XVIII. Freedom of the Nodes

"The following things are by natural law common to all—the air, running water, the sea, and consequently the seashore. No one therefore is forbidden access to the seashore"
~Institutes of Justinian

When Pope Alexander VI in 1493 divided the newly discovered lands outside Europe between Portugal and the Crown of Castile along a meridian 370 leagues west of the Cape Verde islands, he undoubtedly believed he had the authority to do so. The Portuguese empire's subsequent claim to all oceans east of this demarcation line was understandable. However, this decision would, inevitably, lead to confrontations with all the other peoples living on this planet who had claims and interests. Moreover, it contradicted the well-established concept of free use of the oceans in what was then known as the law of nations.

The fiercest opposition to the papal bull would come from other European colonial powers. The Dutch empire had started exploring the world, sending its ships across the globe. This led to the famous confrontation in the Andaman Sea between a Dutch ship and a Portuguese one. The Dutch claimed self-defense, and the Portuguese claimed jurisdiction over all the oceans. In the ensuing legal disputes, a body of knowledge was developed that came to be known as Mare Liberum (the freedom of the seas), acknowledging the common use of the oceans for all nations. This concept survives to this day as 'freedom of the seas,' one of the mainstays of international law.

Five centuries later, another small group of European-based institutions is claiming jurisdiction over a foundational aspect of the law of nations: property rights and free exchange. They are aiming to control financial transactions, including those using innovative blockchain systems such as Bitcoin. As it happens to be, the sixteenth-century critiques of the overly ambitious Iberian empires can be directly applied to today's equally ambitious global regulators.

§ 18.1. The Freedom of the Seas

The intellectual foundation for the freedom of the seas can be found in the work of Hugo Grotius. *The Laws of Prize and Bounty* contains a chapter called *Mare Liberum* that provides four reasons why the seas should remain open to all:[1]

- Access to all nations is open to all, not merely by the permission but by the command of the law of nations.
- Infidels cannot be divested of public or private rights of ownership merely because they are infidels, whether on the ground of discovery, in virtue of a papal grant, or on grounds of war.

1 Grotius, "*Commentary on the Law of Price and Bounty,*" (2006), Chapter XII, page 96.

- Neither the sea itself nor the right of navigation thereon can become the exclusive possession of a particular party, whether through seizure, through a papal grant, or through prescription (that is to say, custom).
- The right to carry on trade with another nation cannot become the exclusive possession of a particular party, whether through seizure, or through a papal grant, or through prescription (that is to say, custom).

1) Rights at Open Sea

In the existing state of affairs, Grotius argued, it has come to pass that one nation supplies the needs of another. Consequently, anyone who abolishes this system of exchange abolishes the highly prized fellowship in which humanity is united. He destroys the opportunities for mutual benefactions. In short, he does violence to nature herself. Therefore, the right to engage in commerce pertains equally to all peoples. How unjust then, asked Grotius, was the situation in which persons desirous of commerce with peoples who share that desire are cut off from the latter by the intervention of men who are not invested with power either over the said peoples or over their trade route? Access to all nations is open to all, not merely by permission but by the command of the law of nations.[2]

People need trade for survival. If they wish to engage in trade, they have the right to do so. More crucially, the networks of trade—in this case the open oceans—must remain open for everyone to use for their benefit. These principles equally apply to digital waterways, which in a short time have become as vital for facilitating commerce and providing humanity what it needs to flourish as the open seas.

2) Rights of Infidels

One of the arguments raised by the Portuguese was that their authority over the seas was granted by the pope and thus came directly from God. Grotius, on the other hand, claimed that the pope could not have made such claims because the land was clearly occupied and divided into property before this declaration. Moreover, the Church could not claim jurisdiction over those it, at the same time, labeled infidels. Infidels cannot be divested of public or private rights of ownership merely because they are infidels, whether on the ground of discovery, in virtue of a papal grant, or on grounds of war.[3]

Speaking of the rights of infidels is indicative of the paternalistic attitude of European empires at the time. Unfortunately, this paternalistic mentality lingers. The broader definition of infidel extends beyond those who do not follow the Christian faith. It can mean “one who doubts or rejects a particular doctrine, system, or principle.”[4] AML legislation is produced in Europe by a small group of regulators. In its guidance on cryptocurrencies, the FATF specifically orders its stakeholders to identify and scrutinize transactions involving jurisdictions “lacking in regulation, supervision, or appropriate controls” (as determined by the FATF).[5] In practice, anyone must follow the modern

2 Ibid., Chapter XII, Thesis I, [Author: summary of various sections].
3 Ibid., Chapter XII, Thesis II, [Author: summary of various sections].
4 “*Infidel,”* (The Free Dictionary), accessed on May 6, 2024, https://www.thefreedictionary.com/infidel
5 FATF (2021), page 40:
“*In addition to P2P transactions, the FATF has identified other potential risks which may require further action, including; VASPs located in jurisdictions with weak or non-existent AML/CFT frameworks (which have not properly implemented AML/CFT preventive measures) and VAs with decentralised governance structures (which may not include an intermediary that could apply AML/CFT measures). These risks may require countries or*

AML and global governance faith or face restrictions in their use of the financial system and the digital waterways. Entire nations are currently cut off from engaging in transactions with the rest of the world. Moreover, various cryptocurrency initiatives exist in jurisdictions without supervision or controls, such as in South African slums,[6] because people lack access to basic financial services. If we pursue the FATF logic to the end, these people are not in compliance with AML standards. If they succeed in piecing together a payment system, South Africa will be expected to clamp down on it or risk having the entire nation cut off from international payment systems and funding. History has shown that the imposition of AML controls has had an impact on access to and the availability of financial services in developing countries.[7] In short, what is emerging is a globally connected system where everyone must play by rules set in places like Paris and Basel or be excluded.

Are there no similarities between a declaration of the pope and one from the FATF or the OECD? Is international law the new gospel? Should a small group of European regulators determine the conditions of transactions for people around the world and control the technologies they can use to make these transactions? If we accept this, the current financial system is no better than fifteenth-century religious colonialism.

3) No Ownership, No Jurisdiction

Let us ascertain, asked Grotius, whether the Portuguese were able to bring the sea, matters of navigation, or the conduct of trade under their own jurisdiction. The answer is no. The sea, since it is as incapable of being seized as the air and cannot have been attached to the possessions of any particular nation. A ship sailing over the sea no more leaves behind itself a legal right than it leaves a permanent track. Neither the sea itself nor the right of navigation thereon can become the exclusive possession of a particular party. And what shall we say, Grotius continued, of one who obstructs merely navigation upon those waters, despite he himself suffering no loss in consequence of such navigation?[8]

The same logic applies today; decentralized financial technologies are not owned by one person. Moreover, they are not owned or controlled by residents of any single state. In fact, they cannot be owned or controlled by people living under one jurisdiction. As such, no single state or supranational organization can claim jurisdiction over all ‘nodes’ in a decentralized network. They serve the benefit of all humanity, without favor or judgment.

Additionally, the emergence of decentralized networks has resulted in decentralized assets. States have demonstrated their recognition of basic property rights through their eagerness to tax these

VASPs to identify VASP- or country-specific risks and implement specific safeguards for transactions that have a nexus to VASPs and countries lacking in regulation, supervision, or appropriate controls based on these risks.”

6 Vivier, Hermann, “*Bitcoin Ekasi: The Township One Year Later, Modeled after Bitcoin Beach, a South African township attests to the opportunities of a bootstrapped bitcoin economy,”* (Bitcoin Magazine, Aug 16, 2022), accessed on May 6, 2024, https://bitcoinmagazine.com/culture/bitcoin-ekasi-township-one-year-later

7 Bester, H., Chamberlain, D., de Koker, L., Hougaard, C., Short, R., Smith, A., and Walker, R., “*Implementing FATF Standards In Developing Countries And Financial Inclusion: Findings And Guidelines,”* (G:ENESIS, Washington, D.C. May 2008), page vi:
“*The imposition of AML/CFT controls can and did have an impact on access to and usage of financial services in the countries concerned. The most vulnerable clients are those who lack the prescribed identification documents, undocumented migrants and clients of institutions (such as money services businesses) whose links with formal financial institutions are severed for AML/CFT reasons. AML/CFT controls also tend to increase transaction costs which can cause financial institutions to withdraw from low-value transactions and client markets using these.”*

8 Grotius, “Commentary on the Law of Price and Bounty,” (2006), Chapter XII, Thesis III, [Author: summary of various sections].

assets. But property rights work both ways. With the right to tax comes the duty to protect these assets—especially from those operating outside of the social contract. After all, one foundational task of the state is to facilitate the peaceful division and transaction of property. Following Grotius's reasoning from five centuries ago, what shall we say of those who obstruct the free use of property they neither own nor have jurisdiction over? At what point did property rights become conditional on the ideologies and policies of foreign actors?

4) Right to Trade

Under the law of nations, Grotius said, the following principle was established: that all men should be privileged to trade freely with one another, and they may not be deprived of that privilege by any person. Since the need for this principle existed as soon as distinctions of ownership had been drawn, it is clearly ancient in origin. After all, Aristotle already acutely observed that barter supplies what nature lacks to properly meet the needs of all men. And because distances between regions prevented men from using many of the goods desirable for human life, this process of barter was devised in order that one person's lack might be remedied by means of another person's surplus. Therefore, according to the law of nations, the privilege of barter must be common to all. As such, the right to carry on trade with another cannot become the exclusive possession of a particular party, whether through seizure, through a papal grant, or through prescription (that is to say, custom).[9]

It is a well-established fact that the rights to private property and its exchange are unalienable rights. Any state not honoring the property rights of individuals and their right to free exchange is operating unlawfully under natural law. It undermines its own legitimacy, because what good is a state that cannot protect the basic rights of its citizens? Whether a state operates alone, in cooperation with others, or on account of a higher ideal makes no difference.

The use of technology and the management and exchange of property are essential to human life. No single person in modern society owns all he needs to survive. Using technology and regulations to restrict commercial transactions can be considered as much an attack on private property as an attack on life and liberty itself. Just as no single party should be allowed to deprive humanity of the use of electricity, telephones, refrigerators, or email, no single party can be allowed to restrict open-source technology used for voluntary transactions. To think one is entitled to do so is no different from a pope claiming divine authority to divide the entire world into the property of two men.

§ 18.2. Liberating Decentralized Networks

The Portuguese wanted to restrict access to the oceans for all other vessels but their own. Hidden behind the arguments of spreading the one true faith were the real motives of money, power, and control. After all, the next step was of course the levying of tax on all trade crossing this liquid territory. Forcing the use of a debt-based monetary system on the world at interest while restricting transactions that challenge this monopoly represents a similar form of colonialism. Although this time it was not forced upon specific peoples but upon humanity in its entirety and at its core.

There is also the issue of practicality. No country could claim jurisdiction over the sea without forcefully limiting the trading rights of all other nations. Restricting access to digital payments to

9 Ibid., Chapter XII, Thesis IV, [Author: this paragraph is a summary of various sections, including a quote by Aristotle].

only approved methods and approved purposes violates many foundational rights, including basic property rights and rights to trade, privacy, and freedom of association. These policy objectives can only be enforced through tyrannical laws and enforcement infrastructure, which we see being developed around us.

At their core, accessing and using decentralized networks are rights that should be available to everybody. One small group of European regulators should not have blanket authority to restrict property rights and the right to free exchange. They may be delegated limited authority for standard-setting to facilitate trade and voluntary interaction across borders but not much more.

As with the open sea, men cannot possess any rights in decentralized and open-source technologies beyond those related to common use. This remains a practical reality. Even if governments aim to regulate a decentralized network that is free to access and based on open-source code, they would not be able to do it. Establishing unenforceable laws results in endless controversy—something law should aim to prevent. Banning the use of novel decentralized technology rivals banning the printing press or sailing over the ocean—both of which would be megalomaniacal, unjust, and ultimately unenforceable.

I propose to apply the concept of the freedom of the seas to decentralized networks. At its core, no small group of people can legitimately restrict technology. I call upon all states and institutions to recognize that the benefits of free transactions and trade outweigh the interests of established financial powers with their outdated systems and globalist policy objectives. The use of these beneficial technologies should be recognized as unalienable rights of all human beings. This concept shall be known as Freedom of the Nodes (FotN).

Practical Considerations

The 1982 Law of the Sea Convention (LoSC) confirms that all states enjoy the freedoms of the high seas[10] and that no state may subject any part of the high seas to its sovereignty.[11] Ships of all states enjoy the right of innocent passage, not just on the open seas but even through territorial waters.[12] The freedom to navigate the open seas is an unalienable right. The same applies to the navigation of decentralized networks.

This modern regulatory framework further suggests how to treat property rights when no single jurisdiction has the authority to assign them, as is the case with, for example, land rights. One approach is to treat crypto tokens, such as those mined on the Bitcoin network, similarly to seabed resources. No one can claim or acquire territory on the deep seabed or rights to its resources. According to the LoSC, these are “the common heritage of mankind.”[13] It explains that “no state shall claim or exercise sovereignty or sovereign rights” over any part of the deep seabed or its resources.[14] However, under certain conditions, minerals can be extracted and alienated.[15] The main lesson is that there is precedent for property rights emerging from a jurisdictional void and belonging to asset holders, who may then transfer those assets freely.

10 United Nations, “*Convention on the Law of the Sea,”* (Montego Bay, 10 December 1982), Art 87.
11 Ibid. Art. 89.
12 Ibid. Art. 17.
13 Ibid. Art. 136.
14 Ibid. Art. 137, 1.
15 Ibid. Art. 137, 2 & 3, [Author: the LoSC states that minerals can only be extracted in accordance with various regulations and procedures of the International Sea Bed Authority. The reason for this is to prevent disputes and unfair advantages of developed countries, and to account for environmental considerations and an equal distribution of wealth.]

There is, however, one area where the open seas and decentralized networks differ. Participants in blockchain technology do not go anywhere when they go online; they do not move out of their jurisdiction. The open seas, on the other hand, consist of real places on Earth that are beyond state jurisdiction. To prevent activity at sea from being exempt from laws, every ship is required to have a nationality. States have jurisdiction over ships flying their flags on the high seas, and they may apply their laws (such as tax and criminal laws) to all on board irrespective of their nationality.[16] Such registration arrangements are not needed on decentralized networks, since all participants themselves remain under existing laws.

FotN concerns itself not with altering existing laws or establishing rules to prevent conflict of law. It establishes a decentralized, abstract source of property rights. The state's main task is to protect these rights. Naturally, states can apply additional rights and duties, such as tax laws, to persons under their jurisdiction who own such assets. FotN merely ensures that ownership and transactions in decentralized assets remain available to each human being. Liberty in code, protected by liberty in law. It guarantees ownership and transactional rights on decentralized networks. It is the practical implication of the inalienable rights to own, use, and exchange property and transact freely in a medium of exchange of choice—and thus express one's free will across the globe.

FotN further helps explain specific kinds of transactions unique to the blockchain: transactions without a known counterparty. This dynamic comes into play with atomic swaps or DeFi. In these cases, the owner of an asset transacts with the network by using a smart contract to exchange one type of crypto asset for another. There is no need to involve the law, since the network secures these transactions, and individuals using this network do not need to be protected from themselves. Much of the traditional investor protection legislation has become unnecessary due to the secure, open-source code and the absence of third-party risk.

Methodology

There are those who believe they must protect the world from the blockchain's dangers. However, the network's design provides its own protection. In those areas where open-source code and math govern, oversight is no longer needed. When governments and regulators accept this reality, we can have a mature discussion about what requires regulation and what does not.

In practice, like the Portuguese claimed jurisdiction over the open sea, states and international regulators claim jurisdiction over access to (decentralized) technologies. This process is understandable since the crypto space has been rife with scandals. However, most serious violations were committed by specific actors who engaged in activities already prohibited by law—not by the technology or the decentralized networks themselves. What is needed, then, is a way to distinguish between proper decentralized networks and those hiding scams and unlicensed financial activity behind a veil of technological jargon. The first category can operate freely and does not need regulation, while existing regulations govern the second.

For decentralized networks to fall under the FotN, they must satisfy four criteria: contain native assets, be governed by open-source code, be sufficiently decentralized, and be free and accessible to all.

16 Ibid. Art. 92 (1) and Art. 94 (2b)

Containing Native Assets

The native asset requirement limits FotN to asset-based decentralized networks. The requirement that assets be native means they must exist independently of rights and duties defined by any single jurisdiction's legal system—*as this would undermine decentralization*. Only assets free from regulatory and third-party risk can provide a foundation for a truly decentralized network. This ensures a neutral base for the digital economy. One where applications—each having its own set of unique rights and duties—can be built on top without being hindered by legal uncertainty at the base layer.

Governed by Open-Source Code

Open-source code benefits everyone by allowing common ownership and universal use. It allows for the cooperation of large numbers of people along uniform standards in a democratic and voluntary way. Anyone can download the decentralized network code and submit suggestions for improvement. Because no single person owns open-source code, it cannot fall under one jurisdiction. This is crucial to prevent legal uncertainty for participants of the network.

Decentralized networks should be (largely) governed by code, not by one person or even a few persons. Governance by code means a protocol runs according to fixed parameters, where only limited changes are possible that require acceptance from network participants to take effect. A network governed by code can therefore not be adjusted to the specific rights and duties associated with a single jurisdiction.

Sufficiently Decentralized

The term *sufficiently decentralized* was used in an official capacity by William Hinman of the Securities and Exchange Commission in the U.S.

He summarized it as a token or coin whose purchasers would no longer reasonably expect a person or group to carry out essential managerial or entrepreneurial efforts.[17] He hinted at the inability to establish and enforce jurisdiction over decentralized networks due to the lack of legal personality of the network itself and the absence of key persons needed to run the network. Building on this, sufficient decentralization demands that the technology forms a network wherein the following applies:

- No single person or identifiable group controls access to the technology.
- No single person or identifiable group carries out essential managerial or entrepreneurial efforts.
- No single person or identifiable group can restrict specific transactions or exclude specific persons.

Universally Accessible

The technology supporting the decentralized network and its transactions must be publicly available through standard consumer devices, without discrimination or special permission. All

17 Hinman, William, "*Digital Assets Transactions: When Howey Met Gary (Plastic), Remarks at the Yahoo Finance All Markets Summit: Crypto,"* (Securities and Exchange Commission, San Francisco, CA, June 14, 2018), accessed on May 6, 2024, https://www.sec.gov/news/speech/speech-hinman-061418:
"*as a network becomes truly decentralized, the ability to identify an issuer or promoter to make the requisite disclosures becomes difficult, and less meaningful."*

software required to support or use the network must be freely downloadable via the Internet. Any person may use the code and network to create applications for private or public purposes. Access control introduces third-party risk, resulting in specific rights and duties and thus attracting the law. A decentralized network should be available for use, without conditions, for every human being.

The resulting FotN principle was published on February 27, 2025, on the Ethereum blockchain.[18] Explanations of its use are found on GitHub.[19] A PDF version was published on the InterPlanetary File System under its author's name and an open-source license.[20]

18 "*Contract 0x4A4b427c7C5417e6C50999ab546064b751e0365b,*" (Etherscan, Feb-27-2025 07:05:23 AM UTC), https://etherscan.io/address/0x4A4b427c7C5417e6C50999ab546064b751e0365b

19 "*Freedom of the Nodes,*" (Github, March 13, 2025), accessed on March 13, 2025, https://github.com/decentralized-law/freedom-of-the-nodes

20 "*Freedom of the Nodes,*" (IPFS, February 27, 2025), accessed on March 13, 2025, https://ipfs.io/ipfs/bafkreigrzc2rxfwsklzr3ayrqwxnnubsmmzgwrotjhojpny4lxxi6rmyvi