the sensitivity of a given currency in relation to factors of space, time, milieu, acceptability, and trends.39

B. The Swiss Franc, Zimbabwean Dollar, and Transnistrian Ruble

The Special Drawing Rights (“SDR”) basket is defined and maintained by the International Monetary Fund (“IMF”).40 It currently consists of the following five currencies: The USD, the euro, the Chinese renminbi,41 the Japanese yen, and the British pound.42

36. See id.
38. See id. at 18–19; Turbo, Short Introduction., supra note 35.
42. Special Drawing Right (SDR), supra note 40.
The above five currencies are commonly referred to as *world currencies*.\(^{43}\) It is rather interesting, however, that the Swiss franc is not included in the SDR basket, as it is a stable and significant currency—well-known, widely accepted, with a lot of things fixed to it.\(^{44}\) The franc is investment protected and it goes without saying that the Swiss—and the Swiss banking system—have an extremely strong reputation across the world in this particular field.\(^{45}\)

Just like the Swiss franc, the Zimbabwean dollar\(^{46}\) was also not part of the SDR, but unlike the Swiss Franc, it was never accepted at an exchange office other than in Zimbabwe, such as somewhere in deep rural China, for example.\(^{47}\)

I went with my friend Istvan to Transnistria\(^{48}\) in 2014, which is not internationally recognized as a sovereign country.\(^{49}\) It lies in a disputed area somewhere between Moldova and the Ukraine.\(^{50}\) Despite the fact that the international community does not recognize it, Transnistria has its own parliament,\(^{51}\) government,\(^{52}\) central bank, and currency.\(^{53}\) People are allowed to pay exclusively with Transnistrian rubles in Transnistria, as we


\(^{44}\) See CHF - Swiss Franc, XE, http://www.xe.com/currency/chf-swiss-franc (last visited Apr. 18, 2018); *Special Drawing Right (SDR)*, supra note 40.

\(^{45}\) See CHF - Swiss Franc, supra note 44.


\(^{47}\) See *id.*; *Special Drawing Right (SDR)*, supra note 40.

\(^{48}\) Transdniester, http://www.transdniester.ru (last visited Apr. 18, 2018). Transnistria is called *Pridnestrovie* in Russian. *Id.*


\(^{50}\) *Id.*

\(^{51}\) See Verkhovnii Sovet Pridnestrovskoi Moldavskoi Respubliki [The Supreme Council of the Pridnestrovskai Moldavskai Republic], http://www.vspmr.org/ (last visited Apr. 18, 2018) (Transnistria); Tomes, *supra* note 49.

\(^{52}\) *Ss ’iliki [References], Pridnestrovskai Moldavskai Respublika: Ofitsial’nyi Sait Prawitel’stva*, http://www.gov-pmr.org/links (last visited Apr. 18, 2018) (Mold.).

experienced. However, the Transnistrian ruble is generally not accepted as currency outside of Transnistria, with the possible exception of some bus companies that travel to and from Transnistria. Other than that, only the Russian Federation accepts the Transnistrian ruble as a legitimate currency—i.e., unit of account. The Zimbabwean dollar, Swiss franc, and Transnistrian ruble exist in parallel worlds. All three are excluded from the SDR basket.

What does currency acceptance mean? The big nations accept their own currency and these are the same currencies that are accepted in international business. There exists 5 to 8 relevant currencies world-wide; 5 of them are also part of the SDR basket. The remaining circa 170-plus currencies are not part of the SDR basket and so are essentially considered irrelevant in international business.

The Swiss franc provides a unique example of a relevant viable currency not part of the SDR. In today’s extraordinary world, an extraordinary cryptocurrency could provide us with another viable, relevant, yet unaccepted currency excluded from the SDR basket.

C. Private Golf Club

The powers managing the SDR basket do not have any motivation or interest in allowing any additional currencies into the global currency market. On one hand, one could compare the relevant currencies of the currency market to an extremely exclusive private golf club. On the other

54. Transnistrian Ruble, supra note 53.
55. Id.
56. Id.; TRANSDNIESTER, supra note 48.
57. See Special Drawing Right (SDR), supra note 40; Transnistrian Ruble, supra note 53; ZWD – Zimbabwean Dollar, supra note 49.
58. See Special Drawing Right (SDR), supra note 40.
60. Richard Lee, Top 8 Most Tradeable Currencies, INVESTOPEDIA, http://www.investopedia.com/articles/forex/08/top-8-currencies-to-know.asp (last visited Apr. 18, 2018); see also Special Drawing Right (SDR), supra note 40.
61. See Quickbooks Canada Team, supra note 59; Special Drawing Right (SDR), supra note 40.
62. See Special Drawing Right (SDR), supra note 40; CHF-Swiss Franc, supra note 44; Lee, supra note 60.
63. See Bierer, supra note 9, at 81–83.
64. See Special Drawing Right (SDR), supra note 40.
65. See id. Much like a private golf club, “[a] country participating in this system need[s] official reserves—government or central bank holdings of gold and wide...
hand, a cryptocurrency is uncontrollable because of its peer-to-peer ("P2P") structure and sometimes they can be difficult to deal with because of their mainly decentralized structure.66

Let us step back for a moment and take a look at a naive scenario, which can show the potential position of cryptocurrencies based on the approach of the major financial powers.* If the major powers—and/or the international banking system—ban cryptocurrencies and only a group of small, financially weak countries accept them, or at least do not prohibit them, then those currencies would stay at the level comparable to the Zimbabwean dollar making it hard to spread.*

If any major economic power—e.g. China, the United States of America, Russia, India, Japan, Turkey, or the United Kingdom—accepts the cryptocurrency, then it will stay alive, and the trading and accounting will be open to the direction of the major power who accepts it.67 This will provide the opportunity for the cryptocurrency to exist in a parallel world and give it a chance to become a new global currency.68 However, if exclusively only one major power accepts it, then it would most likely be forced to stay at the level of the Transnistrian ruble—unless it could somehow function as a cultural-export.69 If cryptocurrencies became recognized and accepted multilaterally, while at the same time banned by other major powers, then it would create a hybrid, financially dualistic, internationally divided, polarised world.70

The third option would be if virtually all developed nations happened to ban cryptocurrencies; then, they would just disappear overnight into the dark web and be reduced to the level of the black market where drugs, bloody diamonds, human traffickers, and illegal weapons are traded—and any form of government intervention avoided at all costs.71 Unless the whole internet platform changes, everything that we now think about the world, the status quo, and money, would radically change as well.*

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67. See Hewitt, supra note 13, at 625, 632–33; Bajpai, supra note 69; *Special Drawing Right (SDR), supra* note 40.
69. See Bajpai, supra note 66; *Transnistrian Ruble, supra* note 53.
70. See Bajpai, supra note 66; *Special Drawing Right (SDR), supra* 40; *Zimbabwean Dollar, supra* note 46.
71. See Bierer, supra note 9, at 84; Bajpai, supra note 66.
D. Pebble-Stone and the Cyber-Pebble-Stone

A currency is only what people collectively accept, agree on, and have confidence in its authenticity. In theory, legal tender can be almost anything: For example, the paper from the turbo chewing gum pack, colored paper as banknotes, bits of metal as coins, precious stones, cooking pots, and salt. The thing about money that is most important is that both sides of a transaction accept it, recognize its specific value, and ideally is not too perishable.

The pebble-stone was the legal tender mainly on Waqab—Yap, Island. Today we call them the Rai stones. Rai stones were circular limestone disks with holes in their centers. They varied widely in size from 3.6 meters in diameter to just 7 or 8 centimeters. Despite their greatly differing dimensions, they still acted as a feasible working currency for their culture. We can still see the evidence today, so we know it worked.

The whole cryptocurrency mysticism can be personified with this pebble-stone example. The character of the cryptocurrency can be thought of as a cyber-pebble-stone, similar to that used in antiquity on the Waqab Islands. However, we also see that the legal tender was different on other nearby islands, and different legal tender was used from territory to territory.

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74. See John Kay, A Currency Is Anything That Two People Agree Is a Currency, FIN. TIMES (Aug. 6, 2013), http://www.ft.com/content/f97fad02-fdd6-11e2-8785-00144feabdc0; Saleeth, supra note 73.


77. Docevski, supra note 75.

78. Id.

79. See id.

80. See id.
Specifically, a different kind of legal tender was used depending on where you went.82

E. Stone, Iron, Wood

The pebble-stone example has another aspect that needs to be considered.* Based even on the most conservative estimations, the Waqab-pebble-stone-system, also known as the Rai Stone System, was used for an astounding 500 to 1400 years.83 The USD has been used for just 226 years, and the euro only for about twenty years.84

Of course, 225 years has the potential to become 1500 years.85 However, there is still a sizable difference between 225 and 1500 years that cannot easily be dismissed—apart from the fact that the dollar, in its relatively short life, has spread so pervasively throughout the whole world.86

Imagine aliens who are aware of all of the above mentioned facts, but are independent of all the Earth’s socioeconomic structures, political paradigms, and philosophical and cultural frameworks.* They could probably fairly easily imagine that the human race could use stones again instead of the USD, or use cryptocurrencies, or anything else that conforms to the definition of what we, today, call money.* Even the USD, or any internationally recognized currency, can be considered a transitional currency, such as the previously discussed Pennsylvanian pound.87 Imagine that someday in the future, there could easily be no one alive who can remember using the USD.*

Of course, this an extreme example; it is unlikely that we will go back to using stones.* Because instead of using stones, we now use metal coins and wood chips—banknotes, in the oh so modern digital age.88 Are
metal and wood more advanced than stone?* Is the stone more primitive than base metal and wood?* I do not think so.* All are basically the same.*

Most people agree that in life, anything can happen; trends come and go.89 Let us recall our earlier discussion that it is hard to predict the future of the cryptocurrencies.90 It is just like how we want to imagine, from a seed, the possible magnitude and extension of a mature tree.* Something positive can come out from a roots-up system and organic movement; however, we just have no idea how it will pan out.*

Keep in mind that the cryptocurrency concept is merely a pebble stone or, better yet, just a virtual pebble stone.* In addition, the Court of Justice of the European Union used the same analysis for cryptocurrency and currency.91 The court, in case C-264/14,92 held that the cryptocurrency “transactions are exempt from [value added tax] under the provision concerning transactions relating to ‘currency, bank notes, and coins used as legal tender.’”93

F. The Infrastructure of the Blockchain94—Budapest Taxi Strike

Cryptocurrency is P2P.95 But what does that really mean?* In 1990, the price of crude oil almost doubled.96 Taxi drivers went on strike in

93. Id.
Budapest because of it.\textsuperscript{97} They stopped and brought the city to a standstill.\textsuperscript{98} A total of 25,000 cabs were on the streets in Budapest, Hungary, creating merry mayhem.\textsuperscript{99} The taxi drivers blockaded all important roads.\textsuperscript{100} Only emergency vehicles and the departing Soviet military were allowed through the road blocks.\textsuperscript{101} Public transport stopped, private vehicles stopped, factory production stopped, people could not get to work, and teachers and students stopped going to school.\textsuperscript{102} Everything stopped.\textsuperscript{103} The whole capital ground to a halt.\textsuperscript{104}

In Budapest, at the start of the 1990s, taxi drivers took their instructions via Citizens Band Radio 80 ("CB").\textsuperscript{105} A CB system consists of short-distance radio communications.\textsuperscript{106} The CB radio played a key role in the taxi drive blockade because the taxi drivers organized the strike through their CB radios.\textsuperscript{107} The CB system was decentralized in the 1990s.\textsuperscript{108} Every taxi driver was able to get in touch with every other taxi driver.\textsuperscript{109} This meant that the authorities were helpless to stop it because it was a decentralized system that they could not easily interfere with.\textsuperscript{110}

They were unable to eliminate a central server because there was no central server.\textsuperscript{111} Literally thousands of CB radios were connected to each
other in a P2P system. Today, there are central radio stations, and the P2P connection of taxi CBs no longer exists. Today, taxi drivers would not be able to organize a strike and stop the transportation of Budapest quite so easily because the authorities would now be able to take down the radio station and stop their communication, unless the taxi drivers adopted some new P2P system, like FireChat which was used in the Hong Kong Revolution, in a Catalan pro-independence demonstration, at the University of Hyderabad, India, demonstraons in Ecuador, during a flood in Kashmir, during a hurricane in Mexico, and an election in Venezuela.

But, this is not the case with cryptocurrencies. The cryptocurrencies are mainly non-centralized. Its weakness is its strength, because the P2P system cannot be taken down, like the taxis’ CB radios

112. See Interview with Gyula Kodolányi, supra note 102; Marshall, supra note 95.
117. TNN, supra note 114.
121. Griffiths, supra note 119; Firechat, supra note 120.
122. Griffiths, supra note 119; Firechat, supra note 120.
123. See Marshall, supra note 95.
124. Id.; Holmes, supra note 89.
in Budapest in 1990.125 It is neither centralized, nor controllable.126 The P2P system can pose a threat127 to the existing top-down power structures indeed.128

IV. SIMULATIONS

A cryptocurrency has a bottom-up, P2P, decentralized character.129 Furthermore, it is almost organic in nature.130 So, let us consider for a moment, as a thought experiment if you will, that cryptocurrency is a new organism—a new species—and compare it to its living counterpart.* Let us see cryptocurrency as an organic process and compare its traits and characteristics, shall we?* First though, remember this kind of thought experiment can be misleading and requires an open mind.* Just bear in mind then that these biological properties will not be used as direct analogies, but rather to illustrate the exponential possibilities of cryptocurrencies.* What I am suggesting is that a cryptocurrency can be compared to the characteristics displayed in our natural living world.*

A. Spread. Inhabit. Takeover the World.

A single poppy flower producing just fifty seeds per year could in just nine years populate the entire surface of the Earth.131 This is exponential growth at work.132 Now, let us look at some other examples of the rapid spread phenomena that have actually happened across the world.*

The radio—one of the oldest modern information network technologies—reached sixty million people in its first thirty years; remember, this was when the world’s population was still under two billion

125. See Fletcher, supra note 96; Interview with Gyula Kodolánya, supra note 95; Marshall, supra note 95.
126. See Fletcher, supra note 96; Holmes, supra note 89; Interview with Gyula Kodolánya, supra note 99.
127. See Holmes, supra note 89; Marshall, supra note 95.
128. See Holmes, supra note 89; Marshall, supra note 95.
129. Holmes, supra note 89.
132. See id.
people. Amazingly, television broadcasts reached the same number of people in only fifteen years. The Internet has grown at an astounding rate of almost ten times greater than that of television. In 1987, there were 10,000 hosts, and by 1992, the number of hosts surpassed 1,000,000. This growth is even more extraordinary considering that the appropriate Internet infrastructure—antennas, masts, network providers, fiber optic cables, Wi-Fi routers, 4G, etc.—barely existed, and some not even at all!

However, today this is not the case when it comes to cryptocurrencies and blockchain technology. The infrastructure is largely already in place, and the Internet is getting faster and more powerful by the hour. Remember the poppy, it would need only nine years to disseminate itself across the earth. Cryptocurrencies, unlike poppies, do not even need wind, birds, or animals to spread their seeds—antennas, masts, network providers, fiber optic cables, Wi-Fi routers, and 4G already exist. So, based on what we know about the rate at which the Internet evolved, a cryptocurrency could easily go global as a currency in under ten years’ time—maybe much sooner.

134. Id.
136. Id. at 3–4.
138. See The Physical Internet, supra note 137.
139. See id.; The VeriSign Domain Name Primer, supra note 135, at 2.
140. If the Animals Were Alive Forever, supra note 131.
141. See The Physical Internet, supra note 137.
The total market capitalization of cryptocurrencies exceeds $377 billion USD as of April 2018. Competing vegetation and natural borders—oceans, deserts, mountains, etc.—create barriers and limit the spread of poppies; whereas, the barriers for cryptocurrencies are fiat currencies, government intervention, capital controls, competing cryptocurrencies, and technological issues such as: Hackers, artificial intelligence implications, cybercrime, warfare, electromagnetic pulse events, national firewalls, catastrophic infrastructure issues, etc.

B. Acceleration. Increasing value.

The fastest land mammal is the cheetah—*acinonyx jubatus*. Its elastic vertebral column and well-developed muscles allow it to reach speeds of 90 to 100 kilometers (“km”) per hour—55 to 62 miles per hour. Impressively, cheetahs can accelerate to 86.9 km per hour—53.9 miles per hour in 2.75 seconds. But, their high speed can only be kept up for a short period of time.

We do not need to imagine if there is an animal that can quickly accelerate and sustain its high speed. Such an animal already exists: the pronghorn—*antilocapra americana*. This remarkably speedy animal has been recorded as comfortably running at 56 km per hour—35 miles per hour for 6 km—3.7 miles per hour without any sign of fatigue. Can the cryptocurrencies display similar characteristics, such as the ability to rapidly accelerate and keep its speed and its value—who is an *acinonyx jubatus* and who is an *antilocapra americana* in the crypto-fiat currencies world.

145. See If the Animals Were Alive Forever, supra note 131.
148. Id.
149. Id.
150. Id.
151. See id.
152. Animal Records: Fast and Slow, supra note 147.
153. Id.
154. See Bajpai, supra note 66; Bitcoin Price History Chart, BUY BITCOIN WORLDWIDE, http://www.buybitcoinworldwide.com/price/ (type “2017-09-01” into the From
When Bitcoin started in 2009, one bitcoin was worth less than $1 USD. By September 3, 2017 one bitcoin was worth 4,623 USD, by December 17, 2017 one bitcoin was worth 20,078 USD, and by May 1, 2018 one bitcoin worth $8,917 USD. That represents a huge increase.

C. Proliferation, Quickness, and Productivity

In matters of reproductivity, we cannot narrow our focus simply to animals living native to us, like our pets.* We need to look for some highly reproductive animals as well, such as the Cameroon sheep.* The Cameroon sheep reaches maturity at the early age of five months and the female can easily deliver lambs twice a year. The gestation period varies between 147 to 150 days. Therefore, their reproductivity does not belong to any specific season. The hugely reproductive Cameroon sheep raises an average of two to three sheep per year. And with each new female offspring, more new lambs are delivered twice a year. With an average lifetime of 10 to 12 years—which is high for most animals—these characteristics make the sheep a highly reproductive species.

Sheep live in the natural, human world. These animals have average characteristics, nothing extraordinary; however, cryptocurrencies already show extraordinary abilities. An extreme species does not have

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155. Bitcoin Price History Chart, supra note 154.
156. Id.
157. See id.
160. See ASSN CAMEROON SHEEP BREEDERS & KEEPERS E.V.: RACIAL DIVERSITY, supra note 158.
161. Id.
162. Id.
163. See id.
164. See id.
165. See ASSN CAMEROON SHEEP BREEDERS & KEEPERS E.V.: RACIAL DIVERSITY, supra note 158. Credit to Nassim Nicholas Taleb for the inspirational thought of categories like ordinary, extraordinary, and extreme; however, I used them in a different way. See NASSIM NICHOLAS TALEB, THE BLACK SWAN: THE IMPACT OF THE HIGHLY IMPROBABLE 242, 256 (1st ed. 2007).
average characteristics; it has extreme characteristics.* An extreme species
has extreme characteristics, which makes cryptocurrency more like an
extreme species.* The Initial Coin Offering (“ICO”) collect more millions
of USD in the first few days.167 Dozens of new ICOs come up each week.168
More and more people are using and investing in cryptocurrencies, thus the
volume and business of cryptocurrencies is growing.169

D. Perception of Time: The Fast-Moving Animal Senses Time
Differently

The perception of time for animals is closely related to how fast their
metabolism works or how fast they are.170 For example, the fly is able to
escape a swatting newspaper because it detects movements more subtly and
precisely than we do.171 The perception of time is dependent on how much
information can be processed over a given period of time.172 This is an
important factor, especially in the case of predators and their potential
prey.173 The perception of time for common prey animals such as rabbits,
squirrels, mice, and flies are much faster than those for larger animals and
slower ones.174 Dogs perceive time twice as fast as humans—more
precisely, they process information at twice the rate—making our
movements appear like a slow motion movie to them; this is why they make
catching flying balls and Frisbees look so darn easy.175

167. EOS Token Sale Generates over $185 Million in First 5 Days, CRYPTO
NINJAS (July 1, 2017), http://www.cryptoninjas.net/2017/07/01/eos-token-sale-
generates-185-million-first-5-days/.

18, 2018); ICOs Launching Soon, TOKENMARKET, http://www.tokenmarket.net/ico-
calendar/upcoming (last visited Apr. 18, 2018); ICO Results, COINSCHEDULE: R

169. See The Cryptocurrency Market Is Growing Exponentially, MIT TECH.
chnologyreview.com/s/607947/the-cryptocurrency-market-is-growing-
exponentially/.

170. Kevin Healy et al., Metabolic Rate and Body Size Are Linked with
Perception of Temporal Information, 86 ANIMAL BEHAV. 685, 686 (2013); Emilie Reas, Small

171. Press Ass’n, Time Passes More Slowly for Flies, Study Finds, GUARDIAN
(Sept. 16, 2013, 4:53 PM), http://www.theguardian.com/science/2013/sep/16/time-passes-
slowly-flies-study.

172. Id.; see also Healy et al., supra note 170, at 685–86.

173. Healy et al., supra note 170, at 686; Press Ass’n, supra note 171.

174. See Healy et al., supra note 170, at 686.

175. See Sebastian Anthony, Small Animals See the World in Slow Motion, or
Why Your Puppy Is So Hyperactive, EXTREME TECH (Sept. 17, 2013, 10:32 AM),
Another interesting example of time and motion perception is the tiger beetle.\textsuperscript{176} It runs so fast when it hunts, that its eyes cannot process what it is seeing—thus, making it necessary to stop from time to time so it can actually reassess the position of its prey.\textsuperscript{177}

The slow-moving bulk of today’s standard currencies cannot grasp that something new and much faster is evolving around them.\textsuperscript{178} Those who are involved in the faster-moving world of cryptocurrencies and blockchain technology are like the animals that have a more finely-tuned perception of time, allowing them to see on-going trends and new opportunities.\textsuperscript{179} Unless, of course, they begin to move too fast like the above tiger beetle and lose their focus.\textsuperscript{180}

E. Optical Paradox, Tetris Effect, Game Theory, and Other Trends

The masses create a collective soul, a group within which people think and feel differently.\textsuperscript{181} In other words, the masses behave differently than the individual people in it—group think, if you will.\textsuperscript{182} Its science even has a name: Crowd Psychology, which was first brought to our attention by Gustave Le Bon nearly 200 years ago.\textsuperscript{183} As groups get larger, their behavior becomes more emotionally charged, rigid in attitudes, and less intelligent.\textsuperscript{184} The members of the crypto world create a mass as well, based on my concern.\textsuperscript{185}

\begin{itemize}
\item \textsuperscript{177} \textit{Id.}
\item \textsuperscript{178} \textit{Id.}
\item \textsuperscript{179} \textit{Id.}
\item \textsuperscript{180} \textit{Id.}
\item \textsuperscript{181} \textit{Id.}
\item \textsuperscript{182} \textit{Id.}
\item \textsuperscript{183} \textit{Id.}
\item \textsuperscript{184} \textit{Id.}
\item \textsuperscript{185} \textit{Id.}
\end{itemize}
The Tetris Effect gets its name from the 1980s computer game Tetris. Research showed that if a person played too much Tetris, it began to pattern their dreams, mental images, thoughts, visions, and even created hallucinations. It affected their reality so much that they began to see the world in terms of Tetris cubes. Tetris created a new mental disorder—the subjects saw falling Tetris blocks at night in the darkness. The subjects saw Tetris shapes everywhere—in the streets, in shops—and they imagined them falling and fitting together all the time.

Likewise, if somebody is fanatical about the crypto world, their objectivity regarding its value and the acceleration of acceptance of the crypto money in the real world can start to become all consuming. My concern is that the crypto fans may start to see crypto everywhere.*

Schubik’s Dollar Auction—a non-zero sum sequential game—illustrates the psychological effects of large groups influencing decision making. The subjects made irrational decisions playing the game. The game consisted of a one dollar note auction. The outcome during the experiment—with a large group—was that the average sale price for $1 USD note was $3.40 USD. Sometimes, it even went as high as twenty dollars. Why would anybody pay more than $1 for a $1 note?* Why would you pay above the market price?* Interviews showed that the participants were shocked by their own behavior and could not believe what they had done.*

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187. Sinicki, supra note 186.
188. Id.
190. See Earling, supra note 189; Sinicki, supra note 186.
191. See Bowles, supra note 185.
193. See ANDREW TREES, DECODING LOVE: WHY IT TAKES TWELVE FROGS TO FIND A PRINCE AND OTHER REVELATIONS FROM THE SCIENCE OF ATTRACTION 162, 164 (2009); Shubik, supra note 192, at 111.
195. See TREES, supra note 193, at 163.
196. Id.
197. Id.; see also Shubik, supra note 192, at 111.
There are dozens of new and ongoing ICOs popping up each month. If something is a trend, then it is boosted in the market. Every month there is a hip, new designer drug that teenagers want to try. These trends come and go, just like in the ICO cryptocurrency world. They come out of nowhere and can fly away with the wind.* Anything can happen and sometimes amazingly good things happen.*

Cryptocurrencies, in general, are extremely closed systems, yet are still affected by things externally. The buying and selling price of cryptocurrencies influence the exchange rate. Currencies can also be influenced by a solar eclipse, a surprise statement by the prime minister or president, a rise in unemployment rates, a state sanctioned ban, blogs, video blogs, extreme weather, terror events, export data, import data, unemployment data, crude oil prices, gold prices, house prices, Gross Domestic Product, Good Manufacturing Product, interest rates, and natural disasters—in fact the list is endless!

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199. See Ariane Wohlfarth & Wolfgang Weinmann, Bioanalysis of New Designer Drugs, 2 BIOANALYSIS 965, 965–66 (2010).

200. See id.


202. See Wohlfarth & Weinmann, supra note 199, at 965; DeNoon, supra note 201.

203. See DeNoon, supra note 201; Evolution of Blockchain and Cryptocurrency, supra note 5; Holmes, supra note 89.


We can see that there is a huge informational asymmetry among those who operate within the cryptocurrency world and those who do not.\textsuperscript{207} Those in cryptocurrency can overestimate it—dollar auction, Tetris effect, tiger beetle, trends—while those not in cryptocurrency do not even know on what they should even estimate.\textsuperscript{208} Anyone who is on the inside cannot be objective and will move together like bees with the same hive mind.\textsuperscript{209} Anyone who is on the outside does not even see the point of what is happening with cryptocurrencies.\textsuperscript{210} Traders and Information Technology guys are into it, but those outside the cryptocurrency bubble do not have a clue.\textsuperscript{211}

Right now, the scientific world and the investment groups are becoming interested in cryptocurrencies and blockchain technologies, but are still outsiders on the sidelines and aliens to the real inner workings of this mysterious digital realm inhabited by geeks, coders, gamers, and bitcoin miners.\textsuperscript{212} We need a more critical scientific approach; however, is there anyone who understands cryptocurrency and can observe it impartially and objectively?\textsuperscript{213}

V. CONCLUSION: LEGAL COMPLEXITY VERSUS SIMPLICITY—BACK TO THE STONE AGE

As we looked at earlier, the legal term for cryptocurrency spans from legal tender to intellectual property in different jurisdictions.\textsuperscript{214} However, the online-pebble-stone analogy is still a good mechanism to see through the murky cryptocurrency mysticism.*

Think about this: Even though cybercrime does not occur in a physical space, nor does defamation; these are still real events that just occurred in virtual reality—from a legal perspective.\textsuperscript{215} The cyber label

\begin{thebibliography}{9}
\bibitem{207} Kaminska, supra note 185.
\bibitem{208} See Shubik, supra note 192, at 109, 111; Friedlander, supra note 176; Kaminska, supra note 185; Sinicki, supra note 186.
\bibitem{209} See Shubik, supra note 192, at 109, 111; Kaminska, supra note 185; Sinicki, supra note 186.
\bibitem{210} See Shubik, supra note 192, at 109, 111; Kaminska, supra note 185; Sinicki, supra note 186.
\bibitem{211} See Bowles, supra note 185.
\bibitem{212} See id.
\bibitem{213} See id.
\end{thebibliography}
simply marks the space of the committal. The space—cyberspace—of the crime should not mislead us because it is related only to the question of where. Of course, cyberspace does not nullify the crime or the violation; it is merely a subcategory of the crime. It actually means that these acts will occur in front of a bigger potential audience.

Similarly, if we execute a contract online, the agreement will still be an agreement even though we do not have it in a paper-based form. Likewise, most money now in existence that is circulating in the central banking system is actually digital. The truth of the matter is that we are living in an increasingly paper cash free world already—just not yet a decentralized, cryptocurrency one.

As far as I see, the different jurisdictions—cultural, political, and even religious backgrounds—have greater significance to the categories of crime, defamation, libel, or slander than any cyberspace factor.* We can classify cryptocurrencies based on legal terms; however, because new legislation almost certainly will be rolled out in the future, that legislation will quickly make it all up to now obsolete—or at best, extremely out of date and irrelevant. In fact, it might even be amusing to look back in the future at articles, such as this, about the first legal classifications of the cryptocurrencies during the years between 2009 and 2017.* Now, there is a thought.*

Furthermore, the legal classification of cryptocurrency depends on the legal situation. Like a house, cryptocurrency can be subject to a lease,
a land registry process, a tax process, and a mortgage, etc. Cryptocurrency could potentially be classified as a legal claim in case of an obligation, income in a tax-related situation, collateral security, or credit in other cases, etc. The legal minefield here is daunting to say the least.

A. Gold, Diamonds, and Entropy

Entropy is a physics term, related to order and disorder. The highest entropy is the greatest diffusion. Put it this way: A gold bar means low entropy—the wealth is concentrated into a gold bar, instead of spreading itself universally. The gold bar represents a very strong material density. A few gold bars may represent—and be equal in value to—a substantial piece of land, a property, ten years of constant hard labor, and thousands of USD.

In other words, gold represents a huge density of space and time: One gold bar equals ten years of labor—time expanse—and one small gold bar equals three acres of land—space expanse. The entropy here is very low, the value is extremely concentrated. Diamonds show extremely low entropy as well. Its density value is even higher than that of gold.
The cryptocurrency can represent more value than platinum, gold, diamonds, or anything else in the material world.* The cryptocurrency has the highest value in the material world: Approximately 1 mm³ and 0.1 g of 1/CID1774 unit of bitcoin. As far as I know, the cryptocurrency represents the lowest entropy and density in the material world.238

It represents huge value and small expanse size.240 The black hole has infinite density and almost zero expanse.241 It means we are close to diabolical singularity.242

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236. See Bitcoin Price History Chart, supra note 154.
237. Id.; see also Stanczyk, supra note 166; What Backs Bitcoin?, supra note 206.
239. Black Holes and Wormholes, supra note 237.
240. See Entropy (Order and Disorder), supra note 227.
242. See Black Holes and Wormholes, supra note 237. “In the centre of a black hole is a gravitational singularity, a one-dimensional point which contains a huge mass in an infinitely small space, where density and gravity become infinite and space-time curves infinitely, and where the laws of physics as we know them cease to operate.” Id.
B. **Investment Versus Money—The Nest Egg Era?**

It is clear that cryptocurrency has a value and as we saw, the real question is: Can we use it as a form of money because of its huge exchange rate movements? Because of the exchange rate movements, investors like it. If it did not have such huge exchange rate fluctuations, would anybody be interested in it? We see the accumulation feature, as well, with burgeoning cryptocurrency investment portfolios.

Akos—a friend of mine—thinks, “I do not pay for my petrol at the gas station with cryptocurrency, rather I hide it in my safe deposit box, as it would be the new online gold.” The investors say it could be a good, long-term investment which is not necessarily a barrier of the money function.

So, we are back at the beginning. What we see now is the potential of the, as of yet, unused block-chain technology. If the market really starts to use it, healthcare, social media, tech companies, electoral voting, arbitration and legal documents—intellectual rights, copyright, land leases, wills and testaments—would mean it would move up to another level. What are the implications of that? Nobody knows, but in all likelihood, they will just be as paradigm shifting on a mass scale.

The cryptocurrency can spread like our fertile poppy seeds; however, we do not know exactly which cryptocurrency it will be and where it will first spring up from. The Holy Script says: “Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal.” Storage can be hacked, the thieves can steal the private key and the cryptocurrency, and rust and pestilence can destroy the

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243. See Bierer, supra note 9, at 87, 90.
244. See id. at 83, 87.
247. See Banking Is Only the Beginning: 36 Industries Blockchain Could Transform, supra note 225.
248. Id.
249. See If the Animals Were Alive Forever, supra note 131; Shen, supra note 39.
250. Matthew 6:19 (King James).
hardware. One of the main sins appears, as well, because of profit maximization. From a religious perspective, cryptocurrency is mammon, money, and an asset. From a business perspective, cryptocurrency is money, security, and an asset. From a legal perspective, it is digital money, a property right, a security, and an asset—a coin with many sides. From a social-psychological perspective, it is money—an online pebble stone.

VI. CONCLUSION

This article is mainly my philosophical musings on cryptocurrencies and the fact that someday they may well replace—or semi-replace—the fiat-based currencies that dominate the world today. The threats are well known and serious—as well, so called dot-com crises, privacy issues, the crypto-fiat convertibility, the governmental interventions, the public and market sentiments, and so on.

All cryptocurrencies were launched after the financial crisis of 2008. So far, they have not had to survive any serious crisis events. So, we cannot know how they will behave. How might a new species cope under unusual circumstances? We cannot know how closely they are bound up to the movement of the exchange rate of fiat currencies, share prices, and other financial instruments. The variables are mind-boggling. Or, will they manage to operate independently and move in the opposite direction of the other markets?


254. See Bierer, supra note 9, at 89–90.

255. See id. at 93–94; McKenna, supra note 8.

256. See Gilliland, supra note 81, at 1.

257. See Bolt & van Oordt, supra note 1, at 1; Bajpai, supra note 66; Bustillos, supra note 72.

258. See Bustillos, supra note 72.
A. Final Musings on Cryptocurrency in Simple Summary Form

i. Cryptocurrency has a value—whether it is a property element or asset—it is mammon.259

ii. Cryptocurrency can satisfy receivables and obligations, which is the most relevant function of money.* It means we can pay our debts and obligations with it.260

iii. Cryptocurrency is a unit of account in economic terms.261

iv. Cryptocurrency is close to the features of intellectual property rights and securities.262

v. Cryptocurrency is transferable, liquid, and semi-quickly convertible to a fiat currency—or other items of value—with relatively low costs.263

259. See Bierer, supra note 9, at 89–90; Bolt & van Oordt, supra note 1, at 1.
260. Bolt & van Oordt, supra note 1, at 3.
261. Id. at 9.
262. See DiGiacomo, supra note 215.
263. See Bolt & van Oordt, supra note 1, at 3.