

Species of Futurity in Business, Law and Finance

Catalogue Essay for "Who Thinks The Future?"
a Peer Sessions group exhibition featuring Josh Bilton, Darren Harvey-Regan, Jenny Moore, David Mabb, Steven Ounanian, Kate Pickering and Charlotte Warne Thomas
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I want to lay out some scaffolding for this exhibition. No, that's not quite right: it's more like a parallel track, a spate of scenarios that do a bit of contact improv with the show: vignettes that describe a few of the ways in which management practices in business, law and finance think the future. That said, the phrase "think the future", here, might be an understatement. Over the past several decades, the ever-expanding practices of data analysis have, in the names of efficiency and control, produced, enacted and actively experimented with fundamental problems concerning the representation of futurity on general populations of citizen/consumers. Under what conditions can a depiction of the future hold claim to truth, to accuracy? In what senses might a claim about the future – say, a prediction – alter the very future to which it speaks, by performing and producing certain kinds of potential while preventing others from emerging? In what ways might an individual be justly held accountable to a representation of the future used in, say, the penal system? In what Bernard Harcourt (2007) calls our "actuarial age", statistical analyses of risk permeate ever more areas of life; and individuals often bear the weight of these predictions. Representations of citizenship (be it merely consumer citizenship conceptualized as "voting" through spending, or a broader, classical definition including rights and responsibilities with respect to law, nation and the commons) increasingly bear the marks of data analytics' surgeries on the future: its pre-emptions and prunings, its nudges and steerings.

Pain Points in the Datascape

As Karl Palmås (2011) has shown, businesses increasingly base their success on their ability to foresee customers' intentions. Wal-Mart, the world's largest corporation, is able to price out competitors in part due to its ability to effectively use analytics to forecast future sales and stock stores accordingly. Their analytics take into account even the effects of weather patterns on customer spending; they might, for instance, rush order Kellogg's Strawberry Pop-Tarts® right before a hurricane, since statistics show that customers stock up on ready-to-eat food right before a storm.

Similarly, the American casino chain Harrah's tracks each of their customers' gambling habits through loyalty cards. From the data they amass, they calculate a "pain point" for each customer: "the level of gambling losses that will send the visitor home, and possibly make them not come back for a while" (Palmås 2011, p. 348). Pain points might be vastly different from person to person; the point is to know precisely how much money might successfully be extracted from each individual. When gamblers go over their pain points, "luck ambassadors" on the casino floor respond in real time, sympathizing with the gamblers' losses and offering to take them out to dinner on the house. In this way, Harrah's micromanages consumer emotion (p. 348) to ensure maximum profitability; their doing so hinges on a truth statement about

the consumer that governs and predicts their future responses. As Palmås points out, such analytical practices increase power differences between large and small corporations, since the larger ones are far more likely to reap the rewards of sophisticated analytics. They also increase power differences between corporations and consumers. By calculating pain points, companies can claim, quite convincingly, to know something about their customers that the customers do not know themselves. In a political climate in which governments increasingly view tax revenues from casinos as substitutes for general tax hikes, slot machine interfaces – which are carefully engineered to be addictive (Schüll 2012) – perform an important supplemental role in state funding that preys upon, and cultivates, individuals' compulsive need to “gap out” and lose awareness of their everyday problems. While there are many forms of future-oriented calculation – such as, say, predicting climate impacts on ecosystems – that could be used in service of the commons, pain points and other corporate forms of calculation prey upon consumers, cultivating tactical advantages over them.

Towards a Political Economy of Propensity

When the concept of consumer credit emerged in the late nineteenth century as a structuring economic force, techniques used to deem creditworthiness were explicitly “character-driven”. Lenders would look into potential borrowers' eyes, scrutinize their dress, their manner, and their wives' degree of extravagance for signs of dependability (McClanahan 2014 p. 34). In the 1970s, quantitative models of credit scoring replaced these earlier forms of assessment, in part due to accusations that earlier forms of discerning creditworthiness perpetuated racist, classist, ageist and sexist lending practices. Credit companies began to algorithmically analyze customers' spending habits and assign credit scores. These scores were meant to be perfectly “factual”, unbiased and objective; yet, as McClanahan argues, seemingly “objective” scoring methods would often merely launder various forms of institutionalized racism and ageism. (As it turns out, people of colour and the elderly routinely receive lower credit ratings in the US than their similarly qualified white/non-elderly counterparts.) Further, credit card companies would base their ratings, in part, on statistical correlations between certain kinds of spending (for instance, on marriage counseling, night clubs and massage parlours) and a decreased likelihood of paying back loans (McClanahan 2014, p. 39). New customers' credit ratings would go down if they spent money on items and services similar to those correlated with *other* customers' tendency not to pay. What justifies the use of normative statistical measures to govern individuals' access to credit, and to creditworthiness? As lending practices continue to shift – new mortgage lending laws in the UK, for instance, necessitate a grueling hours-long personal interview in addition to numerical scoring, thus blending qualitative and quantitative techniques for granting access to credit (Dunkley 2014) – the question must be raised: is the use of statistical correlation to govern individuals' access to credit any less biased than discerning their “character”?

Whatever the answer to this question might be, such correlative practices have only gained footing since the 1970s, as new research bolsters them with a “truth value”. Increasingly, “big data” places less emphasis on free will, autonomy, personal decision-making and self-expression as it models new ways to link what people actually *do* with what they are likely to become. As MIT scientist Alex Pentland enthusiastically puts it,

Who you actually are is determined by where you spend time, and which things you buy. Big data is increasingly about real behaviour, and by analyzing this sort of data, scientists can tell an enormous amount about you. They can tell whether you are the sort of person who will pay back loans. They can tell you if you're likely to get diabetes... They can do this because the sort of person you are is largely determined by your social context, so if I can see some of your behaviours, I can infer the rest, just by comparing you to the people in your crowd. (Naughton 2014)

More and more predictive research emphasizes the importance of “imitative rays” of behaviour (Tarde 2007, Thrift 2008) coursing through social networks over self-determination. This statistically aggregated representation of futurity, which comes to inform selfhood and regulate individuals’ actual horizons of fiscal, personal and legal possibility, has come to be viewed as both justifiable to many researchers because of the profound impact of context on an individual, and highly profitable as an area of research for corporations and financial institutions – so much so that Nigel Thrift (2008) argues that we are witnessing the emergence of a new “political economy of propensity”, the outlines of which have yet to be fully written. Within this new political economy, it is difficult, if not impossible, to separate the value of a truth statement about the importance of context in determining, say, an individual’s future from the machinations of power that would use such a truth statement as a form of control. As Deleuze famously argued (1992), the emerging structure of power which replaces Foucault’s disciplinary society is the society of control, which functions not through institutional boundaries and strict behavioural prohibitions, but by computers tracking everything in the background, making “dividual” persons – who are controlled by debt – subject to flows of trans-personal information. Given the NSA leaks of 2013, Deleuze’s essay seems ever more prescient.

The Probabilistic, the Possibilistic and the Pre-emptive

As Evgeny Morozov points out, technology already exists which can track vast amounts of personal data in order to predict, for instance, the likelihood of an individual committing a crime at a particular time. Given the rapid rate of technological change, it is entirely conceivable that in the near future, police forces will use algorithms gleaned from personal data to try to pre-empt breaches of the law (for instance, by sending more police to potential problem areas). Such logics have a long prehistory; as Bernard Harcourt demonstrates, statistical analyses have modeled the future in criminal law ever since 1935, when the Illinois State Penitentiary hired its first-ever actuary to use the “Burgess Method” for determining the likelihood of an individual’s success or failure in parole based on group recidivism rates. Fast-forward several decades, and actuarial logic – the employment of statistical, rather than clinical, methods to determine risks of criminal behaviour or to administer justice – completely “permeates the field of criminal law and its enforcement” (Harcourt 2007, p. 2). For some, the use of actuarial logic to, say, more “smartly” target tax audits or routine vehicle checks is simply a necessary efficiency in a landscape of limited police and legal resources. For Harcourt, on the other hand, actuarial logic distorts the very concept of justice itself. It produces biases in the carceral population, and can even increase crime in certain instances, as when, for instance, white drivers in the US accurately perceive that they are not likely to be targeted in routine checks.

While the Burgess Method was based on statistical probabilities, such predictive methods fall short in certain contexts. Counter-terrorist tactics and risk assessment for nuclear power plants require the analysis of extremely improbable events that – if they occur at all – are certainly not likely to be repeated. For such analyses, possibilistic thought becomes a more valuable tool than probabilistic thought, which focuses on that which is most likely. Possibilistic thought (Clarke 2008) focuses on analyzing events that fall outside of probability's range of focus, and is sometimes blended with probabilistic modeling – for instance, in financial institutions' Value at Risk calculations for the derivative market – in an attempt to give a fuller picture of the blend of continuity and contingency that characterizes a cultural conception of the future. As John Hogan Morris describes them, calculations such as Value at Risk act as “a way of governing future instability in the present” (2014).

Yet the analysis of the extremely improbable is also implicated in a broader set of tactical shifts. As Brian Massumi describes it in his work on the U.S. military (2007), there has been a shift from preventative to pre-emptive logic since the cold war. Whereas, say, a cold war nuclear arms race aims to prevent future attacks by matching the enemy's weapons arsenal, pre-emptive logic does away with such balancing acts. Pre-emption, for Massumi, is performative in character; in an era of uncertain enemies and improbable, ever-shifting forms of attack, enemies must first be smoked out of their holes, actively *created* through acts of aggression which will invite retaliation along the lines that the U.S. can then say their enemies always already would have done. The future, as it were, moves into the present: potential enemies are actualized, actively created in the present, by performative acts and statements that will be retroactively “proven true” through combat. While Massumi focuses on the military here, it is worth asking how pre-emptive logic makes its way into all areas of life through uncertainty, possibilistic logic, and the broader landscape of both corporate and personal drives to render the future knowable. What is the difference, for instance, between preventative and pre-emptive measures in medicine? In education? In his book on what he calls “technological solutionism” (Silicon Valley's “there's an app for that” attitude to tackling seemingly all social problems) Evgeny Morozov (2013) points to some interesting potential answers. App-based, individualistic solutions to everything from nutrition to medicine, exercise and environmentalism tend to encourage people to micromanage their own behaviour, but to pre-empt any discussions on a broader, systemic level. (For instance, while discussions that might question how to hold the food industry accountable for its roles in destroying public health might seem difficult, if not impossible to sustain in a solutionist milieu, using an app to monitor one's own eating habits is a readily available option). What is pre-empted, it seems to me, is an address to the commons, in favour of either atomized, individual self-management, or an active production of antagonism through pre-emptive logic.

Duration and the Free

I would like to conclude (however provisionally) by looking backwards, pinpointing a particularly salient representation of futurity from the late nineteenth century.

There is a stunning passage at the end of Henri Bergson's *Time and Free Will* (1889). As Bergson has meticulously argued throughout the book, duration – the essence of time as multilayered, teeming with minute qualitative shifts and heterogeneous, rhythmic flows – is completely antithetical to measurement. To count a clock's

pendulum swings and conclude that, say, ten seconds had passed would be to abstract time, to falsely quantify what can only be qualitative: the minute, rhythmic shifts in the continuous experience of the pendulum's swing (2005, p. 104). Writing in an era of increasing scientificity, in an era which witnessed the early signs of what is now a wholesale management and regulation of life and futurity by calculation, Bergson's argument for the illusory nature of quantification had high stakes. For in duration, he concludes, we are free. If "our action was pronounced by us to be free, it is because the relation of this action to the state from which it issued could not be expressed by a law, this psychic state being unique of its kind and unable ever to occur again" (p. 239).

For Bergson, the free, unique and singular decision (which is not a human property *per se*, but a property of duration) emerges from all that is heterogeneous and singular in experience. The realm of the measurable – which describes a regular, predictable world – is mere abstraction. Bergson's argument is by no means airtight. As Mary Ann Doane argues, even this identification of freedom with the contingency of duration is ideological; given the increasingly routinized, mechanized conceptions of time that apparatuses such as cinema and factory work made possible, "chance and the contingent are given the crucial ideological role of representing an outside, of suggesting that time is still allied with the free and indeterminable" (Doane 2002, p. 230). More recently, Ray Brassier (2011) has argued that Bergson, however sophisticated his thought may be, falls prey to the "myth of the given" – the belief that phenomenal experience can reveal an ontological real. Whether or not this criticism really speaks to the heart of Bergson's argumentation, or whether or not Bergson's intense desire to align free will with qualitative heterogeneity is ultimately more ideological than philosophical, is not for me to say. That said, if we view his passage as an important moment in the conceptual pre-history of an era of hyper-quantification, Bergson's point seems all the more pressing. Can qualitative heterogeneity escape the machinations of control-society quantification? Can the kind of futurity for which Bergson advocates – an uncoded futurity understood as potential, not possibility – stand alone amidst the giants of probability, possibility and pre-emption? How might both qualitative and quantified representations of the future play into control society tactics? With what form of futurity do artists wish to align themselves today?

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