

Social Volatility and Temporal Foci as Accelerators of Economic Trends

Julia M. Puaschunder^{1, 2}

¹The New School, Department of Economics, School of Public Engagement, New York, NY 10003, USA, Julia.Puaschunder@newschool.edu, www.juliampuaschunder.com

²Columbia University, Graduate School of Arts and Sciences, Julia.Puaschunder@columbia.edu, http://blogs.cuit.columbia.edu/jmp2265

ABSTRACT: Based on the COVID-19 economic fallout, the article outlines that the finance world has different temporal perceptions than the actual chronological time measurement in contrast to the real economy. In the real economy, concrete constraints create a more emotional and destructive reaction to the general information about COVID-19. Social online media plays a role in loading these two groups with different affects. Comparing the economic consequence of the endogenous crunch of the 2008 World Financial Recession with the external economic shock of the COVID-19 pandemic aids to retrieve crisis-specific recovery recommendations in the overall discussion. Understanding how the social compound forms economic outcomes promises to explain how market outcomes are developed in society and can be shaped by strategic communication with special attention to new media technologies.

KEYWORDS: Affect, Collective moods, Communication, Consumption, Coronavirus, COVID-19, Digitalization, Economic fundamentals, External shock, Information, Lockdown, News, Pandemic, Social volatility, Socio-Economics, Socio-Psychological Foundations, 2008/09 World Financial Crisis

Language and Crowd Control trough Media

In society language is used to embody theories of reality. Linguists see the discourse inseparable from social and economic factors (Fowler et al. 1979). Ideas relevant to events such as employment and economic prosperity are conveyed in language messages of the media. Different social strata and groups but also different institutions and media have different varieties of language available to them. Linguistic variations reflect and actively express the structured social differences which give rise to inequality and economic dispersion. Beyond effect and reflex of social organization and process, language is part of the social process. George Orwell was the first to recognize connection between language, ideas and social structure in his novel 1984. Language regulates the ideas and behaviors of social masses. Access to information determines the position of the individual in economic market competition. Language thereby become a determinant factor to classify and rank people to assert institutional or personal status in society.

Contemporary writings address political, institutional and social processes as underlying causes of crises, yet the role of information for the building of economic moods is hardly described. Emotional propensities may vary by certain societal groups. Time foci in communication may elicit certain action. Also, with social online media arising in the previous decade, speech and writing has become borderless and boundless, expressing the social circumstances in which language occurs. With the age of instant digital communication, unknown dangers of mass communication of economic correlates has arisen that implicitly builds expectations and hence bubbles to add to economic fluctuations in price.

Language shapes social processes. As part of social process, language influences groups. The information available to certain groups determines their state of mind. While linguists primarily describe the use of language to control the behavior of groups, this article focuses on the unintended and unforeseeable consequences of information on economic correlates. While there are writings on the role of information to control behavior, less is known about the unintended consequences of information in expectation building and hence bubble creation.

The paper aims at unveiling linguistic practices which implicitly become instruments to assert social inequality in economic terms. Linguistic structures are used to explore, systematize, transform and often create realities about prices and markets. The following part highlights the interdependence of market actors beyond prices in communication about the general economy, which are determined by communication creating expectations or contracting collective choice. The use of language as control will be shown to be limited by the collective reality of price and the irrationality of the crowd. Societal differences will be addressed that create systemic propensities to react with different emotions to the same information. In the process, groups form with differing behavior that opens a cliff of disparity between healthy and unhealthy reaction to the same economic information. In this sense language determines the social structure of inequality and the distribution of power within society. Society is organized upon a principle of unequal power determined by public communication as governments, newspapers and social public media control language. Using linguistic analysis as a way of uncovering the making of economic booms and busts will affect the general consciousness about language as an implicit economic correlate and basic of economic fluctuations.

Language reflects and perpetuates inequality. In online media accessible to everyone, not so much in the way how information is accessed. But information becomes relational and asymmetrical in that sense that there are differences of class or states of capital use. As the following part will draw on Karl Marx's distinction of capital into means of exchange and store of value, information about the economy implies a different impetus for the capitalist than the consuming labor. As the inherent relationship is a competitive a negotiation for power and the following article will interpret Marx in Bergson's (1910/2001) immanent critique tradition, the following paper will outline the different starting grounds of capital being an inequality dividing moment in society.

As language supplies the models and categories of thought, it not only shapes people's experience of the world but also people shape their world differently based on information. In this, capital becomes a dividing moment into winning or losing from crisis communication. The following article will thereby outline the economic uncertainty that stems from fluctuations of discourse in the media. The linguistic equivocation mirrors the tension of the real situation in which people find themselves.

The notions of time and value will be discussed in the dividing element of social classes. The producing class, the industrial-capitalists, will be distinct from the laboring class, exemplified by workers. Their different historical starting grounds on time prospects in absorbing market information will become the basis of an argument for a class division in those, who can absorb long-term liquidity constraints better than those who spend for consumption and are therefore more constraint by economic crises. What is new to this argument will be that the emotional arousal over information on economic crises differs between these groups. While producing individuals can wait out liquidity crunches with ease of mind, the laboring consumer will be stressed out and forced to make more unwise decisions.

Behavioral aspects include that the rational industrial-capitalist can make system 1 decisions around crises, whereas the emotional consumer-worker is more likely to make unwise choices given a different emotional arousal of information about external shocks and economic crises. In bringing Marx's concepts of abstract and concrete labor time in relation with affect theory's concern with duration or indexical time as the flow of time from past to present and future; the overlapping time concepts of Bergson (1910/2001), who uses Deleuze's cinematographic concepts will prepare for a deeper look into Sian Ngai's interpretation of Moishe Postone's work on labor, time and social domination in the bridge to contemporary affect theory (Lee 2020).

With governments and media moguls having lost the ultimate power of censorship in the digital age, online media has portrayed as powerful mode of language and thought. Mass communication has leveraged as a tool to unconsciously drive the economic engine.

Unprecedentedly described implicit economic fluctuations build by media representations currently control society's relationship to material reality (Fowler et al. 1979).

Mass media communication can create mass movements based on building mass expectations. The communication is thereby re-packaged at the recipient, whose experience with others influence the way information is processed and guides actions. In this light freedom of speech and access to information appear as for holding unforeseen economic outcomes. The paper thereby outlines the implicit reaction of the knowledge of economic correlates. Unveiling the economic machinery of language as driver of economic ups and downs will aid deriving communication recommendations to ease economic fluctuations. Journalists will be enabled to understand the economic ethos of words and the moral imperative of their economic coverage. Following the goal to gain certainty about the economic situation, information will also be portrayed as a potential to stabilize or destabilize the economy and divide society.

Historical Foundations

Historically, Adam Smith and David Ricardo describe capital as the driver of production (Meister, forthcoming). Liquidity is created by financial markets as a value of economic output that helps the real economy with credit in order to pursue their endeavors in employing workers and creating purchasing power. The real economy foundations are financed via financial markets providing loans to fund grand endeavors in the future (Buera & Shin 2011; Rajan & Zingales 1998). Capital accumulation affects capitalism's continued ability to forward-fund the growth of aggregate demand for wage goods (Meister, forthcoming). In most recent decades, the finance sector has turned for serving social-psychological motives of socially conscientious investors and activists (Puaschunder 2018a, b).

Finance and production have always been features of capitalism (Meister, forthcoming). Capitalist production is financed by producers with no initial ownership of the means of production and no initial control over their labor force (Meister, forthcoming). This historical impact of finance on real economy production has changed over time. While the financial sector now accounts for just under 9 percent of total GDP in the United states, it comprises over 30 percent of all corporate profits; before 2009, this figure exceeded 40 percent (Lee 2020). The interaction of asset markets and economic output in the era of capitalism set the standards for heightened levels of inequality we live in today (Meister, forthcoming). Thomas Piketty's Capital in the Twenty-First Century (2014) outlines that asset values have compounded faster than production has grown (Meister, forthcoming). Piketty's (2014) impressive historical data outlines that basic income distribution between those who own capital and those who need to earn capital for day-to-day living expenses has been widening. Income inequality arises from the ownership of capital. Piketty (2014) agrees with Marx that access to money or credit (postponed need for money) is not part of what is being bought or sold in the real economy (Meister, forthcoming). In the Marxian tradition, capitalist exploit workers indirectly as their consumption must always be funded by paying cash in advance (Meister, forthcoming).

Particular is also the role money plays in these two worlds. The different uses of money create different classes in society. The finance world monetary economy differs from the real exchange economy as the finance sector has the benefit of the liquidity of wealth and thus domination via a wealth rent. But this happens without any market production of the real economy. Financial forms of capital appreciation does not nurture society per se by enhancing social relations in material wealth that enriches socially or a valorization of commodities that is only possible in the real economy (Meister, forthcoming).

Income inequality stretches deep in the time prospect the differing groups of the finance community and the real economy have during crises (The Levy Economics Institute of Bard College, 2020). Differing emotionality arises from economic crisis communication in the news

if wealth exists or does not. The finance world has a time swop advantage to maintain existence and sustain in a separation between time of delivery, consumption and time of payment. Finance options introduce a separation of time for market prices and volatility (Meister, forthcoming). In diversification financial market actors can wipe out the differences between positive and negative market movements and hence catalyze volatility. With the creation of options, which were illegal up until 1973 as for being considered as gambling, the finance world can benefit from time value. In stock options, the finance world can index winning industries and turn away losing market segments.

The finance world enjoys the value of optionality in purely financial gains (Meister, forthcoming). Liquidity problems arise for the real economy during economic upheaval, which are titled as realization problems in Marx in the realization of ordinary living expenses (Meister, forthcoming). According to Marx, money received in wages in the real economy is spent as soon as received in commodities that do not function as value-preserving assets or investments (Meister, forthcoming). Money arises for transactional purposes in a confidence of finance in real economy activity. Options markets allow the financial system to anticipate and bet and benefit from future threats to liquidity from turbulence (Meister, forthcoming). The heightened volatility resulting from widely publicized threats to basic needs can be monetized.

Volatility can be positive and negative for the finance market to profit from, whereas volatility can only be negative in the real economy. This ability of financial markets to capitalize on threats through creating and pricing options is a source of financial resilience today but it also reveals the real economy's political vulnerability (Meister, forthcoming). Take crops – in the finance sector shorting commodity prices offers financial gain perspectives, in the real economy any deviation from expected harvest goals is hurtful. The finance sector has created this risk-free, emotionless vacuum in comparison to an emotionally-laden, liquidity-constraint real economy. Volatility added to markets thus implies positive opportunities to gain for the finance world, but negative frictions in the real economy (Meister, forthcoming). That is the hidden inequality underneath the financial cushion skin.

Financial liquidity as such comes with a political and societal price (Meister, forthcoming). Liquidity is manufactured by paying someone a premium to assume the risk of temporal illiquidity (Meister, forthcoming). Guaranteeing against systemic illiquidity and supporting the value of asset markets in the real economy activity was originally the main purpose of the finance world. The state connected these two world by the exclusive power to issue currency and finance long-term by the use of governmental bonds and redemption via inflation (Meister, forthcoming). The institutional support allocates tax revenues towards the financialization of infrastructure essential for real economy activities. This government's borrowing power to support financial markets liquidity is political creating additional social noise (Meister, forthcoming). Piketty (2014) concludes that government policies – such as redistributive income taxes, capital levies, and monetary control – can lower the rate of return on capital as the ratio of wealth to output rises.

Liquidity in the finance sector has become the requirement of capital accumulation and imbues ultimate vulnerability to society in the obligation of the real economy to bail out failing financial markets and bear the costs of speculative bubbles bursting. In a collateral realization problem, the finance world is considered too big to fail and can benefit from value-at-risk, while being able to count on bail-outs if failing. The 2008/09 world financial recession aftermath was a vivid sign of bailouts being paid by an inflation-disowned general public.

The price of liquidity is set by capital markets (Meister, forthcoming). Policies may peg the appreciation of capital markets to growth in the real economy. Meister (forthcoming) proposes to fix the problem of inflation by pegging wage rates to changes in the nominal price levels of the goods that wages can buy. The contract between capital and labor in Marx is entered voluntarily by the labor's own interest and can be left by the labor. But the current

financial market and real world divide is an implicit monetary peg that was either chosen nor can be left.

Liquidity creation neither derives from production nor corresponds to asset appreciation possible in the real economy markets. Meister (forthcoming) builds on Marx's critique of capital appreciation that does not come from expanded economic output in the real economy and thus vanishes societal and cultural value. Capital accumulation stems from economic output but does not lead it or imbue it with value. The finance world thus lives from real economy productivity but erodes the social and cultural foundation economic growth builds on. In case if asset markets grow faster than the industrialized economies that underlie them, the democratic, cultural, artistic and social value erodes. A drive of capital in the finance sphere thereby eats from the financial potential of the real sector.

Over the course of industrialization, money's operating system permeated the world with expanding production cycles of capital in the private accumulation enabled by the institution of capital's unequal exchange with labor by means of the wage and of private property's systems of accounts (Beller, forthcoming). Under capitalist expansion and its highly varied methods of accounting, qualities became increasingly treated quantitatively and subjugated by the calculus of profit (Beller, forthcoming). The abstraction of money was perfected in finance capital in which the finance world derives wealth from pure speculation and risk management detached from labor and labor time (Beller, forthcoming). Abstraction in capitalism requires a reformalization in material processes. Rendering money into commodities will make capital fungible for society (Beller, forthcoming). The finance world turns money into finance and risk into value. The derivative society in the finance world can benefit from risk. With shorting, financial executives actually turn a downturn into financial gains. The finance sector benefits from the fungibility of money, which may be called fluid putty money for financial market transactions and collaterals convertible to money. The real economy is more struck with clay parts of economic growth that are dependent on favorable market conditions.

As for social class differences, the real economy has a different more emotionally-laden time perception than any chronological clock could ever provide (Martin 2019). Time on the clock is different than the time in the mind since experiences are created in the head (Martin 2019). Memory becomes the guide in interpreting information and absorbing time differently as opportunity or burden depending on the financial world and the real economy. The global transformation of time occurred during the era of neoliberal globalization, in which the finance sector became more and more detached from society (Martin 2019). Financial time is measurable and monetizable, ordered and linear (Martin 2019).

Fear of time becomes an issue in the real economy (Martin 2019); while the finance world can benefit from arbitrage and hedging to turn negative market performance to their favor during a violent disruption. The finance world ends with self-actualization and opportunity, while the real economy is constraint in a reality they want to escape from (Maslow 1943). While the real economy has a stressful time consciousness that is easier to be explained in finance terms that lived (Martin 2019). The finance world is therefore in direct contrast to the real economy. The finance sector enjoys a physical time, while the real economy suffers from a psychological time perception (Martin 2019).

Problematic appears that the finance world only focusing on preserving and expanding the store of capital that already exists without adding social value to it. In a direct mediation of value redistribution or mutual bail out obligation forms could bring back the finance industry to serve the real economy (Postone 1993; Meister, forthcoming). As a service sector the finance sector could transfer economic value for the sake of shared prosperity (Higgins & Reddy 2020). Facing an obligation to contribute to society, finance markets can play a leading role to finance higher social goals and long-term endeavors – for instance in the eye of climate change and global responsible intergenerational leadership quests (Puaschunder 2016a, b, c).

Social Volatility

The relation of information and emotionality forms the basis of social volatility, which differs within society. Actual volatility is a measure of the amount of randomness in a financial quantity of any point in time (Wilmott in Lee, forthcoming). Volatility stems from the notion of fleeting, transitory movements in markets and is as much an indicator of financial well-being as stock market performance (Lee, forthcoming). High volatility is associated with unpredictable market changes and an overall market uncertainty (Lee 2020). Quantitative volatility estimations derive from models building on historical data opposed to the indexical or real-time trading in the wake of events occurring, in which time flows from the future through the present into the past (Lee 2020). The market's estimations of the future volatility of the underlying stock is featured as implied volatility (Lee 2020). Emil Durkheim speaks about collective affective components in collective effervescence as collective resonance (Lee 2020). Social volatility adds a social dimension to a rational account.

Lee (forthcoming) distinguishes in finance between instantaneous randomness and historical volatility based on two notions of time: The homogenous time of classical physics in which all events take place (presupposed by historical volatility) and the indexical time (as the instantaneous time of trading), in which the relations between events generate a sense of past, present and future. While standard neoclassical theory defines volatility as a "standard deviation of stock prices" or "statistical dispersion of returns for a given security or market index," also political, social and cultural influence shape volatility (Lee, forthcoming).

The qualitative influence on volatility works through social affect and collective moods of emotional market actors, who react to large-scale information flows. The popular imagination and expectation thereby creates a buzz or steer that drives or crunches market actors' behavior. Departing from notions that trading is scientific (Friedman in Lee, forthcoming), social volatility arises from collective interpretations of the signs of times.

Ample evidence and data exists on the quantitative nature and outcomes of volatility. Yet to this day there is no solid theory or empirical investigation of social volatility – the qualitative influences on volatility, such as affects, emotions and collective moods that shape individual's reactions to information, news and historical events. Intensity and nature of emotionality may differ between those invested in financial markets and those who derive their income from labor. Extent and intensity of sensations creates this gap between capital and labor as experienced in high market profits for financial gains and liquidity constraints experienced in the real economy during crises. This kind of turnover capital in the finance world, Marxist scholars call 'fictitious capital' (Harvey 1990). The ones engaged primarily in capital gains have the luxury of optionality as the time and right to choose (Lee, forthcoming). They are the ones who can wait out and suspect the implied volatility of underlying market options as better estimators of future market performance.

Lee (forthcoming) advocates for reconciling the quantitative and qualitative dimensions of volatility. Integrating social notions that cause volatility will aid in embracing the instantaneous levels of social volatility formation. Henri Bergson (1910/2001) brings together volatility and indexical time in the notion of duration (Lee, forthcoming). In Bergson's (1910/2001) notion, initial volatility is created by many vibrations linked together via discourse of many unloading in emotions and motions. The present gets tainted by the past and the imagination of the future. In the Bergson (1910/2001) duration, the flow of time into past, present and future becomes a qualitative multiplicity of emotional moments that create collective actions (Bergson, 1910/2001; Lee, forthcoming). Emotions, desires and passions play a role in breaking waves of economic trends. Different emotionality propensities in the eye of market communication about the overall economic state grounded in differing starting conditions within different social groups, are yet to be scrutinized and depicted scientifically.

Affect Theory

The importance of affect for market reactions and finance outcomes is first described in John Maynard Keynes' notion of 'animal spirits,' which lateron gets picked up by George Akerlof and Robert Shiller (2009). Lee (forthcoming) accounts the work of Giles Deleuze, Bergson and Spinoza as the most important philosophical influences on the development of contemporary affect theory, in its "ability to affect and be affected" (Lee, forthcoming; Massumi in Deleuze & Guattari, 1987: xvi; Spinoza). Massumi's *The Autonomy of Affect* (1995) explicitly used Spinoza, Bergson, and Deleuze to create the theoretical parameters for affect theory and connection to the finance world (Lee, forthcoming). Related components derived from the belief-desire model and moral philosophy notions as well as decision making under uncertainty behavioral economics (Lee, forthcoming).

The belief-desire model and decision-making under uncertainty became the dominant framework for subjectivity in quantitative finance. Affects in economic markets were first addressed in Keynes 'animal spirits' asking why people disobeyed expected utility theory, which opened the way for the development of behavioral economics by Amos Tversky and Daniel Kahneman (1979; Lee, forthcoming). As a next step, we need to translate expected utility theory into an empirical verifiable psychological model of beliefs and desires.

Affect theory entered finance in the wake of instability concerns of the 2008/09 world financial recession and Thomas Piketty's (2014) concern over growing wealth inequality (Lee, forthcoming). Today's affect theory in finance proponents are Laura Berlant (2011) and Sian Ngai's Gimmick (2020). Although we have expanded our repertoire of quantitative tools to measure and manage risk, uncertainty and volatility, to this day the qualitative side of volatility is left rather unexplored (Lee, forthcoming). In the behavioral economics research, experiments and fieldwork discovered that individuals systemically do not behave rational as for being tainted by heuristics, framing and affective biases. Belief-desire models were introduced in Kahneman's (2011) flow model that attributed affect as influence on decision making in system 1 (as unconsciously biased) and 2 (as rational decision-making) thinking domains. Integrating System 1 and System 2 theories into social volatility includes time prospects and money use. Societal groups form in which holders of the means of production, industrialists-capitalists, have ample long-term views and long breath in finance as for generating money from money in the finance world. They are the ones prone to system 2 thinking capacity during times of economic upheaval. The laborer-workers are consumers, who are bound to work for a salary in order to fulfill their day-to-day needs and wants. So the distinguishing factors are the turnover time and need of capital as well as the obligation to pay for consumption goods. Laborer-workers are the ones stuck in system 1 thinking with the crisis hits as they react emotional given their constraint budgets and lack of degrees of freedom. Industrialists-capitalists enjoy a longer time horizon and continuous degrees of freedom to spend. The problem of a gap between the finance world and the real economy highlights this distinction of classes and the problem of identities in markets that are either emotionless or filled with affect leading to two classes of behavioral outcomes that will bleed into wealth and poverty (UNICEF Press Release September 2020).

Social volatility brings a subjective element to probability estimations of events and their occurrences. Weighing on one's beliefs and desires in the reflection of information provided about markets shapes individuals' intentions and actions.

The anthropologist Caitlin Zaloom describes the riding on the ebbs and flows of socially shared affects constructing economic up and down swings as flow experience (Lee, forthcoming). Instincts of traders and market actor's engagement in capital for investment, not consumption, determines the better understanding and profiting from natural rhythms of financial fluctuation (Lee, forthcoming; Zaloom 2006). This is the nature of being a dynamic trader, who outperforms the market in his understanding of collective moods bleeding into collective action influencing market outcomes (Ayache 2008; Lee, forthcoming). The ebbs and

flows of affective intensities form decision-making qualities, which differ between societal classes. Surfing volatility thereby becomes a skill of those using money to make money by being in the zone (Csikszentmihalyi, 1990; Lee, forthcoming; Zaloom, 2006). Flow creates an affectual bridge between System 1 and 2 (Lee, forthcoming). Csikszentmihalyi (1990) suggests that being in the zone occurs when there is an optimal alignment of goals and abilities and people are absorbed by a task (Lee, forthcoming). This prepares the argument that flow underlines the distinguishing factor between those who can afford long-term considerations in markets whereas others become emotional in their decision making under constraints.

The belief-desire-intention model becomes the framework to analyze action and communication (Lee, forthcoming). Studying emotional impacts on finance aids in explaining the market powers of herd behavior, panic selling and irrational exuberance around expectations creating bubbles. Bergson and Deleuze's insights that affect changes intensity and quality of judgment develop the notion that affective choices may lead to suboptimal outcomes. In that affect becomes the basis for social volatility that does not follow the discrete-time punctuation of decision-making. Those whose time perspective can be longer due to the engagement in financial markets, benefit from a wave-like flow of indexicalized continuous time, which Henri Bergson (1910/2001) called duration (Lee, forthcoming). Flow thereby becomes the psychological modulation of duration (Lee, forthcoming). The flow of affect adds a qualitative dimension to volatility, which is missing in the belief-desire model of decision-making under uncertainty (Lee, forthcoming). Flow thereby also adds to behavioral economics, which is based on the study and description of heuristics but offers – to this day – little on the emotional sensibilities of decision-making and the subsequent economic outcomes (Lee, forthcoming). Social volatility thereby has a direct effect on culture and economic outcomes.

In the connection of time and modality to volatility time plays a role in the social division as capitalist-industrialists have more long-term possibilities than consumptionallocation constraint consumer-laborers. Modality attributes the qualitative dimensions of affect and volatility.

Bergson's (1910/2001) duration is the indexical flow of time between present, past and future, which physics does not distinguish but behavioral economics does (Lee, forthcoming). Emanuel Derman (2002, 2016) proposes trading as an event with indexical time and the traders enjoying flow highs in surfing volatility waves (Lee, forthcoming). Volatility is thereby grounded in a flow model driven by affect that creates a differing sense of time.

Collective moods constituting social volatility is a sign of our globalization time, in which reflexive communication on social media tools has created socio-economic pressures of globalization (Harvey 1990; Lee, forthcoming). To this day, there is no clear account of the mechanisms of language online creating collective moods and affects of the individual. Unanswered are questions about the socio-psychological motives in the public discourse online forming emotions and if the internet as platform without any official governmental censorship creates new levels of complexity. In the public sphere we can already say that the internet offers unprecedented opportunities to blast information instantaneously and truly globally. Lee (forthcoming) believes that there seem to be new forms of volatility being introduced by digital technologies in the contemporary culture and politics of finance. The internet may have informativeness decreasing in light of big data. For the individual consumer of the internet, problems of hyper-hyperbolic discounting arise. Internet users face a constant predicament between dignity in privacy and utility from information sharing. Individual information sharers cannot foresee what their shared information will have an impact for them in the future. The information is shared tranche by tranche and with entities that may hold more information over time and certainly over big crowds. In all these features, information has become a highly volatile good in the digital age. Yet to this day, we do not have a theory on how information leads to emotions creating social volatility with direct market outcomes. Although efficient market theory considers the markets as an information processor, we still have no behavioral

account on how the information bleeds into emotions curbing or accelerating certain choices of certain market actors. Information processing in market has therefore become a highly recursive act in the collective building up of emotions that then fuel crises or exuberance. Media and internet technologies have also increased the "turnover" time of information so the fractal butterfly effects become increasingly commonplace; the overflow of "availability cascades" become the norm rather than the exception (Lee, forthcoming).

As Lee (forthcoming) outlines, digital technologies make possible the representation and fast-paced, widespread transmission of information about volatility. But their representation and transmission contribute to the randomness that they represent and transmit and this is all being constantly updated in real-time. The traders notice implied volatilities and can use it for their favor in their long-term vision. This kind of novel social volatility but also the class divide in those who can handle social volatility more relaxed account for an increasing phenomenon as digital technologies unfold around the globe exponentially and socially rising trend of our times.

Affect is a reaction to environmental stimuli beyond rational calculus (Berlant 2011). Berlant (2011) notices optimism becomes cruel in capitalism when it ignites a senses of possibility that actually makes it impossible to attain the expansive transformation for which a person is striving (Berlant 2011). The fantasies of a materializing education, job security and a stable career for upward mobility are built within the framework of cruel optimism (Berlant 2011). People are believed to be attached to conventional good-life fantasies within institutional and capitalist frames, which turn in reality to capitalist arenas of instability and fragility (Berlant, 2011).

The Gimmick gives a tableaux of illusions that does not add up to reality. Gimmicks include the camouflage of unequal expansion of capitalist gains and economic opportunities by mass media, literature, television, film, video and art up to social media online that procreates cultures of unhappy aspirations. Good life fantasies and lifestyle aspirations in a low interest rate climate create prisons of debt for people who spend their whole life paying off past consumption. This cruelty in the optimism created by capitalism leads to so-called death of despair (Berlant 2011; Case & Deaton 2020).

With a reality that presents itself in human via affect that senses trends and implicitly guides our behavior, affect contours any incident coming down on society. Affect is shared in the historical present and therefore becomes a profound force responsible for collective economic crises. Affect is also present in the adjudication of survival strategies but also a driver in the pursuit of a better life. While economic crises, however are absolved by awareness and relatively less emotional content, the hypervigilance and tension of the real economy is caused by being bound to real world constraints that creates an unequal emotional outburst. Different affects are related to different patterns of reflexes and behaviors.

Unequal urgencies and senses of emergency lead to unequally distributed sensibilities, which evoke differing gestures in the economy that constitute common norms of social classes. The economic situation is therefore a genre of social time and practice. The underlying relation of persons and worlds is sensed based on the group a person belongs to that constitutes certain behavior. The same situation creates either opportunities or tragedies of despair. The same world-shifting events may for the finance world create gain perspectives in recognizing certain collective mood behaviors economic potential, while the same occurrence imposes a world-shifting threat to the real economy.

The distribution in these categories of reception highly depends on the geopolitical and biopolitical locations as well as the socio-economic starting ground of the wage generation. Economic crises are extended in parts of society turning into an ongoing condition and intensified situation with extensive threats to survival (Berlant 2011). The distinction into social classes of crises is structural is made via affect – it is emotional excitement caused by crisis and emotionless rational response in others. The finance sector can remain mentally distanced and can economically flourish in times of crises due to hedging potential, while the real economy

suffers from closeness of the world and real skin in the game in their everyday life. The real economy may face a loss of confidence, while the finance world experiences a confidence boost due to financial friction hedging potential. These emotions and mood build in large mass cultures via new technologies that are constantly and reflexively scanned for news and information that gets added and changed on a periodic basis. The media proliferates world realities and gimmicks about the current state of the world in our common modes of living. Gilles Deleuze writes that affects act in the nervous system not of persons but of worlds. Affective scenarios are emphasized in social discourses within diverse social bubbles that reciprocate emotions and feelings about the political and economic norms. Diverse social contexts echo the collective sensual activity in light of events that get transmitted and reemphasized in social media. The inequalities of contemporary capitalism lie in the emotional hyperventilation of the real economy and the rational mastery of the finance world that gets exacerbated in the dynamic relations of social crowds and clans. While the finance world is detached from real world problems, the real economy suffers from a collective trauma in the face of threats and catastrophes in their everyday precarious lives. The finance world stays detached from emotionality given the possibility to hedge against risks, spread risks and diversify more fungible assets that are not needed to cover day-to-day expenses. Brian Massumi (2018) represents the nervous system as so autonomous that affective acts cannot be intended, in contrast to affective facts that institutional entities, such as the finance sector professionals, can manipulate to foreclose future capacities (Berlant 2011). These are what Deleuze (Lee 2020) calls the affective components of historical consciousness in the face of subjectivity. The real economy seems to suffer from loss of confidence with personal affective states in times of crises given their threats to well-being, while the finance world has a powerful anti-affective force of crisis gain potential that invigorates their desires. The affective reconstruction of the reality varies between the two worlds of finance and real economy of hope and loss during a crisis existing concurrently. Affective qualities taint the conditions of life and how decisions play out in the lived time. The affective moments saturate the corporeal and cognitive process that lead to different subjectivities of reality and guide different behaviors. A common historical moment thereby appears as diverse visceral moment in assessing the diverse opportunities and risk prospects of different groups. A shared atmosphere of a cluster of interest determines a pattern of approaching and navigating in markets. The different patterns of affective responses thereby leverage into the structural divide in external shock struck economies (Nikiforos 2020). The convergence between the affective response and economic differences creates zones of inequality in society (Nassif-Pires, de Lima Xavier, Masterson, Nikiforos & Rios-Avila 2020).

Future research should conceptualize to elucidate the affectivity of events with a special emphasis on the two worlds. A formal rendition of affective experiences would thereby provide different modes of responses that are specific to the recipient groups. Future research may clarify the affect stages of different crises, meritocracy and upward mobility but also anxieties around precarity and financial gain prospects that shape and guide human behavior and certain groups at different stages in their lives. Social stratifications in different classes, like gender, race and nation should be pegged to characteristic affects and emotional qualities that are prevalent in order to outline the different shades of inequality prevailing in society. Linking the world of feelings to the worlds of money and real economy will aid in capturing how catastrophes bleed into ordinary life in emotions and guide consumption. All these insights will offer most novel ways how to find the right communication and socio-psychological means to avert crises.

Responsibility in the Post COVID-19 Era

The COVID-19 crisis turns out to be a crisis of the measurement of value (Gorz 2003). The increasingly affective quality of language online turns the crisis communication into a hidden inequality accelerator. Affective differences in the perception of COVID-19 external shock

communication underlines the immaterial wealth of capital (Gorz 2003). Capital leverages as a shared skill that materializes in the everyday life decisions and grants peace of mind. But this feature in capital leads to a reduction of emotions and real economy experiences. The financial market hegemony therefore capitalizes on the real economy by creating security in making money from money and the exchange of non-profitable industries emotionless. People's life choice is between the artificial head or the pounding heart.

The COVID-19 pandemic created winners and losers as well as the deep gap between strongly positive financial market developments and the negative performance of the real economy induced by lockdowns. Exposing the real economy to a wave of private bankruptcies and liquidity bottlenecks, therefore calls on governments around the world to reboot financial markets to return to be a service industry - to serve the real economy. Government bailout packages are likely to be financed over the long term by the historically-lowest, never-so-longlow key interest rates. Low key interest rates will continue to allow the capital market to flourish. But this is based on the cost of a weakening of the potential of the interest rate as a monetary policy tool, which the economist John Maynard Keynes (1936/2003) already described as a "liquidity trap." The low interest rate policy brings along long-term external financing of past ideas, which impairs the flexibility of investors to finance future-oriented innovations and may hold back societal progress. Low interest rates on savings accounts in the real economy keep people trapped in the debt financing of past dreams (Forbes, 2020). Household debt traps are causing massive psychosocial burdens, a so-called 'deaths of despair' trend is already noticed in the US for mid-career death spikes induced by alcoholism, drug use and suicide (Case & Deaton 2020). Unequal world problems include a diversified access to health, well-being and prevention in society.

Poor people are less likely to be able to afford and be cognizant about how to lead a healthy life. Marketing Gimmicks lure them into constant needs for consumption with a lacking budget. Exploitation creates an ever-existing appetite for food and self-medication that if cheap in light of personal consumer debt and uninformed leads to slow death of despair. People with less financial and salutogenic expertise may harm themselves over time with hedonistic and compulsive behavior that yet works towards capitalistic consumption goals. The obesity epidemic burdens the working classes of contemporary capitalist countries, like the United States and the United Kingdom and all countries that participate in the global processed-food regime (Berlant 2011).

In a convergence of communication, information and financialization as computation, the virtual online machinery is dominating value creation today (Beller, forthcoming). Representations of today's language and online communication determine responses to the social volatility rendered the more precarious real economy. Affect is the currency of the real economy, while financialization strategies that of the finance sector, which exacerbates the prevalent inequality schemes in society (Lee & Martin 2016). Money becomes the real abstraction (Beller, forthcoming). Ironic in finance volatility and the financialization of everyday life have become a major source of value in the creation for synthetic finance (Beller, forthcoming). Computation is the extension, development and formalization of the calculus of exchange value enacted in the finance sector (Beller, forthcoming). Information has become the basis of a derivative contract on any phenomenon. Its emergence is one with the calculus of probability and thus of risk. Information becomes a derivative on reality whose importance comes to exceed that of reality, at least for those bound by the materiality of information's risk profiles.

In the digital age, information becomes a technique that injects a socio-historically mediated system of valuation in society. Prior social narratives and ontologies slice society for social class differentiation. Financial income streams are meant to be transferred to social currencies. Information becomes social differentiation and the intake of information in heuristic. Computation has played a role in the financialization of the economy. Information becomes

meshed with human inputs fueled on toxic emotions to become hedging capital. The finance sector benefitted from the financialization of daily life in the finance society of risk profiteers. But how to enact this convertibility and unleash a liquidity in the real economy is yet to be determined.

With the planned post-COVID-19 bailouts representing more than 60 percent of the money ever issued in the history of the US, should the finance world be obliged to return to the overall human well-being and promote the pursuit of humanness in arts, culture and societal growth? Can the finance sector lacking emotions return to the real economy via redistribution for also breeding creativity, soothing their hurtful anxieties and give to the core of humanness? Can we speak about a novel exploitation of real world livelihood and emotions by the finance world? Is there a moral sense or honor to put the finance world into service for the sake of human feelings? This may be a redistribution matter of ethics, justice and trust.

Staying in capitalism to change it, transformations and changes should be afar from pure quantitative value maximization and simple redistribution of financial assets. Qualitative values appear more uniquely precious than international prices. Local pockets and environments enrichen our lives deeper than international prices. It is on us to trying to figure out these and put them in synchrony with each other but expand from the local.

This is the post-COVID-19 Renaissance and Reformation of Immaterial capital as in the end, life is about reality. The real present in the real conditions of existence. If we stop the social, we forget who we are.

References

Ayache, E. 2008. "I am a creator." Wilmott Magazine, June 2008, pp. 36-46.

Beller, J.L. (forthcoming). The world computer: Derivative conditions of racial capitalism. Durham: Duke University Press.

Bergson, H. 1910/2001. Time and free will: An essay on the immediate data of consciousness. Mineola, NA:

Bergson, H. 1911. Matter and memory. London, UK: Allen and Unwin.

Berlant L. G. 2011. Cruel optimism. Durham, NC: Duke University Press.

Buera, F.J. & Shin, Y. 2011. "Finance and development: A tale of two sectors." *American Economic Review 101*: 1964-2002.

Case, A. & Deaton, A. 2020. Death of despair and the future of capitalism. Princeton, NJ: Princeton University

Csikszentmihalyi, M. 1990. Flow: A psychology of optimal experience. New York, NY: Harper.

Derman, E. 2002. "The perception of time, risk, and return during periods of speculation." *Quantitative Finance 2*: 282-296

Derman, E. 2016. "Remarks on financial models." In B. Lee and R. Martin (Eds.), *Derivatives and the Wealth of Society*. Chicago, IL: University of Chicago Press.

Fowler, R., Hodge, B., Kress, G. & Trew, T. 1979. Language and control. London, UK: Routledge.

Gorz, A. 2003. The immaterial: Knowledge, value and capital. Chicago: Chicago University Press.

Harvey, D. 1990. The condition of postmodernity. London, UK: Blackwell.

Higgins, M. & Reddy, S. 2020. "From COVID-19 to shared prosperity." *Medium*, June 3, 2020. Retrieved at https://medium.com/sdg16plus/from-covid-19-to-shared-prosperity-5de0098e411c

Kahneman, D. 2011. Thinking, fast and slow. New York, NY: Farrar, Straus and Giroux.

Kahneman, D. & Tversky, A. 1979. "Prospect theory: An analysis of decision under risk." *Econometrica 47*(2): 263-291.

Keynes, J.M. 1936/2003. *The general theory of employment, interest and money*. Cambridge, MA: Harvard University Press.

Lee, B. 2020. Lecture notes for 'Cultures of Capitalism' class Fall 2020. New York, NY: The New School.

Lee, B. & Martin, R. 2016. Derivatives and the wealth of societies. Chicago, IL: University of Chicago Press.

The Levy Economics Institute of Bard College (2020). Multidimensional inequality and COVID-19 in Brazil. Public Policy Brief No. 153, September 2020. Retrieved at http://www.levyinstitute.org/publications/multidimensional-inequality-and-covid-19-in-brazil.

Martin, T. 2019. Contemporary drift: Genre, historicism, and the problem of the present. New York, NY: Columbia University Press.

Maslow, A.H. 1943. "A theory of human motivation." *Psychological Review* 50(4): 370-396.

- Massumi, B. 1995. "The autonomy of affect." Cultural Critique: The Politics of Systems and Environment 31: 83-109.
- Meister, R. (forthcoming). Justice is an option: A democratic theory of finance for the twenty-first century. Chicago & London: The Chicago University Press.
- Nassif-Pires, L., de Lima Xavier, L., Masterson, Th., Nikiforos, M. & Rios-Avila, F. 2020. "We need class, race, and gender sensitive policies to fight the COVID-19 crisis." *Multiplier Effect: The Levy Economics Institute Blog,* April 2, 2020. Retrieved at http://multiplier-effect.org/we-need-class-race-and-gender-sensitive-policies-to-fight-the-covid-19-crisis/.
- Ngai, S. 2020. The Gimmick: Aesthetic judgment and capitalist form. Cambridge, MA: Harvard University Press.
- Nikiforos, M. 2020. "When two Minskyan processes meet a large shock: The economic implications of the pandemic." *The Levy Economics Institute of Bard College Policy Note*, January 2020. Retrieved at http://www.levyinstitute.org/pubs/pn 2020 1.pdf.
- Orwell, G. 1949. 1984. New York, NY: Harcourt Brace.
- Piketty, Th. 2014. Capital in the twenty-first century. Cambridge, MA: Harvard University Press.
- Postone, M. 1993. Labor, time, and social domination: A reinterpretation of Marx's critical theory. Cambridge, UK: Cambridge University Press.
- Puaschunder, J.M. 2016a. "Global responsible intergenerational leadership: The quest of an integration of intergenerational equity in Corporate Social Responsibility (CSR) models." *Annals in Social Responsibility* 2(1): 1-12.
- Puaschunder, J.M. 2016b. "Socially Responsible Investment as emergent risk prevention and means to imbue trust in the post-2008/2009 world financial crisis economy." In: O. Lehner (Ed.), *Routledge Handbook of Social and Sustainable Finance*, pp. 222-238, London: Taylor & Francis.
- Puaschunder, J.M. 2016c. "The role of political divestiture for sustainable development." *Journal of Management and Sustainability* 6(1): 76-91.
- Puaschunder, J.M. 2018a. "Socio-psychological motives of Socially Responsible Investments (SRI)." In S. Boubaker, D. Cumming & D.K. Nguyen (Eds.), *Research Handbook of Investing in the Triple Bottom Line: Finance, Society and the Environment*, pp. 447-472. London, UK: Edward Elgar.
- Puaschunder, J.M. 2018b. "The history of ethical, environmental, social and governance-oriented investments as a key to sustainable prosperity in the finance world." In S. Boubaker & D.K. Nguyen (Eds.), *Corporate Social Responsibility, Ethics and Sustainable Prosperity*, pp. 359-388. Singapore: World Scientific.
- Rajan, R.G. & Zingales, L. 1998. "Financial dependence and growth." *American Economic Review* 88(3): 559-586. *UNICEF Press Release September* 16, 2020, 150 million additional children plunged into poverty due to COVID-19, UNICEF, Save the Children say, September 16, 2020. Retrieved at https://www.unicef.org/press-releases/150-million-additional-children-plunged-poverty-due-covid-19-unicef-save-children
- Zaloom, C. 2006. Out of the pits. Chicago, IL: University of Chicago Press.