Are Bitcoins Property?

An English law analysis of the creation and transfer of property rights in bitcoin

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Introduction / Overview

- Significance
- Unique Proprietary features of bitcoin
- English Property Law
 - Types of property
 - Exercising property rights
 - Methods of transfer
- Bitcoins Place in English Property Law
- Conclusion

Why property law matters

- Growth of virtual currencies
- Application of Blockchain technology
- Transfer of ownership
 - At what point does ownership / risk change hands

Insolvency & Intermediation

- EG: Mt Gox judgment (Bitcoin not capable of ownership)
- Law of trusts
- Intermediaries

• Protections of rights

- Right to use
- Rights to dispose of
- Rights to vindicate
- Right to encumber

Why Bitcoin is unique

Decentralized

- Open source record of ownership
- Entirely intangible but not processed by an central entity.
- Triple entry bookkeeping
- Multiple uses
- Public and private key cryptography
 - Control exercised very differently to any other asset
 - Record of ownership produced by the mining process

Exchange and control

- Wallets / exchanges
- Smart contracts

Types of property in English law

- Real vs personal property
- Personal property
 - Residual in nature everything that is not real property (Bridge 2002: 1)
 - Interests in tangible assets 'chose in possession'
 - Interests in **intangible** assets 'chose in action.'

Chose in action

- "a chose in action describes all personal rights of property which can only be claimed or enforced by way of action, and not taking physical possession." (Smith 2007: 24)
 - The (intangible) asset itself;
 - The rights or interest that arise in respect of that asset.

• Smith (2007: 37) provides a classification of '*choses in action*' under seven different headings.

Nature of the asset to which the rights relate	
Property arising out of a claim	Property in which rights are created
 Debts Shares Leases over land Rights under a contract Cause of action 	 Intellectual property Equitable rights

Transfer of Property Rights

- Assignment
 - when rights in an asset are assigned to another by agreement
 - Rights that are transferred not the asset itself
 - EG: assignment of rights under a debt.

Novation

- extinguishment of an existing agreement between two parties and the conclusion of a new contract (on the same terms) with a third party.
- Again, the transfer of rights (not the asset) by means of concluding a new contract.

• Negotiation:

• special types of instruments (Negotiable instruments) – given effect by statute

• Delivery:

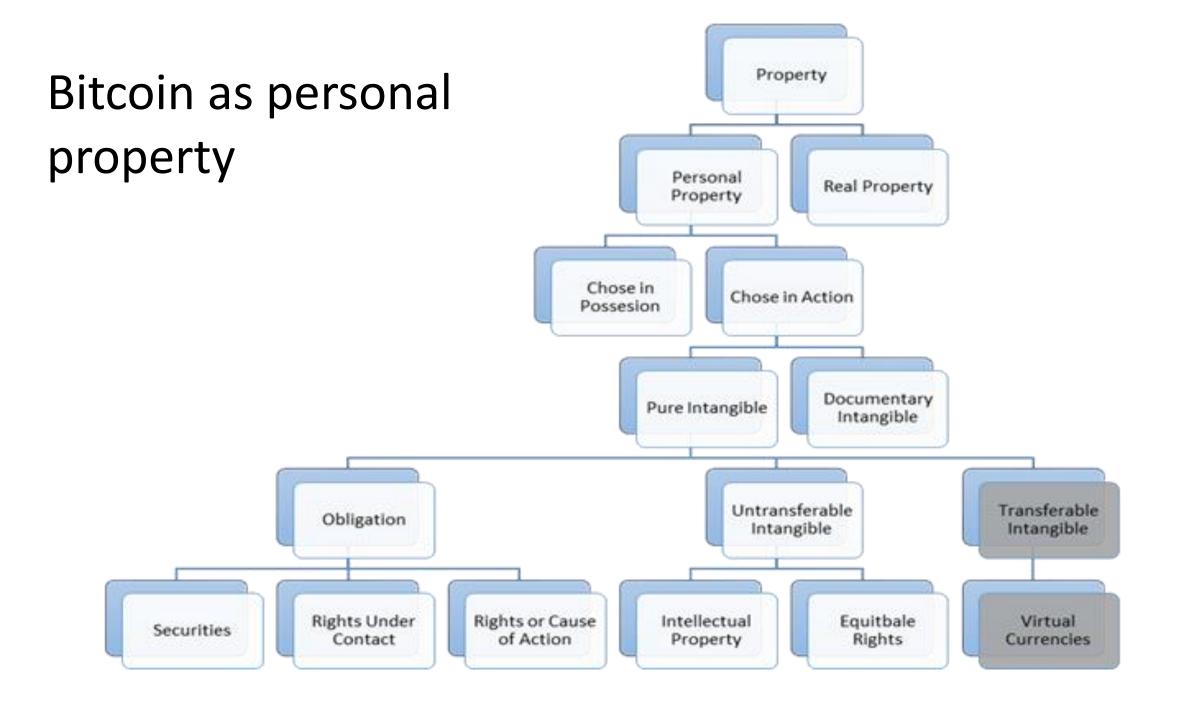
- surrendering of control over tangible assets
- Only applies to tangibles

• Transfer by register:

- how ownership of shares is transferred.
- Set of instructions passed to a central registry which then changes the registered owner: CREST in the UK Clearstream for the rest of Europe

• Credit transfers:

 transfer of money by means of issuing an instruction to debit one balance and credit another.



Bitcoin as Property

• (1) Residual nature of personal property

• Personal property is intended to capture all forms of property that are not real property.

• (2) Lex mercatoria

- Bitcoin is treated as property by commercial parties
- The lex mercatoria is a recognised source of common law. EG: negotiable instruments.

• (3) Comparison to other recognized forms of property

• Bitcoins are more amenable to a description as property than a number of other forms of property. EG: tort claims, Rights under a contract, equitable rights

• (4) Not just limited to bitcoin

 Other assets exchanged by means of the blockchain must be understood as a form of property

(3) Understanding the creation and transfer of property rights in bitcoin

- Adapting the common law principles relevant to the ownership and transfer of chattels
- Perfectly consistent with the unique features of bitcoin laid out above
- The Bitcoin protocol provides all the information necessary to determine ownership disputes through established property law
- English law has proved flexible in accommodating the changing nature of assets in the securities market. The same should be applied to bitcoin.

- Need to understand the transfer system as a whole and the means by which bitcoins are exchanged.
 - Nature of the blockchain
 - Public and private keys
 - Wallets / exchanges
- Conduct, intention and agreement between the parties
- transfer of the coins can be analyzed as a form of "online delivery".
- Delivery by giving the transferee access to the goods.
 - EG: constructive delivery by handing over a key giving access to goods.
- The reason delivery and possession have not been previously been appropriate in respect of intangibles
 - the intangibles themselves are not capable of transfer; or
 - they are personal claims and better analysed as a transfer of obligations

Conclusion

- Form of intangible property generated by a decentralised settlement system which allows users to transact on a purely peer-to-peer basis.
 - they do not arise out of a personal right;
 - they are entirely intangible; and
 - they are transferable from person to person without the use of a third party intermediary.
- does not fit comfortably within the current property law framework.
- Sought to characterize it as a unique *chose in action* amenable to both (online) possession and delivery
- system provides all the information necessary to determine title disputes in this manner.