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SASE Presidential Address

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The fly and the cookie: alignment and unhingement in 21st-century capitalism

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Abstract

This SASE Presidential address given at UC Berkeley in 2016 discusses the entanglement between morality and capitalism. Moral sentiments—and especially what Adam Smith called the sense of propriety, the sense of merit and the sense of justice—play a productive role in organizing the extraction of economic value. Conversely, relative valuations in the economy (prices, for instance) can be thought of as moral engines that reward or sanction certain behaviors, and are presumed to index underlying moral differences. Economic value is produced both when individuals are morally *aligned* with the rational goals of capitalism, and when they perform *unhinged* deviations from the moral standard. I show how modern digital capitalism organizes profit extraction through these twin processes of alignment and unhingement, building new *economic moralities* in the process—moral sentiments that are the result of people's interactions with opaque but powerful forms of behavioral fine-tuning, surveillance and manipulation.

Key words: morality, capitalism, moral economy, digital economy, alignment, unhingement, economic morality

JEL classification: O3, Z1

> *Moral is a signal that brings a rush of polemical blood to the academic head.*
>
> —E. P. Thompson ('The Moral Economy of the English Crowd in the Eighteenth Century', p. 271)

There is always a moral economy alongside the real economy of material exchange. Most of the time it is silently woven into everyday life, as a background condition of economic order. Work will be done. Wages will be paid and debt repaid. Contractual obligations will be fulfilled. Property rights will remain secure. Quality standards will be met. Money will shift hands, and in the right amounts. An economy, in short, does not exist without the ability of human beings to make promises, and to deliver them in a way that is consistent with the expectations of others. (Beckert, 2006, 2016)

And thus economic life appears to be predictable and rather well adjusted for the most part—a marvelously complex and dependable machine that reaches far and wide across the globe, and only rarely fails to deliver the daily goods. But underneath the surface it is full of confusion and failure; lucrative grey zones and legal loopholes; extreme rent-seeking and irrational exuberance; broken promises, nasty tricks and outrights frauds; epic clashes, tremendous waste, enormous human suffering and constant—constant—moral outrage. People do not save enough, or they save too much. Welfare states are too generous, or too miserly. Corporations cheat the rules of the game, investors speculate and people and nature are exploited. Capitalism, in short, both thrives *and* fails on configurations of the moral terrain.

The sentiments that circulate within the economy interact with its operations. Rules, beliefs and emotions about appropriate and inappropriate relations, fair or unfair transactions, just or exploitative practices, the worthy and the undeserving, shape whether economic exchange occurs at all, and the terms under which it takes place. Debt may be extended or withdrawn. Payment may be exacted or restructured, even forgiven. Failed firms may be reorganized or liquidated. Depending on the target, the application of legal rules will be tougher or more lenient. Morality and sentiments are not a postscript to our more serious scholarly work, to be treated separately from economic processes. They do a lot of economic work, too. We see this, for instance, in the existence of taboos and moral struggles against the commodification of bodily parts and fluids, gestation, love or sex (Healy, 2006; Almeling, 2011). We also see it in the place of money in social interactions and in the working of institutions (Zelizer, 1994; Rossman, 2014); in the role of deservingness and conditionality in the implementation of social and economic policies (Somers and Block, 2005; Steensland, 2010; Dubois, 2014; Somers, 2017); in the righteous indignation against austerity (Narotzky, 2016); in a nation's hatred of vulture funds and other mobilizations against 'odious' debts; or in the explicit role that religion sometimes plays in formatting the infrastructure of markets (Calder, 2016). The economy is morally thick, and it must be analyzed as such.

1. The *moral* economy

One obvious starting point for such an analysis is the concept of 'moral economy'. British historian E. P. Thompson coined it in a now canonical article (1971), to refer to the deeply held convictions that guide ordinary people's perception of their economic interactions. His topic was peasant rioting in times of food shortage in 18th-century England. Denouncing the 'crass economic reductionism' that interpreted these spasmodic episodes as the direct effect of hunger, Thompson argued that the rioters acted instead out of a sense of legitimation. Their violence, he said, was a response to the erosion of the paternalistic regulation of the 'bread-nexus', according to which local residents were given priority and better prices when they bought local farm products. The riots indeed erupted after a new crop of entrepreneurial middlemen started to aggressively manipulate corn prices by tempting local farmers with enticing offers in order to supply distant markets. Through violence, popular sentiment forcefully reasserted an old moral economy of provision rooted in agrarian tradition, against the immoral economy of the wider, impersonal market. More was at stake than grain prices: time-honored norms, customary duties and communal solidarities had come under threat, too.

Michel Foucault's historical reading in his lectures on *The Birth of Biopolitics* echoes Thompson's: 'The market, in the very general sense of the word, as it operated in the Middle Ages and in the sixteenth and seventeenth centuries, was, in a word, essentially a site of justice': it was 'invested with regulations', prices had to be deemed 'just' and match the work performed. The life of the market as a social institution revolved around distributive justice and the punishment of fraud (2008, p. 30). However, for Foucault the intrusion of the new market practices that so incensed Thompson's insurgents was indicative of a broader change in the nature of social bonds, as well as in the purpose and operation of government. In his view, the rise of political and economic liberalism in the 18th century operated a major political inversion: from being a site invested by the sovereign to implement justice and police subjects, the market became a site of veridiction that now urged the sovereign to self-limit by following the market's verification (or falsification) of its own actions: 'What is discovered at this moment, *at once in governmental practice and in reflection on this governmental practice*, is that inasmuch as prices are determined in accordance with the natural mechanism of the market they constitute a standard of truth which enables us to discern which governmental practices are correct and which are erroneous' (Foucault, 2008, p. 32, emphasis added).

At the point of Foucault's lectures, the transformation in political practices—the rise of what he would ultimately term 'governmentality', or the government of self-regulating units—had been well documented by Karl Polanyi, of course. In *The Great Transformation*, Polanyi had argued that the implementation of laissez-faire capitalism from above at the turn of the 19th century dramatically eroded traditional mechanisms of reciprocity and redistribution. By abolishing the 'right to live' policies of the Speenhamland poor relief system, British elites firmly installed hunger and the satisfaction of material needs as the culturally accepted principle that organizes everyday pursuits and social life in general (Polanyi, 1947). Man was made to think that his ability to eat was tied to his ability and will to produce, rather than to his membership in the community. The action of the state, validated by the nascent science of political economy, articulated this evisceration of traditional morality from economic exchange. The price system was reframed as a law 'under the authority of Nature herself' (Polanyi, 1957, p. 125). The market became 'natural', and we forgot its historical origins. The only 'right' price for anything, from bread to labor, was now the market price. New moral struggles would have to be framed—and constrained—by the background condition of the 'law of the market'.

The paternalistic and quasi-feudal Speenhamland poor relief system was the focus of intense attacks by classical political economists. They dismissed it as a well-intentioned, but ineffective and fundamentally flawed interference with the market truth—the 'laws of political economy'—which demanded freedom of movement and freely adjusting prices. But the yearning for a more integrated social life did not disappear. It came back with a vengeance in the 20th century, through the Janus-faced couple of fascism and the welfare state. These counter-movements were the natural counterparts to the most unnatural 'great transformation' waged by economic ideologues on 19th-century society.

In contrast to Foucault bird's eye view, Thompson and Polanyi give us a much more contested story of the rise of the liberal economy on the ground. They remind us that moral dispositions and feelings are often at odds with the demands of the economic system and the logic of liberal government. Similar conflicts, in fact, have played out everywhere capitalism implanted itself. In ethnographic studies carried out in the 1960s in the outskirts of Algiers and in rural villages, Pierre Bourdieu (2000) observed the considerable difficulty that French colonial powers faced as they tried to foster an ‘economizing’ relation to time and work, a ‘spirit of calculation’ among a Kabyle population where exchange was still largely governed by the logics of affiliation. Bringing about the new ‘economic habitus’ whether in post-Speenhamland England or in colonized Kabylia, required a long, sustained effort on the part of authorities—and most prominently the mobilization of state violence.

These descriptions of the conflict between the moral (or the social) and the economic, often overlapping with the distinction between modern and pre-modern economies, are all well known. The dominant interpretation of ‘moral economy’ has been as a *moral* economy: It presumes that there is an economy out there, or an economic ideal, that is grounded in feelings of justice, solidarity and reciprocity. Standing against it is its evil twin, its negation, the other economy associated with the dis-embedded mechanism of the market and the amorality of self-interest only. That second economy is the economy of economists (indeed they had a hand in its institutionalization), so the conceptual opposition overlaps with a disciplinary one, too. What economists find liberating about the price system is the fact that it seems to stand outside of morality altogether: the market does not have to be fair to be a superior force in organizing human activities, in other words to coordinate human needs in the most efficient manner possible (Hayek, 1945).

The implications of privileging coordination and efficiency over other welfare criteria are not trivial, however, even for economists (Atkinson, 2009). First, by relegating ‘the moral dimension’ to the margins of economic analysis (Etzioni, 1988), neoclassical economics and market technologies run the risk of legitimizing social inequalities and crowding out collective norms, work ethics and civic ideals (Sandel, 2013; Bowles, 2016). Second, the exclusion of moral considerations from the market imaginary propagates wholly inaccurate visions of social life. Thompson, Polanyi, Bourdieu, James Scott (1976) or Chris Hann (2010) showed that far from being disposable and irrelevant, the moral economy was a real thing to real people. In many ways, the norms of justice, subsistence or symbolic exchange seemed to agree *more* with the social interdependencies between men than the propensity to ‘truck, barter and exchange’. For them, it is often capitalism that appears to be unnatural and forced. People resist it, and it is only through artifice, violence and coercion that it was finally brought into existence in 19th-century England, 1930s Southeast Asia, 1960s Algeria, or that it decollectivized Eastern Europe in the 1990s.

2. Moral *economies*

In this lecture, I would like to propose a more expanded reading of the concept of ‘moral economy’. My analysis will be oriented to the ‘moral *economy*’, or, rather, to ‘moral *economies*’, in other words to the circulation and exchange of moral intuitions, feelings, opinions and discourses. Here I use the term economies in a, well, economic sense: like other aspects of social life, morality is produced, distributed and put to work; parts of it may be measured, standardized and priced; and its exploitation bears financial promises. Second, my use of the word ‘moral’ is sociological and constructivist, rather than normative: is moral what people categorize as moral.[1] Because they live in the social world and not in the realm of ethical

1 As Fourcade and Healy (2007, p. 301) put it: ‘[This] approach is broadly Durkheimian. Morality does not refer here to some universal ethical standard; rather, it means what a society, or a group, defines as good or bad, legitimate or inappropriate’ (2007). Also see Hitlin and Vaisey (2013).

theory, moral valuations are likely to be empirically varied, sometimes even illogical and inconsistent.[2] And thus we have to follow Fassin (2009, Fassin and Eideliman, 2012) and speak of moral economies in the plural.

From this point of view, all moral systems have an economic dimension. They lie beneath any process of economic valuation and shape the possibilities and practices of profit-making (Boltanski and Thévenot, 2006). Conversly, all economies are moral economies: all differentiate and hierarchize between good and bad, high and low, legitimate or illegitimate, and the market economy is no exception. Correlatively, holding on to the view that the rise of market culture *necessarily* undermines the moral terrain prevents us from truly engaging with the complexities of the relationship between the two, as well as the complexity of the social struggles at stake. Many Enlightenment writers brimmed with positive valuations about the moral potential of market exchange. Albert Hirschman (1977) points out that the *doux commerce* thesis in the 18th century (Montesquieu, Steuart) insisted that the market enhances all kinds of personal and collective virtues, and generally promotes peace and the taming of passions. Adam Smith thought that being involved in economic exchange made people more punctual, polite, prudent and cordial. The French went further, seeing the market as an agent of political emancipation against the special privileges of social orders and corporations (Rosanvallon, 1989). Let us remember that the generalization of the ideology of the market posed a considerable challenge to the economic position of the French nobility. As historian Laurence Fontaine (2014) has recently shown in *The Moral Economy*, nobles awarded themselves the privilege to set their own low prices for everything; they routinely paid their suppliers with crappy gifts and social gestures instead of cash, and at their own leisurely pace. Some merchants were never compensated. Church officials acted in a similar way. The bourgeoisie's embrace of the market was legitimated in the name of freedom and equality in economic transactions. In fact, one often forgets that the French Revolution was very liberal on the economic front.

The market held a moral promise for workers as well: the promise of independence—that is, freedom from the bonds of feudalism or even from assistance schemes like the Speenhamland system (Fraser and Gordon, 1994), and the promise of moral equality. Anderson (2017) offers a useful reminder that there was a time—starting with the British Levellers in the mid-17th century right through the US Civil War—'when the market was left', that is, when the idea of the market was associated with democratic egalitarianism.[3] The flipcoin of emancipation, obviously, was the waning away of the kinds of traditional, solidaristic arrangements that EP Thompson discussed. Under an egalitarian regime the poor stood to lose more than grain subsidies in times of dearth: their particularistic attachments, even their special place in the community warranted less recognition. The market now asserted its own moral order with a different conception of fairness, rooted in objectivity, de-personalization, and the denegation of collective structures, all in the name of individual liberty and equality of status. The starving peasants had little choice but to use their freedom to file, one after the other, into the factories set up by the new bourgeois entrepreneurs. The working class was born.

2 This is with the proviso that vulgarized versions of normative theory can also be part of the everyday moral universe.

3 The above passage is greatly indebted to Sophie Moullin.

That moral order, like any moral order, had to be set in motion, explained and taught. Moral feelings do not emerge spontaneously but always exist against a background of institutions, politics and, importantly, 'moral science'. Being so relevant to the making of money and to political stability, the moral economy is the object of special concerns and expert interventions, discursive articulations and critiques, and applied technologies. Religion always played a big role. As early as 1835, Dr. Andrew Ure had advised in his *Philosophy of Manufactures* that 'the moral machinery [must be organized] on equally sound principles with the mechanical' (cited in Thompson, 1964, p. 361). Hence, came what E. P. Thompson called 'the marriage of convenience between Puritanism and industrial capitalism' (ibid.). It taught workers to despise unproductive activities and shaped their inner compulsion to regard work as a pure act of virtue (Weber, 2002).

Machines were also called upon to reorganize the work process and the whole personality with it. Consider the late 19th-century efforts to control, synchronize and optimize workers through a precisely designed physical and temporal architecture—a transformation Thompson described in another well-known piece. The alignment of workers on the stopwatch, and later the conveyor belt, helped bring about a comprehensive reform of the moral world of workingmen and women. The search for efficiency and coordination suffered no slackers. The value of time had to be inculcated, by saturating 'men's minds with the equation, time is money' (Thompson, 1967, p. 95). The rise of scientific management and Fordism in the USA, for instance, would be tightly coupled with a heavy moralization of all aspects of private and social life, particularly alcohol and sexual licentiousness, those 'dangerous agents of destruction of laboring power' (Gramsci, 1975, pp. 216–217). Behavior deemed immoral was disciplined through repression, educational campaigns and targeted interventions all the way down to the domestic realm. The state was prominently enrolled in the moral mobilization of labor (though it helped define the moral boundaries of business action, too).

3. The economy of moral sentiments

Moral struggles were thus articulated, sometimes loudly, in discourse and the work of institutions. But the real action in the moral economy may be in the discursive and institutional *silences*, those areas of social life that do not need to be spelled out or fought about because they have receded into the taken-for-granted background. Historian of science Lorraine Daston emphasized this intuitive dimension in her own definition of the moral economy: 'a web of affect-saturated values that stand and function in well-defined relationship to one another, ... a balanced system of emotional forces, with equilibrium points and constraints' (1995, p. 4). The moral economy, from this point of view, is best seen as a system of untold intuitions and feelings—a well-institutionalized economy of *moral sentiments*, to use Adam Smith's phrase.

What are these moral sentiments that provide the context for our emotions and desires? Smith's text offers some clues. Part I of the *Theory of Moral Sentiments* (2009) is titled 'Of the Sense of Propriety', and Part II 'Of Merit and Demerit'. A modern sociological understanding will recognize that the *sense of propriety* refers to the fact that the moral economy is collectively produced and collectively performed: it is through their connections to one another, which Smith sees as rooted in sympathy, that individuals acquire and sustain their moral intuitions. A good Durkheimian knows there is no coercion that is more powerful and imperious than the invisible coercion of the norm, the deeply embodied *sense of what is (or isn't) proper, or appropriate* (Durkheim, 1995). The conditions of possibility of the sense of propriety are always specific, of course. First, the moral economy is temporally and geographically situated: behaviors and discourses that may have seemed perfectly acceptable yesterday will be deemed morally wrong today, and vice versa. Viviana Zelizer (1985) has traced the historical process by which we came to think of child labor as a settled moral matter. If the question comes up again, as it does once in a while, we are deeply upset. But we are at pains to explain our sense of outrage since it one of those matters that—we feel—'should go without saying'. We have forgotten the moral reasons, because they have become so natural. This is perhaps the best way to understand the significance of E. P. Thompson's piece: grain subsidies once had that same self-evident moral status in the English countryside. The sense of propriety, in other words, is the product of relatively settled human struggles over the ontology of moral judgment. We cannot easily articulate 'the moral background' (Abend, 2014), or what it is that *makes* things right or wrong, because the distinction between what *is* and what *is not* morally acceptable has become self-evident. Every market exchange presupposes an—instinctive, silent and taken-for-granted—moral threshold.

The *sense of merit and demerit* refers to 'the qualities of deserving reward, and of deserving punishment … the good or ill desert' (Smith, 2009, p. 81). It is, in other words, a positive or negative valuation, a valuation along a *sense of worth, of deservingness*. The sense of merit is closely articulated with the sense of propriety of course (a disgraceful action from the point of view of the sense of propriety is lower in the scale of worth than a graceful one), but it is analytically distinct. 'To reward', Smith continues, is 'to recompense, to remunerate, to return good for good received' (2009, p. 82). How we judge one another, how we make attributions of relative worth is often 'revealed' through behavior, in the manner studied by economists (that is, in the system of relative prices) or, in a very different way, through what Pierre Bourdieu (1992) calls the 'logic of practice'. The moral economy as a system of worth relations presents itself in the small rewards and punishments of everyday life: shaming, contempt, obliviousness, condescension, insult, (dis)respect, superiority, competition, pride, recognition, esteem, admiration—in other words, through the structure of symbolic exchange and feeling.

Finally, and to the extent that it will be confronted against real outcomes, the sense of merit is always articulated with a *sense of justice* (also Smith's word). The sense of justice, we could argue, measures the distance between the *imagined* sense of merit and the *concrete distribution* of material and symbolic rewards and punishments. We may, for instance, expect for the sense of (in)justice to be particularly developed in a society that proclaims that all individuals are *a priori* equally worthy, but differentiates between them in practice. Or, conversely, in a society that cultivates a contradictory relationship between moral worth and actual social condition: this kind of society is likely to produce what Nietzsche [1887] (2013) calls *resentment*—an outward emotional reaction to feelings of inferiority which elevates the moral values of the socially vulnerable and downgrades those of the powerful.[4] There is perhaps no better demonstration of the relevance of this argument than the wave of

4 According to Nietzsche (2013), resentment is a product of the 'slave mentality' associated with the rise of Judeo-Christian morality. Traditional knightly aristocratic modes of valuation took the inequality of social positions for granted, and aligned moral worth with noble status. Judeo-Christian morality, by contrast, ascribes moral worth to the condition of being weak and to feelings of compassion for the weak, making *resentment* legitimate.

populist politics that engulfed Europe and the USA in 2017. Perhaps no one has better shown than Arlie Hochschild (2016) that economic struggles are fundamentally inseparable from moral struggles.

The question before us, now, is whether and how the moral economy defined in this way—as the sense of propriety, of merit, of justice—matters for the real economy. The question of worth is at the core of our preoccupations here. At the most basic level we know, for instance, that those at the bottom of the economic ladder (e.g. the poor) are especially vulnerable to both moral blame and moral regulation, as if deserving less. Examples abound, from welfare or aid policies conditioned on stringent practices of personal accountability, to lending or debt restructuration conditioned on strict fiscal discipline (Fourcade *et al*., 2013). But we can also reverse the causal logic and look at the connections between moral attributions and relative prices. There are plenty of ways that market institutions capitalize on the moral economy as the sense of relative worth. For instance morally stigmatized economic actors, organizations or populations are routinely charged higher prices, fees, rates or given lower service. In the 1960s already, scholars had noticed that 'the poor pay more' for a range of basic necessities (Caplovitz, 1967). Most countries in Latin America are disadvantaged by the perilous consequences of what economists call 'original sin', or the difficulty to issue debt in their own currency on international markets. Moral judgements about the nation, which may incorporate everything from cultural stereotypes to investors' strategic manipulation of the markets' opinion, weigh heavily on its borrowing terms (Fourcade, 2017). Less-valued participants face a higher threshold for what counts as exploitation.

We should thus be interested in the conditions under which moral habits, moral attributions and the sense of worth are put to work through discourses, technologies and institutions (i.e. what Michel Foucault called *dispositifs*) to become sources—or at least expectations—of economic profit. The efficiency of the capitalistic process depends on arranging and orienting human beings in such a way as to maximize future value. And that, in turn, presupposes capitalizing on, intervening in, or meticulously planning, certain kinds of moral orders, including imaginaries and hierarchies of worth.

In the rest of this lecture, I focus on the processes by which these imaginaries are produced and exploited by market organizations in today's digital economy. The first step, I argue, is the *alignment* of subjectivities on the demands of the market, through their incorporation into record-keeping and knowledge-making systems; the second step is the *unhinging* and differentiation of these same subjectivities, which lies beneath the work of valuation and value extraction.

4. Alignment

Anyone who has witnessed their teenage child precisely measure their Instagram likes ('121 likes in 20 minutes, mom!'), marveled at their spouse's lengthy assessment of various segments of his bike ride against anonymous competitors on Strava, or fallen prey to her own nerve-racking citations counts on Google scholar, will once in a while pause and meditate on the meaning of life and the nature of the self in the digital society. (These examples are purely fictitious of course, and any resemblance to existing persons or events is purely coincidental.) Political theorists have—not without reason—warned that the neoliberal *dispositifs* of self-tracking are framing new kinds of subjectivities, turning people into optimizing individualists constantly working on their self-appreciation. Digital capitalism, they warn, fuels a narcissistic condition, fastening individuals onto their own distorted reflection in the icons and symbols on the machine[5] (Feher, 2009; Brown, 2015; Schüll, 2016). Moved by an ethics of self-improvement, 'we are [increasingly] invited to view ourselves as longitudinal databases constantly accruing new content', as Schüll (2016, p. 9) puts it.[6]

But the real action is perhaps elsewhere: *the more we obsess about ourselves, the more we are productive, and therefore valuable, for the system*. If our sense of worth becomes increasingly tied to the stream of data we produce about ourselves, so is our value on the market.

This is nothing new under the capitalistic sun. Factory ethnographers have extensively documented the competitive games that industrial workers play to beat the machine and each other. They have repeatedly revealed that workers break their back on the job, even as they claim to dislike it. To the amazement of the naïve Marxist, they have shown that the demands of capital are not met only through moralization and external force. Rather, the spontaneous deployment of shop floor cultures of physical bravery and masculinity might even more effectively turn workers into diligent subjects of capital. In Michael Burawoy's classic study (1979), the social and psychological rewards of 'making out' on a tough job—in terms of prestige, sense of accomplishment, pride—far outperform the coercive devices and monetary incentives offered by management. Writing at about the same time, Paul Willis (1979) found that workers meet (or exceed) production targets not because their foremen want them to—but because of a culturally overwhelming compulsion to prove *to each other* that they are men, not wimps. The rebellious culture of masculine bravado is also what made the 'lads' unlikely to succeed at school, influencing their pathway into manufacturing jobs in the first place.

Even as it remains illegitimate in the eyes of workers, the process of labor exploitation thus fosters powerful forms of symbolic repossession and enjoyment. This is what Pierre Bourdieu in *Pascalian Meditations* calls the 'twofold truth of labor'—the propensity to find an intrinsic profit in even the most constraining type of work: 'In many work situations, the *margin of freedom* left to the worker ... introduces the risk of non-work or even sabotage, going slow, etc.; but it opens the possibility of investment in work or self-exploitation. ... Paradoxically, it is because it is perceived as a conquest (for example, the freedom to smoke a cigarette, to move around, etc.) or even a privilege (granted to the longest serving or the most skilled) that it can help to mask the overall constraint, which gives it its whole value. The minor privileges that people cling to makes them forget all the rest. ... Thus the scope for maneuver that agents win for themselves (and which theories of "resistance" are quick to celebrate, in their concern to rehabilitate, as proof of inventiveness) may be the condition of their contribution to their own exploitation' (1997, p. 204). The irony, indeed, is that this subjective investment further aligns the worker with the factory system and efficiently contributes to meet production goals. Capitalism, in other words, is both contested and

5 In the USA, the campaign of 2016 Republican Presidential hopeful Ted Cruz caused a minor stir when it released an app that was not only highly addictive, but also collected massive amounts of valuable information on people.

6 For instance, we have moved from conceiving health in terms of freedom from disease, to associating it with precisely quantified amounts of regular exercise and hydration, always nudging us toward further optimization.

empowered through the moral channels that run deeply within us, through the ambiguous economy of self-worth (Sharone, 2013).

What often characterizes a moral economy in practice is precisely its lack of consistency, its precariousness, itself rooted in bizarrely self-contradictory dynamics.[7] Aspirations to workers' solidarity and unity do not prevent the daily and fierce expression of physical competitiveness around the machines on the factory shop floor. Inchoate feelings about what is right or fair or socially appropriate coexist all too happily with a contrarian (and no less imperious) sense of worth, coming from displays of superior physicality, efficiently buttressed by incentive structures.

I have repeatedly seen the same contradictions on display in interviews I have been conducting in Silicon Valley, among engineers and marketers who publicly worship at the altar of big data while privately confessing their dread of the monster they have unleashed onto the next generations. Indeed, these mindful insiders often take pains to closely regulate and monitor the online lives of *their own* children. The kids, they realize, are already living in a different moral economy, populated by constant reminders of their and others' positions on some sort of social fitness scale. Like the manufacturing workers of yesterday, their lives are framed by machines that spur their competitiveness, their self-love and their psychological involvement in the game in order to harvest ever-larger quantities of valuable outputs. The products are texts, photographs, emoticons, heartbeats and likes—rather than nuts, bolts and muscles—but the mechanism of extraction is not that different. In both cases, the system is purposefully designed to keep subjects feeding the machine what it wants.

Often, the experience is psychologically bewildering, all at once rewarding and frustrating. Machines do not judge us, but we judge through them. Much like in computer games, the satisfaction of leveling up is immediately superseded by the algorithm ratcheting up its demands, keeping us on what psychologists call 'the hedonic treadmill', or engaging in what video gamers call 'grinding' (sinking time and performing mindless and repetitive tasks in order to advance in the app). Incited by design to constantly engage, people measure themselves against the clock, against others, or against an imagined future or past self. Their unrelenting efforts to become cognizant of the machine's ways are recorded on countless chat rooms. Fantasies about control persist and blossom, in spite of the overwhelming recognition that the system is constantly changing.

The moral economy as a 'balanced system of emotional forces', to use Daston's definition again, is in part the product of this precarious, technology-driven alignment process. Alignment is hard work. Its success depends on the existence of a vast machine that harvests, circulates and directs bits of data between computers. There is no drawing in without a complex infrastructure of browsers, bots, crawlers, cookies, applications and application programming interfaces (APIs), block chains, cables, servers, data streams and data warehouses, among others (Hu, 2015), or without codes, special-purpose programming languages (SQLs), ETLs processes (for extract, transform and load), and matching algorithms that collect, sort, match, archive and manage (Gandy, 1993).

7 Lorraine Daston's succinct definition, mentioned earlier, has the merit of allowing for such contradictions, in contrast to E. P. Thompson's, who grounded his concept of the moral economy in 'a consistent traditional view of social norms and obligations, of the proper economic functions of several parties within the community' (1971, p. 79).

Modern institutions are increasingly expert at this, carefully calibrating their technical interfaces to imperceptibly implicate and entangle subjects, to align them so some economic or other purpose may be performed. Sometimes the vast machine is involved, and sometimes alignment results from very simple interventions in what Montesquieu in *The Spirit of the Laws* called the 'disposition of things'.

In their economic bestseller, *Nudge* (2008), Richard Thaler and Cass Sunstein praise the 'choice architectures' that frame people's behavior in desirable ways without changing their underlying preferences. The canonical example they use is Schiphol's ingenious treatment of its bathroom problem. Mock-up flies were introduced at Amsterdam's Schiphol Airport following the suggestion of a maintenance man, who wanted to tackle the persistent and vexing issue of dirty urinals. Painted or baked directly into the porcelain in the center of the bowls, the fake insects operated a quiet and miraculous revolution, dramatically improving the men's aiming ability and reducing spillage by 80%. The success of the device inspired others to follow suit, and urinals adorned with flies, bees, goalposts, targets, flames, balls and trees can now be spotted in airports, stadiums, cafés and bars around the world. A quick online search of 'urinal fly' brings about several companies specializing in the design and retail of urinal decals and stickers, which you can generally buy in 10- or 12 packs. There is a children's version of the product, marketed as an effective device for potty training.

The fly in the urinal is a direct alteration of the arrangement of things, people and bodily fluids. In contrast with command-and-control techniques of governance, the logic remains concealed, working on the actor from within and without his explicit acknowledgement, as a 'libertarian paternalistic' device. Long before the rise of behavioral economics, Michel Foucault had highlighted in a 1979 College de France lecture the same paradox at the heart of the Beckerian conception of *homo economicus*: on the one hand he is self-directed; on the other hand he is someone who can be governed, managed, *through his freedom* because his self-interest guarantees that he will 'respond systematically to modifications in the variables in the environment. . . . From being the intangible partner of *laissez-faire*, *homo economicus* now becomes the correlate of governmentality' (2008, pp. 269–270).

And so the fly governs him. There is no *ex-ante* pressure and no *ex-post* sanction: the design works on its own. The man with a pressing urge could in principle direct the stream elsewhere, but the specific way in which the insect is positioned imperceptibly and unconsciously 'nudges' him in the desired direction.[8] Likewise, the most effective data infrastructure is fully institutionalized, as if baked into the background. People contribute to it as a matter of course, just because it is there (the sense of propriety, this is what you do), and sometimes because it *interests* and engages them in a game-like manner, as in the Strava or Instagram examples (the sense of worth).

The example of the urinal fly is rather benign: the technology is primitive, and the goal has merit. The fake bug's presence obviously enhances the welfare of the Schiphol travelers, the airport staff and management. We increasingly delegate our morality to socio-technical arrangements around us, from safety belts (Latour, 1989) to data-rich techniques of self-tracking. This is supposed to be good for people, nudging them toward 'responsible' or 'healthy' behaviors—regular hydration, exercise, or controlled weight are the metaphorical flies in the urinal, the goal you do not want to miss. Most importantly, better control means less risk, better knowledge and identification means more efficient targeting, and both provide better arguments vis-à-vis clients and venture capitalists. The purpose of most choice architectures is not simply to produce conformity with an ideal: it is, first, to produce *a valuable* form of conformity; second, it is to *reveal differences* in the march toward the ideal. The ability to differentiate and measure the distance from the ideal, it turns out, is the other source of value.

5. Unhingement

Science studies scholars have framed the re-alignment of subjectivities in markets as a problem of performativity. In Michel Callon's (1998) famous phrase, market devices (designed primarily by economists) *perform* the economy: by equipping market actors with prostheses, which help them in their calculations, they bring *homo economicus* into being. In the strong version of the theory, the formatting of calculative agencies also pulls the economy closer to the way it is supposed to work in economic models.

But how do we square this narrative with the fact that there are plenty of market devices that are designed to perform just the opposite of economic rationality—to play on impulses, on people's penchant for self-absorption, or on their secret embrace of *Schadenfreude*? On the one hand, Callon is indubitably right: the new technologies of the market continue to expand the possibilities for calculation and to proliferate calculative agencies. Knowledge and calculability have been brought to bear on increasingly intimate areas of the self, straitening its moral fiber and accountability to generate new sources of revenues. (Note that as their customer databases sometimes constitute the main asset of digital companies, barebone incorporation is itself a source of profit.)

On the other hand, Callon is wrong: profitability also demands that the new technologies of the market cover their tracks, make calculation impossible, and systematically exploit irrationality, addiction, emotion and failure (Illouz, 2007). Let us not forget that the finality of market devices is to make money—not to produce calculative agencies. Or rather, we must re-inscribe the production of calculative agencies into economic reason. Even

8 *Nudge*, in fact, reviews a whole series of similarly structured interventions with various aims—from lowering electricity consumption to increasing organ donation, all building on people's urges and unconscious emotions—what economists call 'behavioral biases'.

economists, Akerlof and Shiller remark, often forget that 'the goal of almost every business person is to get you to spend your money' (2015, p. 20). The reality is that while people may calculate more and more, they do not even come close to shadowing the ideal figure of *homo economicus*. Furthermore, it is not clear that market institutions want them to: in modern capitalism, people are much more profitable as unhinged deviations than as formatted clones. Through the 'data refinery' (Weigend, 2017) the market increasingly sees and 'knows' things about them that they do not know about themselves. It capitalizes, or seeks to capitalize, on their unconscious behavioral patterns (Fourcade and Healy, 2017; González, 2017), elicits wants that are far removed from their self-perceived intentions (Deleuze and Guattari, 2009), and tricks them into repeatedly acting on those desires in a process that Akerlof and Shiller (2015) describe as 'phishing for phools'.

In her magnificent book, *Addiction by Design* (2012), Natasha Dow Schüll describes how slot machines in Las Vegas were precisely crafted to make people sit comfortably for hours on end, wins were finely calibrated to keep gamblers put more money at risk, and the surrounding ambiance was fine-tuned to encourage a retreat into the zone—the place where the gambler wages her bets as if under hypnosis, mechanically. At one with the machine, she repetitively slips her credit card, drops her coins down the guzzler, and feeds paper money into the bill-swallowing automaton. Staggering in the Nevada sun after a particularly crushing binge, penniless once more, she blames herself and signs up for yet another session of a gamblers anonymous support group. We may judge her feeble moral fiber harshly. But only if we forget that a whole industry thrives on, and indeed solicits, those very weaknesses, perfecting her addiction in incremental steps.

What unites the experiences of the Instagram-hungry teenager, the Strava-obsessed biker and the gambler is, at first glance, their interaction with a design that keeps them properly aligned and framed (that is Callon's story, and it might also be Foucault's). The moral economy of capitalism has left Puritanism behind, and the material prostheses for keeping people incorporated and engaged have multiplied. Today the devices we carry around in our bags and the apps on our phones are explicitly designed like slot machines. (That is not me saying this, that is the 'Google design ethicist', Tristan Harris.) They demand to be fed 'as a matter of course', in an often intrusive and imperative manner. To achieve their goals, they deliver to their clients what system designers call 'variable intermittent rewards' in return—social approval, competitive gratification, exchange of favors, and the occasional material gain (e.g. a 10% discount) (Harris, 2016). As a result, our phone has become a vast personality questionnaire. For the company these rewards help source something much more valuable: first, a trove of personal data; second, the ability to compare individuals to one another, to categorize, classify and differentiate (Fourcade, 2016; Fourcade and Healy, 2013, 2017).

The basic urinal does not record how many times you hit the fly when you pee. This is why I called it a regime of alignment. But if such a technology existed, the process might look quite different. To my great delight, I recently discovered the world of urinal-mounted gaming consoles, whose sensors connect players' urinating power and precision to interactive gaming displays located above the urinal. The machine now engages men with a pressing urge in sophisticated ways, keeps individual scores and produces rewards and penalties. It ranks visitors from the most accurate to the most careless, a bit like the records on a pinball machine. The contestants may download their data on a USB drive and upload them on a website.[9] If the device became widely institutionalized and standardized, smart urinals could automatically detect identity and share individual logs across systems.

Now imagine that your urinal report, for whatever reason, is a good predictor of some underlying personality trait—tenacity, compliance, respectfulness, efficiency, reliability—or some other valued property. The record now legitimates the bragging rights of highly ranked competitors, feeding their narcissism and the admiration of others. It also becomes valuable to third parties for a purpose that has nothing to do with hygiene. They may pay dearly for it. It is now an instrument of decision-making in the market, shaping your value to others and the price of the goods and services offered to you. We have now crossed into a regime of value extraction, where *both* virtue and failure, as measured by the device of course, may be rationalized and profitably exploited.[10]

But there is more. Imagine now that the fly is not really where the action is, and that Schiphol's management cares very little about your record in the toilet. After all, it is highly localized and perhaps of limited relevance elsewhere. But suppose that hitting the fly triggers a new identifier—let us call it a 'cookie', or more simply a tracker—which, with the help of your phone, surreptitiously migrates out of the urinal, follows you around the airport and perhaps even all the way to your final destination, and sends all of *that* record back to its originator. Wouldn't that be more valuable? Well, this is essentially how Facebook and Google work.[11] The value now lies in dis-alignment, in following the unhinged and ambiguous movement of desire and habit online. This is a regime I call unhingement.

While I was working on this lecture, I received a note about a new web browser extension called 'Stackup'. The purpose of this app is to develop yet another way to measure precisely how people, indeed, stack up. This particular system measures and categorizes the time that individuals effectively spend reading online: 'Teachers are using Stackup to assign and track reading goals in the classroom. Students are using Stackup to uncover interests & showcase the reading they do. Life learners are using Stackup to showcase their online reading achievements' (from the Chrome web store presentation of Stackup). Stackup draws people in by exploiting their moral desire for self-knowledge and valuation, or their professional orientation toward evaluation (in the case of educators). In a pedestrian manner, alignment is effectively achieved through a simple click: the button on the screen that says: 'add to chrome—it's free'. According to the company's material, the design tracks personal productivity and learning online, and allows users to 'show evidence' of their 'passion' and 'engagement' to prospective bosses and other interested parties (for instance, college admission offices).[12] The money potential for Stackup (or any similar company) lies, first, in the possible transformation of data into assets: even if the start-up fails, the last thing left standing will be a trove of personal

9 'Sega installs "toylets" games in Japan's urinals.' *Wired* UK, June 6, 2011, Accessed at http://www.wired.com/2011/01/sega-urinal-games/ on June 22, 2016.

10 Of course, this example may sound a bit far-fetched, and I use it mostly as a metaphor here. Yet let us not forget that many people believe in the Stanford Marshmallow Test, or similar alleged predictors of delayed gratification or other valued quality. If we thought that something like urinal accuracy was a strong predictor of creditworthiness (on the positive side) or the tendency to recidivism (on the negative) can we say for sure there would not be several competing startups attempting to install a network of smart urinals in public and private spaces around the country?

11 Phones do not technically use 'cookies', though they do rely on tracking technologies, too.

12 See https://chrome.google.com/webstore/detail/stackup/dpinfolakhcnlgkdbodgabnliglebhbg?hl=en-US, accessed on January 25, 2017. Also see www.stackup.net, accessed on January 25, 2017.

records, collected and processed in a potentially valuable way: what Zuboff (2015, p. 81) calls 'the surveillance assets'. That's the value drawn from alignment. But the *real* value promise lies in Stackup embedding itself deep within the infrastructure of the web, and beyond it the market, as a silent recorder of our unhinged movements online and an active operator of the productive sorting and slotting of individuals. The app's founders, indeed, see their product as a variant of the credit score, measuring people's inquisitiveness and learning skills, and with potentially large applications in education and employment. The device, in turn, would produce its own new moral standards, intuitions and hierarchies: it would become a source of morality of its own, an anchor to our sense of worth—yet one that was entirely crafted for economic purposes: in short, an 'economic morality'.

6. Economic moralities

In the preface to *The Making of the English Working Class*, E. P. Thompson writes that he wanted to show that working people were not passive victims of *laissez faire*. His book, he argues at the onset, is an effort 'to rescue the poor stockinger, the Luddite cropper, the "obsolete" hand-loom weaver, the "utopian" artisan, and even the deluded follower of Joanna Southcott, from the enormous condescension of posterity' (1964, p. 12).[13] Likewise, the modern counterparts to Thompson's workers are not the passive victims of twisted neoliberal designs. But unlike Thompson, whose compassion went to those whom the industrial revolution left behind, and who resisted it, I have sought to direct mine toward those who jumped into the digital revolution with both feet. Perhaps all that I have tried to do here, in a twisted Thompsonian way, is to rescue the poor slot machine addict, the hopeless World of Warcraft grinder, the fitbit fanatic, the Instagram compulsive, the retweet-counter, and even the deluded player of 'toylet' games from the enormous condescension of the present. I am not sure, nor do I want to ask myself, which of these subjects of capitalism has, or will ever have, the moral upper hand. But I believe that they all deserve our passionate attention.

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13 I am indebted to Kieran Healy for reminding me of this E. P. Thompson quote.

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