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Finance becoming (tech) in socio-technical interaction orders: The case of digital everyday financial practices

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Abstract

Discussing recent literature on online financial practices, this article argues that ‘finance becoming tech’ assumes the form of particular financial situations in the everyday, to be understood in terms of Erving Goffman’s concept of *interaction order*. While the interactionist strand in the social study of finance foregrounds the role of techno-social situations in the constitution of finance, this article suggests applying Goffman’s notion of the ‘interaction order’ to that debate and demonstrates the latter’s capability to reconstruct the techno-social mechanisms through which finance emerges in the everyday. Unlike the notion of ‘situation’, that of ‘interaction order’ addresses the constitution of situational boundaries through interactional procedures as they refer only partially and selectively to circumstances of their social contexts. Against this background, online financial practices are analytically contoured as techno-social situations that enable the emergence of finance as a matter of the everyday. It is argued that the enabling condition for this commingling of everyday and financial processes is a specific delimitation of the digital-financial interaction order from parts of its political economic context – in particular, the uncertainty that structurally characterizes the financial economy.

Keywords: digitalization; financialization; Goffman; interaction; situation

Introduction

This article revisits the interactionist strand of the social studies of finance (SSF) as a way to understand how finance becomes tech. Referring to research literature on digital financial practices that permeate contemporary everyday life, such as trading apps, for instance, the article theorizes the relationship between technology and finance as the becoming, that is, the constitution, of finance through technology in the everyday.

Hence, the article starts with an argument for an intransitive use of the notion of ‘financialization’ – a notion that addresses processes not of the penetration of society by financial logic, but the very constitution of finance itself. The article then reviews recent literature on online trading apps that captures the sense in which today’s digital technologies characterize and co-shape financial processes. It will then relate this research to earlier studies in SSF that addressed structurally similar configurations in professional and non-professional settings, where technologies of remote operation and digital communication shaped an identifiable situation (trading rooms, ‘scopic systems’, and so

on). These early studies in SSF, the argument continues, are based on interactionist social theory that shaped SSF (in particular, Erving Goffman), hence highlighting the technological aspects of finance as a particular modality of the constitution of financial situations. The article then takes SSF's interactionist theorizing one step further, suggesting Goffman's conception of the 'interaction order' as a useful conceptual instrument. In line with this approach, technology/finance may be conceptualized as the component of an interaction that, as an emergent process, conditions the ways that social circumstances beyond the situation can assume significance in techno-social interactions. On this basis, which reformulates the prevailing understanding of 'situation' in SSF, the article will then re-interpret trading apps against the background of the questions of how and in what sense they retain their interactional membranes – that is, how, in Goffman's terms, an interaction order is constituted that is different from orders outside the situation and only selectively connects to them. In order to broaden this claim's empirical basis, finfluencing on social media will be briefly compared to the findings regarding trading apps. A final section will summarize the main findings and make epistemological suggestions as to how to further study the articulation of finance and digital technology.

Financial becoming (through tech)

The theme of this special issue project is 'When finance becomes tech'. In this clause, 'when' can be understood in two different, if interrelated, grammatical senses: as a marker of conditionality (what happens if?) or as one of temporality (at what time?). As debates in journals – and surely those of *Finance and Society* – often take up current and pressing issues, the second sense of the term 'when' seems to be always-already implied – and given an answer: It is *now* that finance becomes tech. But, can we really specify a particular historical moment for this transmogrification?

The special issue theme thus raises a fundamental question of the historicization of finance, and of how such historicization might inform our understanding of present financial dynamics. Unfortunately, finance stands in the way of an easy historicization that would lend itself to the aim of diagnosing the present moment, because finance complicates the periodization of capitalism. Relatedly, digital technology stands in the way of any causal arrow pointing from technology to finance (as with the 'become' question) because at stake is rather co-evolution.

Financial capitalism is often reconstructed as arising in the course of the nineteenth century as complementary to the lock-in of industrial capitalism, and reaching a first peak at the turn of the twentieth century with highly internationalized securities markets and effective systems of transregional and international financial communication (Polanyi, 1944; Stäheli, 2013). Yet, its origins in trade and colonial capitalism predate industrialization by more than two centuries (Braudel, 1982; Lobo-Guerrero, 2011). Likewise, the historicity of digitalization is complicated. Usually, digitalization, understood as digital data production and transmission through computer networks, is referred to as a process that began to have societal impact in the 1990s and since then has reached ever new peaks. Yet, it actually emerged and was utilized in the U.S. military since the 1960s (Everard, 2001) and in finance since the 1970s – long before it arrived in society at large. More radically even, Kornelia Hahn (2021) argues that digitalization predates computer technologies, arising during the eighteenth century together with industrial modes of production which took apart holistic ways of production and re-synthesized them according to capital needs. According to her account, digitalization, rather than being connected with post-industrialism and the rise of the service economy at the detriment of production (Castells, 1996), is a modality of understanding the societal structures and effects of industrial capitalism. Transferring this reversal in the genealogy of digitalization

to finance, one might arrive at an account that the roots of digitalized finance do not lie in recent computer technology but rather in financial portfolio theory of the 1950s (Markowitz, 1952), which laid the grounds for the idea that financial assets can be grouped according to abstract risk classes and not to any underlying holistic entity. Taking this argumentative gesture seriously would amount to admitting that the digitalization of finance has its roots *in finance itself*, not in computer and data technologies.

Hence, this article proceeds from the assumption that the present moment of ‘finance becoming tech’ has a complex genealogy, and that we thus require significant theoretical resources to understand this moment. Much as Latour (1996) argued that we cannot understand society in terms of society alone, we cannot understand technological changes in terms of technological changes alone. Hence, the approach pursued here, although referring to works in the social studies of finance which heavily rely on science and technology studies, will not foreground technology as a factor transforming finance, but rather look at technology as articulated and co-emergent with finance. This means that, in order to respond to the implicit conditional-temporal claim ‘when finance becomes tech’, we have to pose the question: How does finance get constituted in articulation with technology? In other words, the complex historicities and genealogies of both finance and digital technologies, and their interrelation, urge us to opt for a constitutive-theoretical approach to finance.

Approaches to contemporary finance and society regularly use the term of ‘financialization’ in order to describe processes in which financial logics, rationalities, and dynamics become transposed from the financial economy to other sectors of society, such as the production-based economy, corporate governance, the everyday life, or social policies (Davis, 2009; Langley, 2007; Martin, 2002). Yet, from a more fundamental point of view, they distract attention from how finance emerges in these other realms outside of the financial economy. They tend to see the becoming of finance as a transitive process – something that was not financial becomes financial through financialization – instead of an intransitive one, where the object-subject of financialization would be finance itself. My suggestion to understand financialization in a grammatically intransitive sense makes recourse to three strands of argumentation in the social studies of finance, economic sociology, and political economy.

First, the voluminous literature on the performativity of economic and financial representations provides the fundamental argument that representations of the economy and of finance have effects that are constitutive of economy and finance. This foundational research argued that economic and financial theories and models have effects on the institutionalization of business operations and markets (Callon, 1998; Mackenzie, 2008). Recently, Caliskan (2023: 124–5) has suggested the notion of ‘everyday performativity’ for cryptocurrency communities, underscoring the ways in which these actors create representations of the cryptoeconomy that are meant to steer it into certain directions, thus stressing the motivated or intentional character of performativity. Thereby, the notion that the concept of performativity should be reserved for the effects of representational activities, as a specific subset of all conceivable activities, is retained (see Unal et al., 2025). Notwithstanding the critique that the performativity of economic and financial representations does not reside in those representations per se, but emerges as an effect from the ways these are used in different social contexts (Sparsam, 2019), the performativity argument is key for understanding economy and finance as logics that are being constituted (as opposed to transferred, as with the usual transitive understanding of financialization), and also in order to account for the ontology of economy and finance in distinction from what their representations say they are. At the same time, my notion of intransitive financialization is broader than that of performativity, as it also encompasses processes of the constitution of finance that do not go back to the effects of

representations of finance, but to the articulation of finance with other logics, such as technology.

Second, thus, I refer to Vivianna Zelizer (2011), who argued that ‘commercial circuits’ in society consist of amalgamations of different logics and rationalities – in her example, such of monetary profit and of interpersonal care – that do not so much merge but emerge as distinct and specific only in that amalgamation. From this perspective, the ‘financialization of daily life’ (Martin, 2002) becomes visible as a process of emergence of financial logics in articulation with other logics, with finance becoming conceivable as what it ‘is’ only in relation to these other logics. Along the lines of Zelizer’s inroad into economic sociology, finance ‘becoming’ tech thus can be regarded as a process of financialization, albeit in an intransitive sense of constitution that requires no grammatical direct object: What is financialized is finance itself, through technology.

Another field of study that lends itself for foregrounding the constitution of finance in interrelation and articulation with other entities is the security-finance nexus literature at the intersection of political economy and security studies (Boy et al. 2011; 2017; de Goede, 2010), which I introduce as the third conceptual component for intransitive financialization. According to this body of literature, concerns of financial and political security have been re-articulated in different historical conjectures, and their logics have blended, but at the same time this contributed to fleshing out what *counts* as the financial and political aspect of security respectively. The ‘nexus’ is thus to be conceptualized as a point of articulation, as in ANT or in hegemony theory: an identity – for instance, the identity of finance – can be attained only through articulation with and reference to other identities (like that of political security, but also that of ‘tech’). Crucially, these accounts involve not only presentist diagnoses but also genealogies – such as of concrete understandings of the financial vis-à-vis the political (or the technical), but also of the arenas where that articulation is supposed to take place. In regard to the latter point, the ordering of disciplines is itself important, as de Goede (2010) has shown for the security-finance nexus: The separation of the disciplines of IR and IPE created a genealogy of thinking about the relationship of financial and political security in terms of different worlds and rationalities. Hence, an analysis of the epistemological and disciplinary shaping of the articulation of finance and tech is important.

The present article will redeem this threefold agenda of financialization as an intransitive process – to analyze the constitution of finance not only via performative processes, but also through its articulation with digital technologies while reflecting on disciplinary genealogies – through focusing on the ways that technology and finance became articulated in the social studies of finance (SSF) and its genealogy, and how a critical discussion of these can inform an analysis of contemporary financial technologies. It was, in particular, in the interactionist strand of SSF that *financial* processes were analyzed in their *technical* quality (for instance, as ‘appresentation’ of the market financial traders’ computer screens) as being interrelated with cultural processes like subjectivization, identification, and belonging (Arnoldi, 2006; Knorr Cetina and Bruegger, 2000; 2002a; 2002b; Wansleben, 2013). As a result of these investigations, it became difficult to tell what ‘became’ what in this process: Did finance become tech through increasing automation, did subjects become financialized through the subjectivizing lure of the market, or did tech become subjectivized through its affordances? In this article, I argue that this effectual, or causal, non-directionality of processes of ‘becoming’ in the field of finance is a useful starting point for understanding the current permutations of finance in interdependence with digital technologies. The article invites to see this interdependence as an emergent phenomenon, much as the mutual constitution and interdependence of the market and the subject in Knorr Cetina and Bruegger’s (2000; 2002a; 2002b) analyses was conditioned by technologies but still emergent because the different qualities contributing to it – the technology, subjective projections, market signals – retained their identifiability and the

complexity of their interrelations. I thus see the contemporary moment of ‘finance becoming tech’, with finance ever strongly interrelating with digital technologies, as a process of emergence of interdependencies within a heterogeneous set of elements that, in turn, have complex historicities and genealogies.

Financial technologies in the everyday: Online trading apps

While the interactionist strands of SSF started out analyzing the interactions between finance and technology at professional sites such as trading rooms in investment banks, with the proliferation of digital technologies of communication throughout society, more recent studies focus on the financial activities of non-professional traders and investors (Chua 2025; Duterme, 2023; Freibauer et al., 2024; Tan, 2020; 2021; Tong and Preda 2025). Hence, the trading situation is arguably still one of the key sites for the amalgamation of finance, technology, and sociality. It is here where investment decisions are made, and persons become directly involved, via digital interfaces, in financial circulation. Hence, this article will focus on investigations into private investors’ use of online applications for making financial investments, that is, digital trading apps.

While online trading apps for mobile digital devices can be seen as an extension of digitalized trading routines in financial institutions such as trading departments in investment banks, how online trading apps are addressed in SSF significantly differs in the way that digital technology is referred to in comparison with those earlier studies. In the classical SSF studies on market making and intraday trading, digital technologies were not addressed so much as to their ‘digital’ quality; instead, the hinge that connected many of those studies was a certain temporality, namely that of real-time trading powered by advanced IT. This enabled SSF to drive home the point that financial processes can, in actuality, be seen as particular instances of much more general forms of social coordination. For instance, the studies by Karin Knorr Cetina and Urs Bruegger (2000; 2002a; 2002b) and Jacob Arnoldi (2006) foregrounded the ‘post-social’ relationship emerging between traders and financial markets appresenting on their screens from the real-time coordination of traders making trades and markets ‘responding’ to those trades. Later, SSF included lay trading into its scope, on the grounds of technological developments in digital technologies that made it possible for anyone with internet access to engage with direct trade through trading platforms (Preda, 2009a). The paradigmatic scene was a lay trader sitting in front of their stationary digital device (a desktop computer), which could be compared to professional trading practices. In these studies, digitalization was referred to as lowering the threshold of active trading, and broadening the scope of the trading constituencies.

In recent studies of online trading apps for mobile digital devices, however, digitalization becomes thematic in a more outspoken way (Chua, 2025; Duterme, 2023; Freibauer et al., 2024; Tan, 2020; 2021; Tong and Preda, 2025). These studies operate against the background of general investigations into the ways that mobile digital devices change not only financial behavior, but the general relation to the world of those operating them. For instance, dana boyd (2010; 2012) argued that mobile digital devices like smartphones result in an ‘always-on’ condition of permanent connectivity with the internet and, in particular, social media, which penetrates daily life through creating expectations to process and respond to social media posts, push messages, and personalized messages. The specific affordances of mobile digital devices and their impact on everyday life were also taken up by Richard Grusin (2010: 90–121), who argued that those devices attain a much more agential quality for their users than traditional mass media, constantly exposing them to real-time coordination pressures.

SSF's pathway from professional to lay financial trading in digitalized environments, addressing digitalization more explicitly in recent studies than in the classical ones, converges on the centrality of considerations of financial temporality. In the classical SSF studies on professional trading, temporality figured as a concept that plausibilized the similarity between financial trading and any form of social coordination under real-time conditions (hence also the role of phenomenology in parts of these studies, see Knorr Cetina and Bruegger, 2000: 162–63) – a point which also partly applied to analyses of lay traders' activities on trading platforms (Preda, 2009a). In recent studies on online trading apps, temporality is addressed as a major analytical frame for understanding virtually any operation on mobile digital devices, too. For the following considerations, I will single out two recent studies of online lay trading, as they highlight two different aspects of online trading temporality.

Chua (2025), in an interview study with users of online trading apps in Singapore, finds that users often try to dedicate specific times of the day for consulting their trading apps – not only to trade but also to check the balances and the value developments of their investments. She inserts this observation into a subjectivization theoretical approach in a manner that resonates with SSF investigations into digitally empowered financial trading which analytically foreground the emergence of trader subjectivities in those processes (Abolafia 1996; Knorr Cetina and Bruegger, 2000; 2002a; 2002b; Laube, 2017; Preda, 2017). Hence, Chua follows a line of theorization, prominent in SSF, that interconnects questions of governmentality with financial everyday practices and exposures (Langley, 2007; 2008). She sees the significance of her findings in that they challenge a still predominant view on private traders as neoliberal subjects, arguing that her interlocutors, rather ambivalently, display a propensity to critically view their apps' affordances while still relying on them in investment decision situations in which they cannot process or validate crucial financial information:

app-using investors commonly conduct themselves as selectively self-directed digital-financial subjects. In contrast to the paradigmatic neoliberal subject, who strives to be as informed, calculative and controlled in investing their money as possible, the app-using investor aims to understand and control only some aspects of their investing practice, while in other aspects allowing their practice to be shaped and determined by digital designs and operations that are opaque and even threatening to them. (Chua, 2025: 230)

While online trading app users might not experience the same challenge to coordinate their action with other market participants and general market developments in real time like professional traders, the erasure of a visible intermediary with a potentially regulatory role creates an exposure to finance in the everyday that is way more immediate than in classical bank-based private investing. Chua (2025) notices that those apps are designed in a way that discourages the use of other information available online, hence incentivizing users to regard the apps themselves as sole cognitive horizon for their investments. According to her, this exposure results in a skepticism, but at the same time permissiveness, regarding the opaque properties of the algorithms that power online trading apps.

Tan's (2021) investigation into the Robinhood trading app takes a different route regarding temporality. It approaches the app from the perspective of interface design: Tan finds that the app's technical affordances are assembled in a way that encourages users, or 'nudges' them, to trade frequently and to make many transactions. A summary of the effect of the most important technical features of the app's interface reads as follows:

Robinhood is known for its signature swipe-up gesture that confirms a stock transaction. This deceptively simple movement of swiping the finger up across the screen generates a sense of familiarity among millennial and digitally savvy investors who navigate their lives around their smartphones driven by ‘swipe logic’ (David and Cambre, 2016), which makes crossing of the final threshold of stock buying (and selling) easier. While Robinhood’s interface presents limited information at first glance, micro-interactions serve as thresholds that provide more information. For instance, the price chart of a security is interactive. Moving the finger across the chart brings up a gray vertical line that shows the price at a particular time. In this way, the movement of the body becomes directly tied to a varying quantity of money as reflected in the fluctuating stock price (Ash et al., 2018: 9). To the extent that affective responses of ‘fear of missing out’ are triggered by rising share prices, friction is thereby reduced in urging the user to submit a buy order now. Similarly, when prices are falling, these micro-interactions generate a sense of urgency to sell to prevent further losses. (Tan, 2021: 1869)

According to Tan, the design of the app must be seen as part of a ‘platform infrastructure’ that connects the app with other financial organizations, and makes it visible as part of a bigger platform economy. Importantly, its business model positions Robinhood as a broker between the app’s users and financial organizations, like banks or market makers, with the consequence being that the app effectively channels users’ funds into a platform based political economy (Tan, 2021: 1870). The ‘enclosure’ of users (a term borrowed from Sadowski (2020)) into the platform business model thus works through the digital interface:

interface design is used to enclose Robinhood users within the platform. Push notifications with customized content like earnings reports and significant price movements based on the user’s portfolio constantly exhort users to engage with the app, to the extent that active users check the app up to 10 times a day (Marcus, 2020). Robinhood has also enticed investors to stay by introducing new features, such as cryptocurrency, fractional share trading and exotic (but risky) financial tools like margin trading. These features resemble the add-ons that are introduced to games, further ‘gamifying’ the platform to make investing appear fun and interesting. (Tan, 2021: 1869–70)

Hence, Tan’s analysis points to the technological features of digital interfaces to nudge users into transacting with the app, and through it with financial organizations and market, as often and as financially intensely as possible.

The question to be addressed in line with this article’s general research interest is this: How can socio-technical interactions with finance, as analyzed in Chua’s and Tan’s research, be understood as the *becoming* of finance through technology? To address this question, the next section will first go back to SSF and its analyses of socio-technical situations, and then enlarge SSF’s understanding of interactionism through engaging with Erving Goffman’s concept of ‘interaction order’.

Financial interaction orders

The social study of finance (SSF), while encompassing a broad field of research, has developed a genuine take on the socio-technical micro processes that constitute financial procedures. In this, it largely borrowed from science and technology studies, for instance, in the debate about the performativity of financial models (Mackenzie et al., 2007). Apart from references to Latour (1986) and Callon (1986; 1998), who provided vocabulary to

understand economic and financial processes as matters of the ‘articulation’ and ‘translation’ of different elements that constitute economic and financial markets (among them, financial models, cf. Mackenzie, 2008), some important contributions that co-constituted the field of SSF deliberately engaged with sociological interactionist approaches in order to understand the ordering of financial processes, prominently of securities trading. In addition to references to George Herbert Mead, one of the foundational figures of what was later called symbolic interactionism, and Alfred Schütz as a representative of the phenomenological tradition in sociology (Knorr Cetina and Bruegger, 2000: 158–63), a significant set of studies referred to Erving Goffman and his notion of social interactions and social situations. As an early example, one might cite Abolafia’s (1996) study on the cultivation of financial trader subjectivities. Abolafia borrowed from Goffman’s studies on situations of gambling, and depicted financial organizations as institutional settings that, through deliberately setting up such situations, encouraged and demanded that kind of subjectivization (see also Knorr Cetina, 2009; Preda, 2009a; 2017). The interactionist tradition in sociology was hence used in order to achieve two insights: first, the structuration of the relationship between traders and the electronic markets they referred to in their everyday business, which was described as ‘face-to-screen interaction’ and ‘post-social relationships’ between traders and trading technologies (Arnoldi, 2006; Knorr Cetina and Bruegger, 2000; 2002a; 2002b); and second, the structuration of financial cultures along the lines of different departments in financial organizations – for instance, the culture of risk-taking among traders (Abolafia, 1998), the culture of financial analysis (Wansleben, 2013), or cultures of governing emotions and affect (Laube, 2017).

In this early stage of interactionist SFF, the notion of ‘situation’ was often more presupposed than fully theoretically reflected. Knorr Cetina (2009) did point out that the microstructures of finance (together with other professional settings of remote activities), where social coordination assumes a real-time emergent quality without presupposing physical co-presence, makes it necessary to delink the notion of situation, as in Goffman, from its boundness to physical co-presence. But, the boundaries of financial situations – that is, the question of how those situations become delimited from their contexts – were not addressed because the interest in professional financial interactions seemed to have an answer to that: financial organizations, their division of labor, and their techno-social routines set those limits and define the situation. Interactionist theory hence was referred to in order to point out the social micro-foundations of financial agency and dynamics, demonstrating that financial processes operate on non-financial terms. But the ways that these dynamics implied situational boundaries that constituted those situations in the first place were not discussed as properties of the financial situation itself. Either the definition of the situation was attributed to financial organizations, or the financial situation was characterized in a phenomenological way that reduced the constitution of the situation to a mutuality between individual traders and the markets they perceive through their ‘scopic systems’ (Knorr Cetina, 2009). Even attempts, as by Knorr Cetina (2009), to reconceptualize Goffman’s notion of situation in the face of ‘global microstructures’ did not address the problem of the implied extrinsic definition of the boundaries of situations. In other words: While the genuine situational *dynamics* of financial activities were clearly demonstrated in SSF, the question of the *constitution* of those situations as delineated from their environment tended to be externalized to that environment. A notable exception, which also will inform the arguments to follow, was Preda’s (2009) reference to Goffman’s notion of interaction order, in a discussion of online lay trading practices that Preda interpreted, again with Goffman, as digitally mediated ‘gaming encounters’ among anonymous participants. In this, Preda addressed the question of how a trading situation that is not preordained by an institutional-organizational framework gets constituted as an effect of the interaction order of the ‘encounter’ itself.

Hence, I suggest engaging deeper with Goffman's notion of 'interaction order' to gain a deeper understanding of how situations are internally structured in ways that also account for their capacity to constitute situational boundaries. As I will demonstrate, this involves stressing the distinction between the concept of situation and that of interaction order. Goffman's (1983) last public lecture suggested that, in such interaction orders, cognitive and normative frameworks are created that only partially and selectively incorporate societal contexts and their potential effects on them. His main example was what he called 'service transactions' in retail or public administrations to which people turn in order to purchase a product or to receive authoritative documents like drivers licenses or passports. In his analysis, Goffman argued that the participants in such situations, through 'minor social ritual' (Goffman, 1983: 11), attain a situational order that in a certain way brackets some of society's macro-structures of social inequality, for instance, effects of marginalization and discrimination resulting from being categorized along social classifications (Goffman named race, gender, class, and age):

Minor social ritual is not an expression of structural arrangements in any simple sense; at best it is an expression advanced in regard to these arrangements. Social structures don't 'determine' culturally standard displays, merely help select from the available repertoire of them. The expressions themselves, such as priority in being served, precedence through a door, centrality of seating, access to various public places, preferential interruption rights in talk, selection as addressed recipient, are interactional in substance and character; at best they are likely to have only loosely coupled relations to anything by way of social structures that might be associated with them. (Goffman, 1983: 11)

The 'order' achieved in such situations, according to Goffman, must be analyzed as self-sustaining in its deliberate capacity to only selectively refer, in 'loose coupling', to macro-social structures. Unlike Garfinkel (1967), who saw the social situation as the only epistemically relevant site of the reproduction of social order and analytically bracketed any social processes beyond social situations, Goffman analytically introduced a tension between societal and interaction orders. He thus specified the capacity of interactions to produce social orders not as a theoretical axiomatic (as Garfinkel did), but as a genuine level of social order that can be analytically distinguished from other levels of social order as it only partially and selectively refers to those other levels.¹

Goffman argued that situations may attain a relative independence of the social-structural formats of social order through only selectively referring to some of their features, redirecting these in the service of the procedural order of the interaction. Let us look at the argument more closely. First, Goffman distinguished the notions of 'situation' and 'interaction order' while claiming a certain degree of conceptual overlap: 'it is social situations that provide the natural theater in which all bodily displays are enacted and in which all bodily displays are read. Thus the warrant for employing the social situation as the basic working unit in the study of the interaction order'. (Goffman, 1983: 4) While interaction orders typically materialize in social situations, addressed by Goffman generically as face-to-face encounters involving 'response presence' (Goffman, 1983: 2), their orderliness is owed to certain of their procedural features. The most important of these is the participants' cognitive understanding of these very procedures – not in the sense of a normative conviction or utilitarian interest, but merely in the sense of more or less reliable cognitive expectations of what will happen next. Then, Goffman lists a number of what he calls 'basic substantive units' (6) of interaction orders, the most fundamental of which is persons as 'vehicular entities' (6), but which also include more complex entities such as different types of encounters. Importantly for the argument of how interaction orders link up to 'structural variables' (8) on the societal level, Goffman states that those

features may be incorporated into the interaction situation, but not through the adoption of the relations among them as established on the societal macro-level. By way of example, he argues that social hierarchies are represented in interaction orders not in their full complexity but as 'ordinal' (12) orderings, with the effect that very diverse categories of persons may find themselves in structurally analogous positions in interaction orders, his example being the similarity of how 'women' and 'junior executives' are addressed as subordinate in interactions although they belong to different sets of social categories (12). Coming to his main example of service transactions, Goffman argues that in these a general sense of 'fairness' can be maintained only through the attribution of empirical and observable differences in the way persons are actually served (for instance, being greeted by first name when known to the staff member, or being offered to skip the queue due to old age) to social conventions that pose no fundamental challenge to the interaction order but are also not reflective of social inequalities as institutionalized on the macro-level:

In sum, the normal sense that externally based attributes are officially excluded from a role in service dealings, and that local determinism prevails – apart, of course, from covert breaches, real and imagined – is something of a perceptual achievement. Externally based attributes are in fact given routine, systematic 'recognition,' and various local determinisms apart from first come first served are systematically disattended. 'Equal' treatment, then, in no way is sustained by what in fact goes on – officially or unofficially – during service transactions. What can be sustained and routinely is sustained is the blocking of certain externally based influences at certain structural points in the service forework [sic]. Out of this we generate a sense that equal treatment prevails. (Goffman, 1983: 16)

Goffman's suggestion can also be applied to techno-social settings, as technology co-constitutes those 'perceptual achievements' of situational self-sufficiency (as shown by Knorr Cetina and Bruegger, 2000; 2000a; 2000b, for instance). For this, it is sufficient to accept Knorr Cetina's argument (2009) that technological artefacts can attain the meaning of co-constituents – or, in Goffman's terms, as 'vehicular entities' – of interaction orders. Evidently, securities traders and 'their' trading systems attain a comparable isolation of the interaction order from its societal environment, which is actually a precondition for the existence of such highly presuppositional socio-technical interactions. Traders, while continuously watching their trading screens and interacting with the market, gain an understanding of 'the market' as a world of its own which is relatively isolated both from immediate and from more remote contexts of these activities. Regarding immediate contexts, studies in SSF have shown how different departments in investment banks develop quite different 'cultures' of interacting with and interpreting the market, thus isolating their operational interactions from other departments, or using them in a way that affirms their own interaction orders (Wansleben, 2013). With respect to more remote contexts (like 'society' or 'political economy'), Abolafia (1998) demonstrates how traders become socialized in their departments in ways that delineate their trading situations from the political-economic contexts, leaving behind only the dyadic relationship between markets and traders, so that the political economy as a relevant macro-context of trading enters into the latter in the form of a micro-socially digestible feature of the socio-technical interaction order.

Goffman's argumentation in 'The interaction order' shifts the ground for interactionist analyses of finance. In SSF, they have been applied thus far mainly to flesh out the techno-social emergence of finance in situations, but not to reconstruct that emergence as a constitutive process of the *becoming* of finance within and through the interaction order. In other words, the situation was taken for granted as a *site* of finance, or financialization. In

my view, the situation is a *factor* in the constitution of finance, or financialization, and it is so through the properties of the interaction order.

Trading apps revisited as interaction orders

Applying the interaction order perspective to online trading apps, I want to return to the two recent contributions described earlier in this article. With Goffman, we can now pose the question of what kind of ‘postsocial’ (Knorr Cetina and Bruegger, 2000) interaction order is established through the trading apps, and how this order, or these orders, selectively link to ‘structural’ relations beyond them. While Goffman used the term ‘structural’ to refer to social inequalities to be observed on the societal macro-level, like the inequalities associated with social classifications in terms of gender, age, race, and class, in what follows, I extend this notion of ‘structural’ to the political-economic context of those interaction orders. This ‘structural’ context is that of the financial economy that both studies under investigation suggest that they critically interrogate.

In the case of Chua’s study, this is achieved through a subjectivization theoretical approach. App traders are conceptualized as financialized subjects which display certain peculiarities if compared with the analytical construct of the neoliberal financialized subject. Unlike the latter, which is regularly characterized by an urge to attain maximum outputs through the diligent adoption of a normative framework of constant learning and knowledge optimization, Chua’s interlocutors are portrayed as being not only relatively and self-proclaimedly non-knowledgeable about the financial economy, but also about the precise ways in which the apps work. According to Chua, this leads to a subjective ambivalence: while the subjects do not fully trust the app because they can’t see behind the trading interface, they still use it in order to compensate for their lack of knowledge of finance. ‘App-using investors selectively choose to go along with arrangements in which their autonomy and agency are compromised, on the chance of profitable outcome’. (Chua, 2025: 23) Thus, financial trading per app is enabled through a balancing between a lack of self-sustained financial agency and a tolerance of uncanniness regarding the app’s features. Chua’s argument thus links trading app interactions to the financial economy through the argument, as it were, of endured ambiguity as the cost of the hope in profit.

With respect to Tan’s investigation, which rests on an analysis of the interface design of the popular trading app Robinhood, the argument is different. According to Tan, users are lured into frequent and potentially risky trading through the app’s convenience, the low financial and operational thresholds it establishes, and its gamification features. Here, uncertainty about finance is not, as in Chua, something that has to be compensated for through the app, but actually something that the app celebrates as a leisure related value of its own: fun. The link to the financial economy as a whole is established through the argument that frequent trades at potentially high (users’) risks are in the interest of the platform-based business model of Robinhood, which generates revenue by channeling trades to institutional market-makers.

What happens when applying the concept of interaction order to these findings and their interpretations? In the case of Chua’s approach and findings, the concept of interaction order offers an alternative to interpreting the ambivalence regarding users’ relation to the trading app in terms of financial subjectivization. Instead, that ambivalence will appear as a function of the interaction order. The socio-technical interface, which attracts that ambivalence, enables it to operate as a modality of attributing uncertainty, which is characteristic for finance per se (Lee, 2022), to a lack of technical knowledge about what the app actually does. The uncertainty of financial investment, being a systemic condition of a competitive market-based financial economy, thus gets included into the socio-technical interaction order, but in a way that is only ‘loosely coupled’ (in Goffman’s

terms) to that 'structural' uncertainty of finance. In the interaction order, uncertainty, precisely as it is rendered as a problem of the subject handling their devices, instead serves as a way of sensemaking – an ambivalence which is hesitant but still enables use of the app – that blocks structural uncertainty from entering into the situation. In Chua's study, thus, one might see the emergence of finance – financialization in an intransitive sense – as enabled, through a selective and partial reference to the structural uncertainty of finance which is re-functioned as subjective ambivalence vis-à-vis the technology.

With regard to Tan's research, the 'fun' aspect which nudges lay traders into frequent and potentially risky investments invokes Goffman's (1961) study on 'Fun in games', which preordained certain key arguments of 'The interaction order'. In it, Goffman was interested in the ways that games bracket the gaming situation, which he termed 'focused gatherings' (as opposed to everyday encounters) or also 'gaming encounters', from out of their social context. According to Goffman, this happens not only by dint of strict rules of the game (which players need to have an interest in observing in the first place), but also through the per-definition open-ended nature of the game's outcome (which keeps the interaction 'focused'), and through the opportunity that certain, and only certain, aspects of the game's social environment become selectively included into the game, for instance, the attribution of social prestige to successful and witty players. In other words, the interaction order of a gaming encounter is permeable for general codes of social esteem which, however, can only be actualized if the rest of the social context is bracketed out of the encounter. From this perspective, the interplay of the app's technical affordances with lay traders' 'moves' makes finance emerge in the everyday through a transposition of the systemic condition of uncertainty characteristic of the financial economy (observed already with respect to Chua's study) to the open-endedness of a game situation, which is the first constitutive component of fun in games; while the second component, that of social esteem, is actualized through the gains that can potentially be made.

So, the concept of interaction order allows seeing both ways of coping with financial uncertainty – as endured ambivalence or as fun – as interactional routines that deflect and redirect the attribution of uncertainty from the structural properties of the financial system. They are thus, I contend, two different ways in which finance may emerge in everyday life: through a procedural, socio-technical re-attribution of uncertainty: as something either ascribed to technology (as in Chua's study) or to the nature of a 'game' (as in Tan's research).

The becoming of finance through the effacement of financial uncertainty

The effacement of uncertainty – arguably a structural feature of the financial economy – from that economy has been demonstrated in the social studies of finance, political economy, and the history of economics time and again. In historical terms, de Goede (2005) and Preda (2009b) argued that the professionalization of financial trading since the nineteenth century capitalized on a 'rational' notion of financial speculation that was morally set off against irrational and irresponsible practices of lay trading. The advent of financial economics in the twentieth century further contributed to reframing uncertainty as calculable risk (Kessler, 2010). The studies in SSF referred to earlier provide evidence of how securities traders embrace uncertainty, understood as risk, as a way of rational self-subjectivization (Abolafia, 1998). What the present article adds to these arguments is not only the observation that a comparable effacement of financial uncertainty also occurs in socio-technical lay financial practices, but the analytical angle of the interaction order, which reveals that that effacement of financial uncertainty is a part of the very procedural pattern of online trading. The bracketing and blocking of 'structural' features of society, here, amounts to a factual denial to consider financial uncertainty as it is procedurally re-

attributed either to an aspect of the technicality of the apps or to an aspect of ‘fun’. Finance becomes constituted in the everyday, hence, precisely by the de-presentation of the uncertainty that is its systemic feature. And crucially, this is a de-presentation that hinges on widespread modalities of meaning-making, like, in the case studies discussed here, social attributions manifested in users’ narrated experiences or in the affordances of the apps. Yet obviously, their importance does not lie in what they imply regarding *understandings* of finance, but in the way they organize and enable socio-technical *processes*. This brings us back to the notion of intransitive financialization: The question is not so much how finance is *represented* in online settings but how it gets *constituted* through these online representations, and how these are enabled through techno-social processes.

I wish to discuss the methodological implications of this final argument through another example of a financial interaction order – namely, finfluencing on social media (cf. Binder-Tietz et al., 2024; Espeute and Preece, 2024; Guan, 2023 cf. for an encompassing review Busch, 2024). In a recent article, Hayes and Ben-Shmuel (2024) analyzed the media uses of finfluencers and the conversations with their audiences they engage in, stressing the variety of communicative channels, repertoires, and registers. In theoretical terms, they broadly follow a subjectivization approach similar to the one pursued by Chua (2025) in her study of online trading app uses, and combine that with a view on the economy as communication, following Moor (2021):

Examining finfluencers through this communicative lens foregrounds their transformative potential to refashion economic coordination in the digital age. Their novel fusion of financial advice and analysis with influencer media signifies an innovative infrastructure for economic meaning-making, one underwritten by information technologies and social media practices. (Hayes and Ben-Shmuel, 2024: 482)

Analytically, the authors combined a reconstructive inductive methodology of individual posts with a ‘Latent Dirichlet Analysis (LDA), a computational technique for topic modeling used to discover abstract topics or themes within a large corpus of textual data’ (Hayes and Ben-Shmuel, 2024: 485). The structural results of the research are summarized by the authors in the following paragraph:

This dual approach combines the depth of hands-on qualitative insights with the breadth of topic modelling. From this, we find that finfluencers cultivate financial subjectivities among their audiences through four distinct channels: First, digital storytelling weaves complex financial concepts into relatable narratives, making the abstract approachable and engaging. Second, strategic usage of syntax and symbols helps demystify financial jargon, using vernacular to bridge gaps in understanding. Third, community building fosters a sense of belonging and support, encouraging followers to share experiences and receive feedback. Finally, the diversity of voices represented by finfluencers reflects a range of perspectives and experiences that can resonate with a broad audience, not typically seen among traditional financial advisors. (Hayes and Ben-Shmuel, 2024: 486)

The authors do not refer to Goffman’s concept of the interaction order in their analysis, yet their main arguments refer to the strong interactivity of social media and the inclusivity of audiences in the dissemination and discussion of financial knowledge and action repertoires. Accordingly, their article can be addressed with the question of what the concept of interaction order, as discussed here with respect to the becoming of finance, might add to their findings.

First, one would reframe the question of how finfluencers relate to their audiences as follows: How do finfluencers as ‘vehicular entities’ (Goffman, 1983: 6) get constituted together with their audiences in digital interaction orders? This perspective shifts the attention from the cultivation of subjectivities to the constitution of finance as an effect of certain interactive regularities. Among these, Hayes and Ben-Shmuel (2024) count the more encompassing, more comprehensible, and more inclusive way that finance is thematized. Hence, the interaction order of finfluencing mainly seems to consist in rendering finance a topic to have a non-presuppositional conversation about, by way of attributing statements about finance and important finance-related themes to a persona (which is in fact Goffman’s ‘vehicular entity’ of the interaction order) that is public and at the same time approachable, the influencer. From the point of view of the interaction order, it is thus not the thematic substance of these online conversations but socio-technical forms of the attributions through which they operate, that enables the constitution of finance as a matter of the digital everyday. Telling from the analysis presented by Hayes and Ben-Shmuel (2024: 491–3), one interactional mechanism present in finfluencing that might be involved in the effacement of uncertainty is online interactions among finfluencers and their audience, which seems to largely follow a rationale of inclusivity, participation, and mutual confirmation, and which leaves little room for addressing financial uncertainty.

This invites the second question of an interaction order approach: What is the significance of a thematic analysis for the structuration of the interaction order? Telling from Hayes and Ben-Shmuel’s analysis, the combination of reconstructive analysis and LDA methodology of social media posts revealed almost no hint at the structural uncertainty of the financial system; the most ‘structural’ theme is financial market volatility (Hayes and Ben-Shmuel, 2024: 495). On a first level of analysis, this confirms the results of the above elaborations on trading apps, which underscored that structural financial uncertainty is redirected into uncertainty regarding the app’s functioning or uncertainty as a precondition for amusement. But from a point of view of interaction order, the content of the conversations can only be the starting point for an analysis of how the socio-technical forms of the interaction order enable finance to emerge in a particular thematic form – for instance, one that effaces financial uncertainty like the participatory communicative formats mentioned above do. This means moving beyond an analysis of meaning-making through themes and content, and instead investigating how the techno-social format of these representations of finance enact the emergence of finance in the digital everyday.

Finally, these amendments to Hayes and Ben-Shmuel’s article on finfluencers also carry a methodological critique enabled through the concept of interaction order – namely, a critique of the notion of subjectivization which is in widespread use in SSF. That notion presupposes the givenness of a subject before or behind the screen for whom the technological articulation of finance is meaningfully important on a more or less permanent basis (a point also shared by Chua, 2025). First, this conception leaves little analytical space for the ubiquitous presence of non-human agencies in financial markets and in the digital sphere more generally. By way of contrast, a focus on the interaction order can fruitfully continue early SSF’s conviction, discussed above, that non-human agency is part and parcel of financial dynamics. Yet second, and more generally, meaning-making itself, rather than being referred to a sense of experience and its cultivation, has to be rethought in terms of the sequential structuring of interaction processes. This, then, is the final point in the analysis: The becoming of finance in articulation with technology refers to meaning-making in the sense of structured procedures with constitutive effects, not of the substance of understandings about what finance is or should be about.

Conclusion

In the online trading apps and the finfluencer communications discussed in this article, financialization in the intransitive sense amounts to the emergence of a financial situation that, articulated by digital technologies, is deeply entangled with everyday financial practices and, at the same time, only selectively links up to contexts on a macro-structural level. Finance becoming tech, therefore, is not just technicized finance or financialized technology. Instead, it is a new way of making finance emerge, in that its technological articulation creates new but selective interrelations of finance with society, economy, politics, and culture. The article referred to performativity studies in economic sociology and the social studies of finance to argue for the constitutive effects of representations of finance that are not identical with what they claim are their corresponding contents; to Zelizer's economic sociology of the constitutive articulation of economic and financial logics and rationalities with other logics and rationalities (in the case under discussion here, technical ones); and to the inspiration taken from research into the security-finance nexus to reconstruct and critically examine genealogies and epistemologies of social-scientific research into the constitution of finance.

The introduction of Goffman's concept of interaction order to the analysis of finance in the digital age responds to these three bodies of research. The concept of interaction order helps push interactionist reasoning in SSF further, renewing the classical ambition of SSF to argue for the (micro) social foundations of finance. The concept helps, first, to specify the interrelation between digital-situationist finance and its contexts as an 'achievement' of situational self-isolation in which both human and non-human entities are involved. Second, the concept invites formulating a research agenda that treats the impression of personal financial empowerment in segregated socio-technical situations and the effacement of financial uncertainty from those technologically secluded situations as flip sides of the same coin. The interrelation of the financial situation and its beyond assumes the form of a delimitation. It is an interrelation that materializes as interruption. Third, the concept helps productively question analytical paradigms in SSF, such as the widespread use of subjectivization theoretical approaches, through insisting that meaning-making in finance's becoming (tech) rather refers to the organization of procedural micro-orders and not so much to the emergence of substantive ideas about finance.

Above, I argued for a complex genealogy of the contemporary moment 'when finance becomes tech'. I therefore wish to close with some suggestions for future research on the genealogy of digital-financial interaction orders. As argued earlier in this article, their *technological* genealogy points back to trading in computerized professional environments, which, since the 1980s, preordained the dissemination of digital technologies throughout society. The article focused on the conceptual and epistemological implications of the fact that the social study of finance used interactionist approaches to dissect these professional trading activities. A follow-up question is how this pattern of technologically bounded financial situations morphed into private digital investment practices, like trading apps. Another question is how techno-financial interaction orders beyond trading – like the finfluencing practices discussed above but also chatrooms, which play a major role in the contemporary mobilization of non-professional trading publics (see Duterme, 2023) – stand in a techno-social relationship to the much-discussed self-reinforcement of interpretive patterns and practices of 'othering' in social media communication more generally.

The *financial* genealogy of digital-financial interaction orders possibly points back to moments in which the social form of the exchange transaction became valorized within the financial economy. In its discreteness and high degree of formalization – with clear beginning and end points, radical synchronicity of mutual accounting processes, and strict

rules for finalization (Rella, 2019) – the exchange transaction is easily isolatable and hence can be rendered as a momentary and situational activity, thus effectively challenging the flow metaphor of financial exchange. It is probably no accident that Goffman chose the example of ‘service transactions’ – and that he named them ‘transactions’ instead of the much more common ‘interactions’ that dominates his work – in order to demonstrate the capacity of interaction orders to selectively incorporate structural features of society only according to their own procedural logic. Those service transactions are highly routinized, modular, and portable practices with clear beginning and end points, defined responsibilities, and rules for transactional finalization, which is a property both of financial transactions and of bureaucratic procedures. A genealogy of the central role of the exchange transaction in finance would probably invoke moments in financial history such as the rise of quantitatively standardized forms of pricing at exchanges (Pinzur, 2016; 2021), the role of metricization in financial commensuration and market integration (Beunza et al., 2006), the rise of arbitrage as the foundational scene of the discipline of financial economics (Markowitz, 1952), and mathematical finance with its inherent tendency to decompose financial securities into abstract, but priceable, risk components (Joshi, 2003).

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Notes

1. Goffman did not make systematic suggestions as to how to interrelate these different levels of social order, a project that was later taken up by Anthony Giddens (1979) in his theory of structuration.

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