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 a 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 ‘chooses in action’ under seven different headings.

<table>
<thead>
<tr>
<th>Nature of the asset to which the rights relate</th>
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<tr>
<td><strong>Property arising out of a claim</strong></td>
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<td>• Debts</td>
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<td>• Shares</td>
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<td>• Leases over land</td>
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<td>• Rights under a contract</td>
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<td>• Cause of action</td>
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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 personal property
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.