Sociological aspects of crypto-currencies

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Crypto-currencies: sociological aspects

Three problems and traditions in sociology:

1. Social cohesion - structural functionalism, Durkheim
2. Inequality – historical materialism, Marx
3. Rationalization – symbolic interactionism, Weber

Crypto-currencies: sociological aspects

Four problems and traditions in sociology:

1. Social cohesion - structural functionalism, Durkheim
2. Inequality – historical materialism, Marx
3. Rationalization – symbolic interactionism, Weber
4. Wealth & welfare – utilitarian individualism, Smith

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Money in contemporary sociology: *the* central classical author is Georg Simmel (rationalization, symbolic interactionism). Karl Marx to a lesser extent.

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According to Simmel, money is a claim on society: “As barter is replaced by monetary exchange, a third instance interposes itself between both parties: the social collective, that makes available an appropriate real value in the place of money.“

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The collectivity guarantees the value of the “second-order” good that money is: a means of payment. This helps rationalize economic life.

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Money is a cultural phenomenon, an institution.

“The abstract properties of money are defined by its symbolic features.” (Dodd 1994: 154)

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Trust according to sociology:

Social cohesion – network sociology:

Simmel, Durkheim

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S. Herbert Frankel, *Money. Two Philosophies. The Conflict of Trust and Authority*, Blackwell 1977

Crypto-currencies: sociological aspects

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In doing so, it helps to maintain the moral structure of the relations between all of the parties concerned (*pace* Simmel.)

Crypto-currencies: sociological aspects

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In doing so, it helps to maintain the moral structure of the relations between all of the parties concerned (*pace* Simmel).

In other words, money ("good money") is conducive to social stability.

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Money has the unique potential of being incorporated in any future uses that its possessor may desire to put it to. If these are no longer available, the apparent independent power of money disappears with them.

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Under conditions of direct barter, trust is confined to the parties immediately involved.

Money facilitates the development of an ever widening circle of economic interdependence based on trust.

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But money is a mixed benefit. Its ever more abstract and quantitative character progressively undermines the individuals' subjective, unique and "qualitative" factors.

On the other hand, it provides individuals with the impersonal means to realize their personal ends.

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Cp. the economists' idea that money reduces transaction costs.

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In modern civilization, personalized trust has been converted to generalized trust in the ability of systems to maintain circumstances and performances within certain limits.

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Trust depends on a reflex willingness to accept fictions because they function.

Trust as (partially) based on social fictions: "[T]rust is an ongoing process of building on reason, routine and reflexivity, suspending irreducible social vulnerability and uncertainty *as if* they were favourably resolved, and maintaining thereby a state of favourable expectations towards the actions and intentions of more or less specific others." Guido Möllering, *Trust: Reason, Routine, Reflexivity*, Elsevier 2006

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Trust involves suspension or the bracketing of the unknowable. It makes interpretative knowledge momentarily certain. Suspension enables the leap of trust.

Fictions that function.

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Fictions that function: cp. the idea, also progressively recognized by economists, that positive expectations may start a virtuous progress of self-fullfillment.

Compare also the positive cycle of tit-for-tat (Axelrod).

Crypto-currencies: sociological aspects

Compare also the positive cycle of tit-for-tat (Axelrod): link with social cohesion – solidarity – social stability (Durkheim).

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Geoffrey Ingham, *The Nature of Money*, Polity Press 2004, proposes a state theory of money:

Money institutionalizes two reciprocal relations between a state and its citizens, taxation and the national debt, denominated in the state's money of account.

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The two relations are linked in a settlement whose legitimacy is framed in terms of accepted norms of good fiscal practice and credibility that will be sustained.

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The credibility of the promises forms a hierarchy of moneys that have degrees of acceptability. The state's sovereign issue of liabilities usually occupies the top place, as these are accepted in payment of taxes.

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First, “moneyness” has been established by the issuer’s money of account and embodied in a particular form (metal, paper, electronic impulse, etc.); only then does it take on the status of a commodity that may be bought and sold.

Consequence #1: Economics cannot explain the existence of money; it can only analyze its exchange.

Consequence #2: Money cannot be neutral; it is the most powerful of the social technologies, but it is produced and controlled by specific monetary interests. Therefore it is inherently unstable.

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Stable money expresses a stable, but not necessarily equal, balance of power. Orthodox economic theory serves ideologically to mask this conflict.

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Nigel Dodd, *The Sociology of Money*, Polity Press 1994 ; *The Social Life of Money*, Princeton UP 2014

Combine problems addressed by, and insights from, authors of various sociological traditions.

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Dodd 1994:

Indeterminacy/transparency: money is perceived as the ideal of unfettered empowerment and complete freedom to act (*pace* Simmel).

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These networks depend on the existence of specific information.

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Cp. Hayek, the price system as a system of intertemporal telecommunications. Hayek considers competitive market behaviour as a process of discovery of information.

Crypto-currencies: sociological aspects

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Money reproduces asymmetries of wealth and power.

Crypto-currencies: sociological aspects

Incongruity between transparency and empowerment, between the fiduciary and divisive character of money:

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"Money depends for its existence and circulation in society on a generalized level of trust in its abstract properties; money none the less symbolizes and is structurally interconnected with massive conflicts of interest based on the unequal distribution of wealth and power in society."

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Money becomes more abstract and impersonal as the division of labour alienates workers and consumers.

Money makes negative freedom possible by removing constraints.

Crypto-currencies: sociological aspects

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But if it becomes a goal by itself, this is a perversion of freedom.

Dodd 2014:

Money is based on debt.

Crypto-currencies: sociological aspects

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Debt is part of what makes us social.

Crypto-currencies: sociological aspects

Dodd 2014:

Money is based on debt.

Debt is part of what makes us social.

Money is social: it is a claim, if not on “society”, then on varying modes of shared existence and experience.

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The social life of money comprehends:

- its role in the reproduction of conflict and inequality
- its inherent connections with credit and debt
- its sacred or quasisacred properties
- its expression of society's capacity to deal with surplus and waste

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- its shadowy existence within and on the interstices of geopolitical space
- its inherent (and constitutive) cultural properties
- its reformist, utopian spirit

"These are distinctive and frequently contradictory aspects of money."

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Dodd discusses Bitcoin in the chapter on Utopia.

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BTC designed as a money in which there is no need for (social) trust;

BTC rests on trust in software.

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"The social foundations of the Bitcoin system – or, rather, the apparent lack of obvious social foundations – are underpinned by the mathematics behind it: in principle, "crypto-proof" replaces trust."

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But the idea that BTC "seeks to eliminate social life – i.e., trust, incomptenece and political expediency …., its subsequent life looks just likely to be marked by the reemergence of the social life of money."

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Specific argument: need for (anti-hoarding) regulation.

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Specific argument: need for (anti-hoarding) regulation.

General argument: BTC is part of a "payment technology" (Giannini) and all technologies shape, and are shaped by, their users. This gives rise to a particular social system.

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Dodd's observation raises the general question of the unintended consequences of crypto-currencies.

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Btw: Unintended consequences and spontaneous evolution are consistent with the libertarians who advocate Bitcoin and other crypto-currencies.

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"The new seigniorage system:"

the use of crypto-currencies is accompanied by an increasing role of private corporations as payment intermediaries. These are often more expensive than the traditional banking system.

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A consequence of the replacement of public by private seigniorage: "an important part of money's infrastructure is potentially taken further away from, not closer toward, the civic benefits that are meant to accrue from the emergence of alternative moneys."

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So, the increasingly private character of payment systems undermines the common-pool character of the ownership and governance of the payment networks.

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Dodd’s warning leads us back to the economic idea (to be further developed) of payment technologies as club goods, public goods or common pool goods.

The potential of sociology for understanding trust in money

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Network analysis:

- Models structures of interaction and communication

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Network analysis:

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- Social capital: trust

Trust as capital

Trust as capital – money as a common pool good

Money as a common pool good

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Crucial difference between natural resources and money:

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Money as a common pool good

Crucial difference between natural resources and money:

Natural resources may replenish themselves "naturally", perhaps aided by an adequate governance system.

For social or cultural resources such as money (a "social construct"), the governance system is part of the resource itself.

Trust as capital

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What investments are needed to maintain the stock (pool) of trust?

This is a relevant question for traditional and crypto-currencies.

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Another sociological argument to be further developed: the stability (“reproduction,” survival) of institutions depends on the congruence of the perceptions and expectations of individuals.

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Example: the lack of congruence of the perceptions and expectations between Greece and Germany threaten the survival of the euro.

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Possible relevance to crypto-currencies. For example, the perception of Bitcoin as a medium of exchange vs. hoard of value.