an introduction to Bitcoin

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outline

context

what is Bitcoin?

technical details

using Bitcoin

in the future. . .

context

context

- money

context

- money
- medium of exchange

context

- money
- medium of exchange
- fiat currency

context

- money
- medium of exchange
- fiat currency
- central banks

Bitcoin

- electronic *currency*

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- a distributed bank, kind of

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- *not* untraceable

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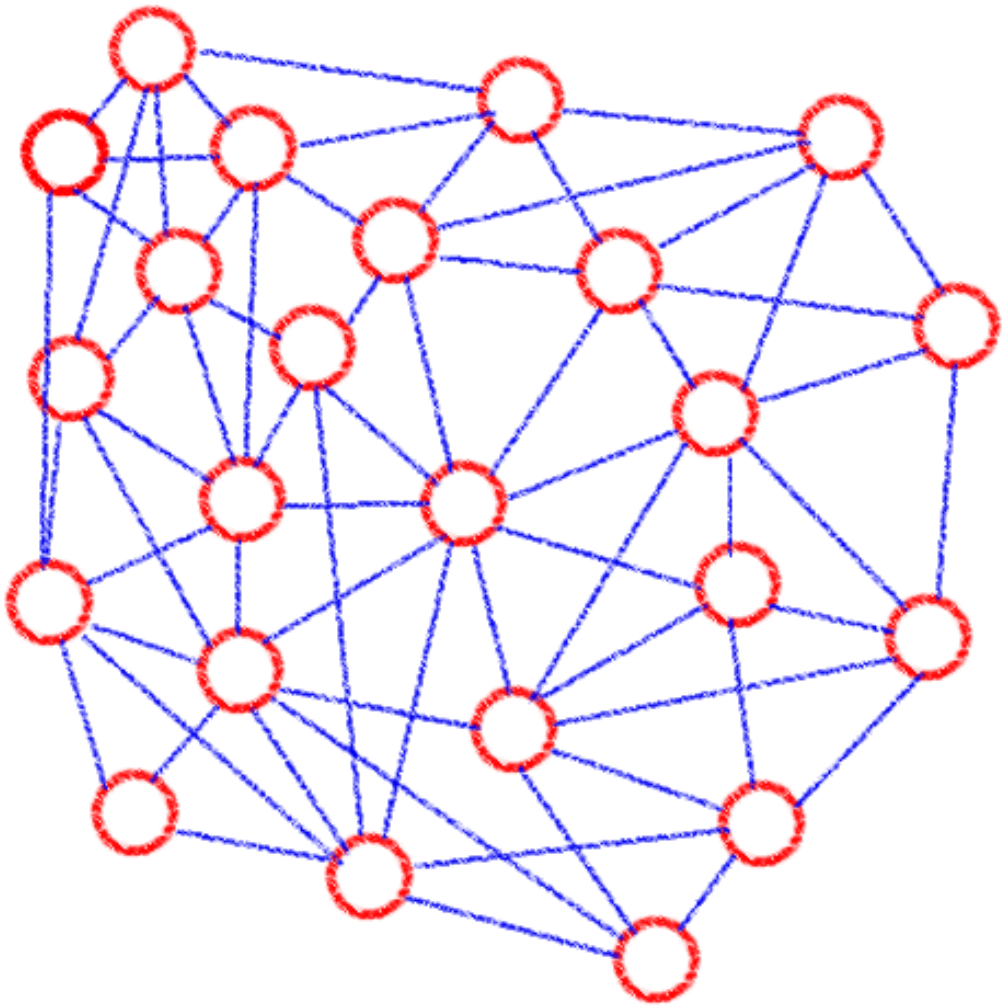
- *not* untraceable
- but anonymous
  - *if* you are careful
- limited long-term supply

now: technical stuff...

(distributed network, accounts, keys
transactions, blocks, mining)

the Bitcoin network



the Bitcoin network

- distributed network
- nodes connected via TCP/IP

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- broadcast transactions

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- nodes join/leave at any time
- request any info that they miss

accounts and keys

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- private key $=$ access to money

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- accounts are cheap

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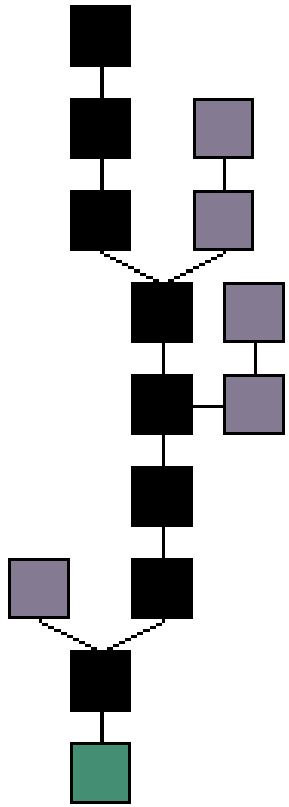

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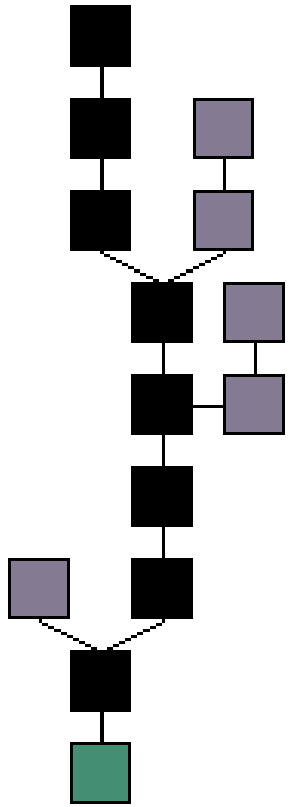

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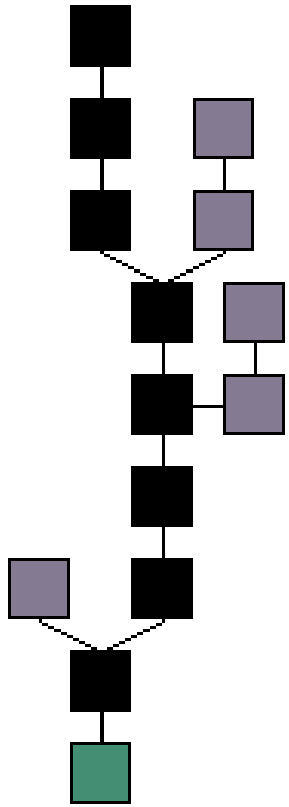

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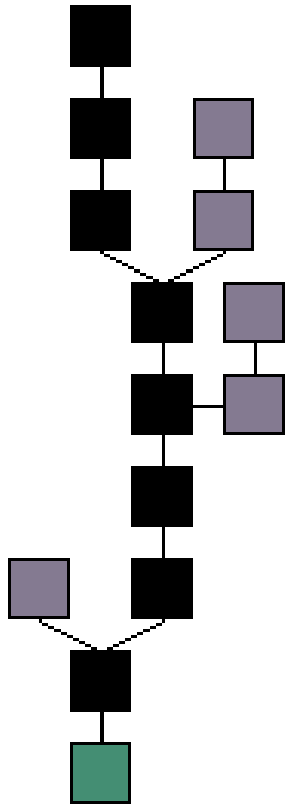
- first one wins
- $\longrightarrow$ “mining”



mining

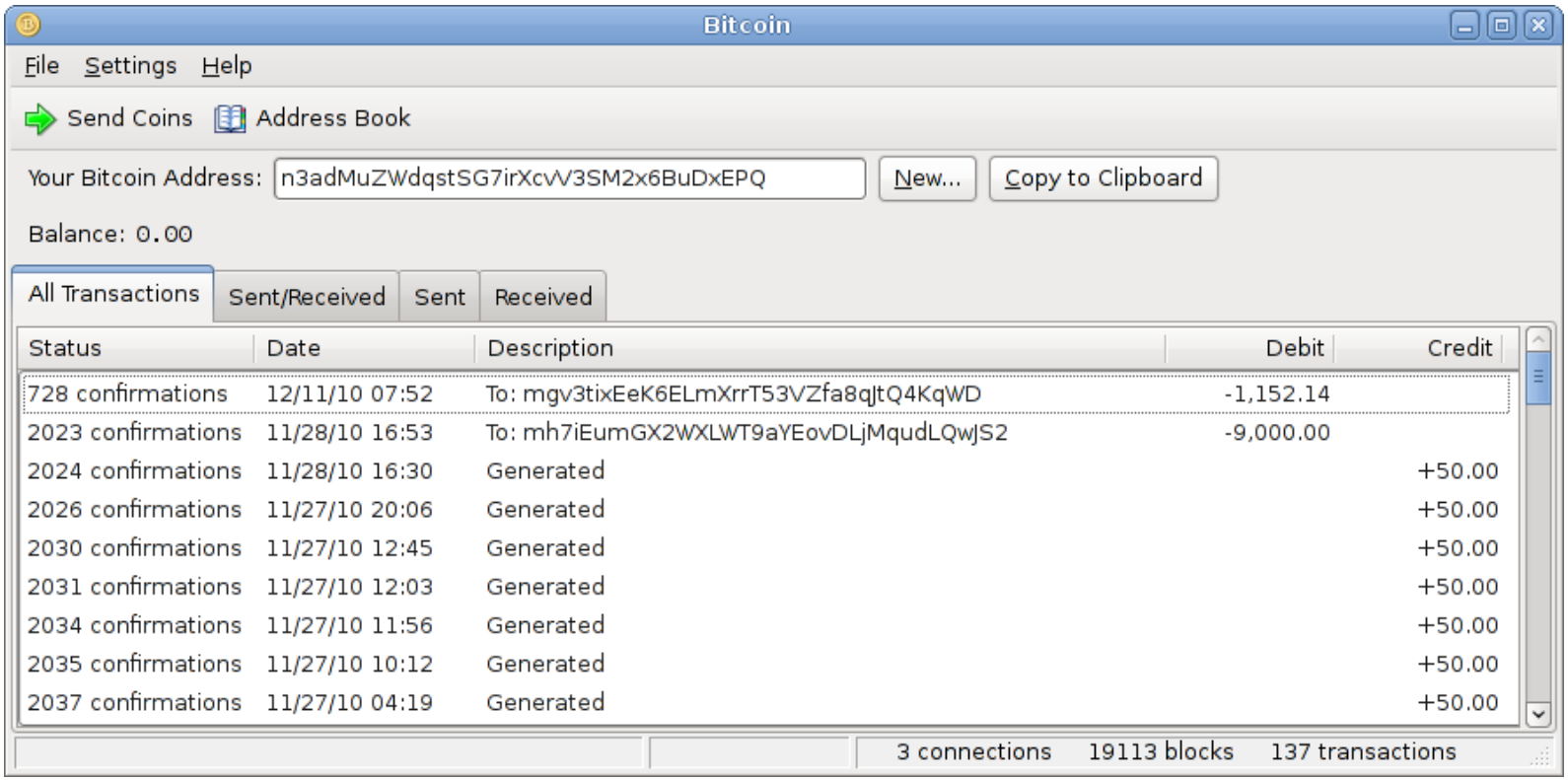
- blocks give money to their creator

mining

- blocks give money to their creator
- 50 BTC each right now
- less later
- but also *transaction fees*

using bitcoin

- Bitcoin client = wallet = network node



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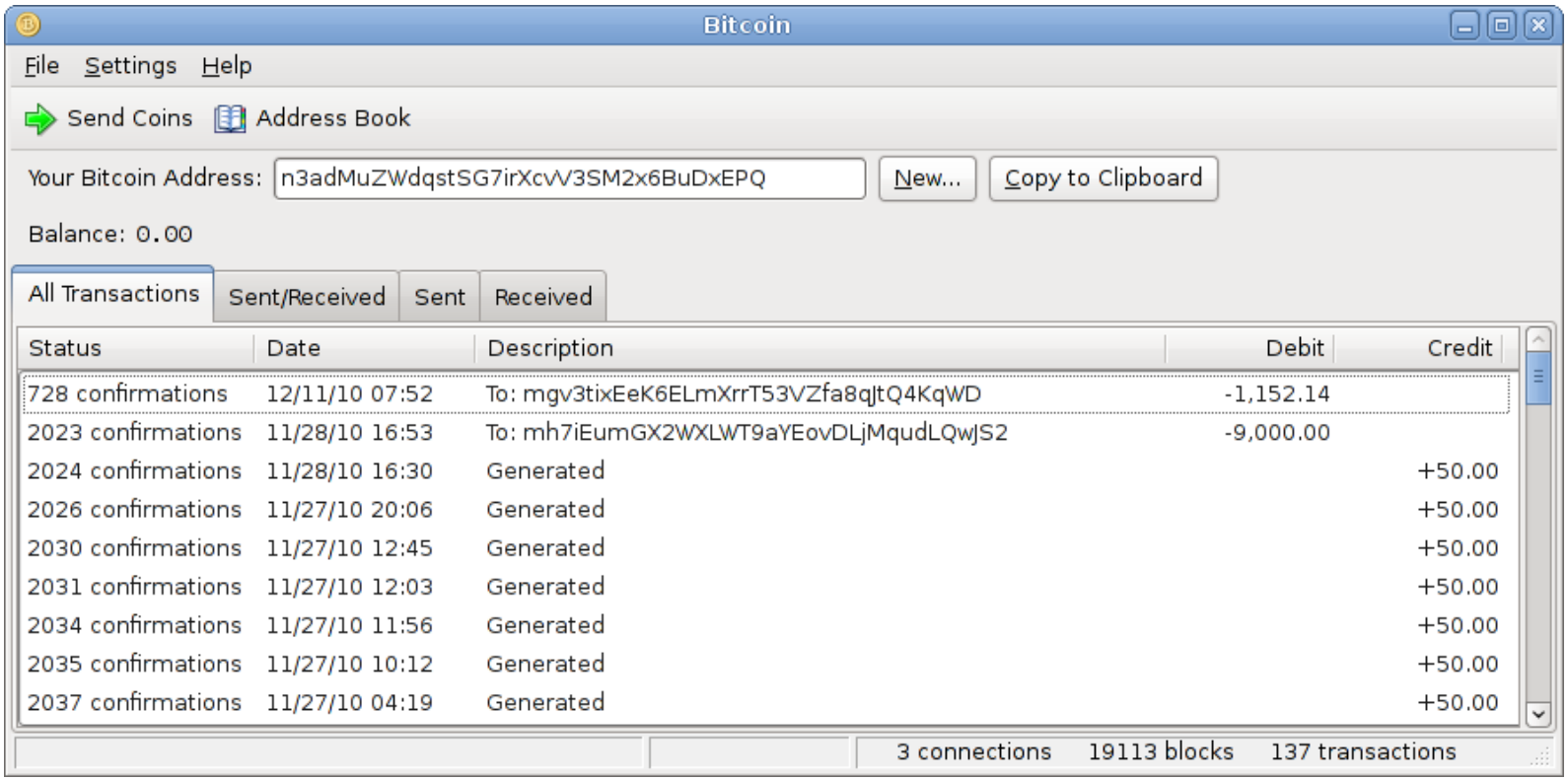

- or online wallet at `mybitcoin.com`

currency exchanges

trage BTC for USD/EUR/...

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- see the wiki for more.

merchants / services

buy stuff for BTC...

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- server hosting

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- server hosting
- books

merchants / services

buy stuff for BTC...

- server hosting
- books
- music

merchants / services

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- see the wiki for *much* more!

outlook

problems / challenges:

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- regulation

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- acceptance

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- deflation?

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- bugs, hacks, attacks

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the end

questions?

see also: `www.bitcoin.org`