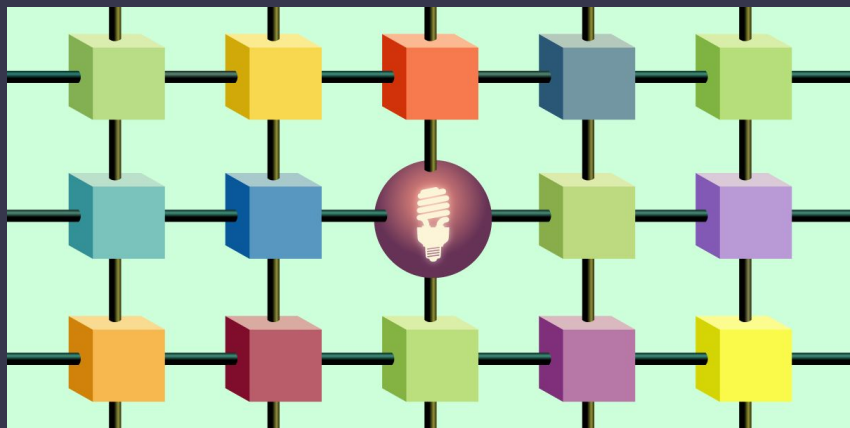


# **The Value of Cryptocurrencies In Supporting Human Rights**

Privacy and Free Expression

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Deputy Executive Director and  
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## The Electronic Frontier Foundation



- The leading nonprofit organization defending civil liberties in the digital world.
- Champions user privacy, free expression, and innovation through impact litigation, policy analysis, grassroots activism, and freedom-enhancing technologies.

Section 1

# Supporting Rights and Liberty

# How Cryptocurrencies Can Support Rights

Decentralized financial options can allow support for political, moral and cultural activities and viewpoints without a centralized point of failure.

- **Avoid Financial Censorship**
  - Centralized financial services subject to pressure to forbid lawful activities.
- **Protection of Privacy**
  - Privacy is a fundamental right necessary for other rights:
    - **Freedom of Expression**
    - **Freedom of Association**
    - **Due Process**
- **Enable Decentralized Web**
  - Enable competition and choice, avoid chokepoints

# Avoiding Financial Censorship

Decentralized financial options can help **avoid censorship**

- When financial institutions and payment intermediaries shut down accounts or inhibit transactions, it can have serious ramifications for **free expression online**.
- Online services rely on financial institutions to ensure they can continue to operate.
- Example: Wikileaks in 2010.
  - Cut off by Visa/Mastercard by political pressure.

# Avoiding Financial Censorship

People often express their political and social beliefs through financial transactions.

- **Membership in organizations**
  - EFF, ACLU, NAACP, NRA
- **Purchasing media**
  - Video, music, books
  - Magazine/podcast/channel subscriptions

# Avoiding Financial Censorship

Financial censorship persists to this day

- Overly restrictive policies can result in removal of speech that the government is prohibited from censoring.
- Financial censorship often prevents lawful but morally disfavored activities
- The Internet cannot be a true global forum for expression if communication and payment services operate as morality police.

# Why We Want to Protect Privacy

Privacy protects the ability to have and share political and social ideas.

“The right to be left alone—the most comprehensive of our rights, and the right most valued by civilized men.” *Louis Brandeis*.

- **The right to be left alone** protects autonomy
- Control over the **flow of your information** gives choice and consent.
- Privacy today **protects against dystopian future.**



# Privacy is Fundamental to Other Human Rights

Financial transactions can reveal deeply personal information (even if often misunderstood)

- Your organizational memberships can reveal your beliefs.
- The media you consume can reveal your social and political interests.
- Your medical expenses reveal information about your condition
  - Transactions for disfavored medical care can lead to prosecution
- Shopping history shows interests, and is often used to suggest intent.
- Anonymity protects unpopular views from the tyranny of the majority

# Protecting Privacy on Public Blockchain

Public ledgers can provide a roadmap to financial history once a wallet is associated with a particular person.

- Wallet allow for pseudonymous transactions
  - Not everyone can use them well enough to protect privacy
- Shopping history shows interests, and if often used to suggest intent and predictions.
- One solution: **Mixers**

Section 2

# Tornado Cash: Code is Speech



## What happened with Tornado Cash

- In early August, OFAC placed “TORNADO CASH (a.k.a. TORNADO CASH CLASSIC; a.k.a. TORNADO CASH NOVA)” to the SDN list.
  - List is usually for **entities**
- Github removed canonical repro, and accounts of three developers
- EFF represents Prof. Matt Green, who put a fork of the code back on Github.
- Free expression rights protect both Prof. Green and Github.
- Still unanswered questions.

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VHDHNVDA4GDJXNDUV0E83U

## Why this matters

- Cryptocurrencies, and blockchain in general, are expressed in code.
- Can express political and social ideas through code.
- Code has both function and expression.
- Recognizing code as speech was one of the key victories of the First Crypto War of the 1990s.
- Initial context was export regulation for Snuffle, an open source encryption program.

# What Courts have Said

## *Bernstein v United States*

“no meaningful difference between computer language, particularly high-level languages ..., and German or French ... Like music and mathematical equations, computer language is just that, language, and it communicates information either to a computer or to those who can read it.... source code is speech.”

## *Junger v Daley*

“The fact that a medium of expression has a functional capacity should not preclude constitutional protection.” Code, like a written musical score, “is an expressive means for the exchange of information and ideas.”



## Protecting Security Researchers' Rights in the Americas

## American Convention on Human Rights Protects Code

- In 2018, drawing on rights recognized by the American Convention on Human Rights, and examples from North and South American jurisprudence, EFF published this white paper.
- We argued that Article 13 of the American Convention protects code as expression.
- White Paper's focus on cybersecurity, but also applies more generally
- Link:  
<https://www.eff.org/coders-rights-americas>

# OFAC Response

## OFAC issued some FAQs

- Mere publishing OK
  - Prof. Green is clear.
- Dusting low priority
- Can apply to get funds out
  - Must give up privacy to do so

## Still open questions

- “Interact” is vague
- Contributing to the code?
- Publishing on the chain?
- Jurisdiction



# Legal Challenges

Coinbase is funding a lawsuit brought by six people challenging the U.S. Treasury Department's sanctions and asking the Court to remove Tornado Cash from the U.S. sanctions list.

This week, Coin Center, along with privacy-seeking workers, donors, activists, and public figures, also filed a lawsuit against Treasury to delist Tornado Cash

Lawsuits present similar issues, with different angles and stories, contending Treasury exceed authority, failed to consider privacy, and are stifling protected rights.

# Why it Matters: Open Source Requires Contributors

It takes a village to create and improve open source software.

- Research and development of software technology must be able to continue.
- Contributors must not be held responsible for any later unlawful use of the software merely because they contributed code.
- The very research and development may be the way to craft a system that helps with this situation
  - Create options to both protect privacy in digital transactions and allow for the enforcement of lawful sanctions.

# Why it Matters: Software Can Protect Rights

Privacy is not just a fundamental right itself, it enables other rights.

- All sorts of **privacy protective software tools are critical** to enabling your rights, like encryption (e2ee messaging, encrypted storage), anonymous browsing (Tor), anonymous servers (.onion), and file transfer (SecureDrop).
- Liability for making or contributing to software tools that might later be used for illicit things would have a **chilling effect on the innovation necessary for their development.**

# Together We Can Make a Brighter Future

- You can help chart the course for a future where technology will enhance our lives, and preserve the rights we hold dear.
- We have to make our future.
  - Get informed
  - Get your voice heard
  - Build privacy and civil liberties protections into your code
    - **Keep it secure and usable**
    - **Privacy by design**
    - **Decentralize**

# Thank you!

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