

# The Changing Medium of Money: Towards Inclusive and (Socially) Sustainable Design in FinTech Platforms

Yuening Li, under the supervision of Prof. Aphra Kerr, Department of Sociology, Maynooth University

Money operates in the centre of social interactions, and functions as a social institution and relation (Mauss 2004; Simmel 2011; Ingham 1996). It is used as a medium of exchange, i.e., payment, in both personal and business activities (Maurer 2014). Since the third industrial revolution, or 'the digital revolution', the coverage of telecommunication has been expanding globally from developed areas to more and more underdeveloped parts of the world. Within the developed areas, telecommunication networks are also growing from urban areas into rurality. At the same time, mobile devices become more and more affordable which enables a more connected world of a digital era where the living experiences of individuals are shifting to be digitalised, including the use of money (Regli 2016; Maurer 2014; Swartz 2020). COVID 19 policies have also catalysed the digital transformation of money and payment.

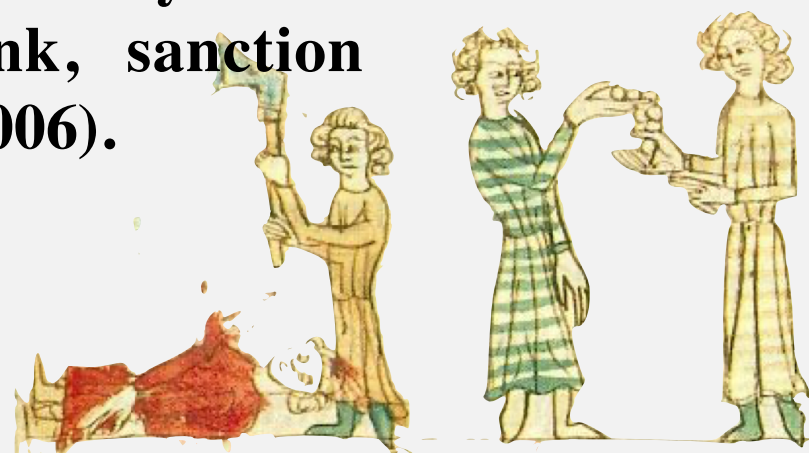
**How can we design inclusive and socially sustainable FinTech platforms?** The thesis will conduct a systematic examination of a sample of FinTech platforms and address the social, cultural and ethical implications resulting from the digital transformation of money. It will also identify people who are excluded by the current FinTech platforms.

## Literature Review: The Evolution of Money & Money as Platform

This research draws literature from classic and contemporary economic sociology of money, datafication, platforms and platformisation, and data justice theories including digital rights, identities, and surveillance (Simmel 2011; Dodd 2016; Swartz 2020; Taylor 2017; Sadowski 2019; Edwards 2016; Zuboff 2019). With a selection of milestones in social money development, it presents a brief history of the evolution of money.

**A token of value: early money mergers from things or goods of high saleableness, for example, gold.**

**Wergild** (man money) was paid for physical harm and served to codify social order. e.g., hierarchy, rank, sanction through numbers (Ingham 2006).

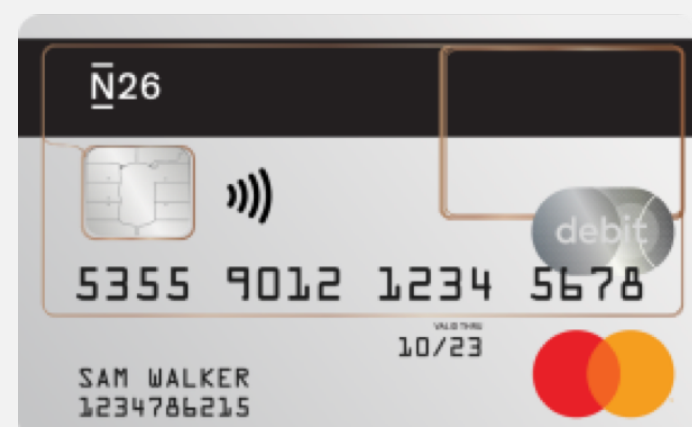


**Jiaozi**, the first paper money, was invented around the 11th century in China by a tea merchant from Sichuan.



**The Simmelian view of money**

1. A medium
2. The purest tool
3. A social institution



Contemporary money can be materialised and dematerialised in the forms of **paper** (state-issued banknote), **plastic** (debit and credit card), **data** (account balance and transactions), and **RFID chips** that can be implanted as a part of the human body.

## Methods: stage 1: Examine existing money platforms

There are two stages of fieldwork separately focusing on money (and the money platforms) and people (including users and the non-users). The focus for the next 6 months is stage 1.

Stage 1 aims to evaluate the digital money platforms and their connection to the changing social meaning and function of money. Money was never payments between equals and excluded groups, for example, lower-income population, minority people, and women for a long time (Dodd 2016). Using the **Walkthrough** method (Light et al. 2018), this research seeks to understand the design, functionality, and the anticipated use of 7 applications from 3 categories follows.

1. Pillar bank applications: Bank of Ireland and Bank of China UK
2. Widely recognised digital banks (neobanks): Revolut and Chase
3. Non-bank money platforms: Klarna, An Post Money and Apple Pay

This research will systematically analyse the applications from the registration stage to the continuing or discontinuation of use to examine the identities of the imagined users and the embedded social meanings and identify the dominant social imaginaries informing the design of current FinTech money platforms.

## How does my project contribute to solving the UN SDG challenges by leveraging industry and academic partnerships?



In 2007, the first digital money platform 'M-Pasa' was invented in Kenya as a more inclusive way to manage money and extended the banking system. This brings the debate of social inclusion, exclusion and sustainability into FinTech design. This research will deploy sociology, science and technology studies (STS) theories in FinTech development to rethink money, digital infrastructure, and networks. It mainly discusses the UN SDGs 9, 10, and 16.

## Contacts

Yuening Li (she/her)

SFI Centre for Research Training in Advanced Networks for Sustainable Societies  
Department of Sociology, Maynooth University

Email: [yuening.li.2021@mumail.ie](mailto:yuening.li.2021@mumail.ie)

LinkedIn: <https://www.linkedin.com/in/yuening-li-a89a41158/>