

# Post-Humanitarianism: Governing Precarity through Adaptive Design

Mark Duffield

Global Insecurities Centre, University of Bristol; [m.duffield@bristol.ac.uk](mailto:m.duffield@bristol.ac.uk)

## Abstract

This paper provides a critical analysis of post-humanitarianism with reference to adaptive design. At a time when precarity has become a global phenomenon, the design principle has sidelined the need for, or even the possibility of, political change. Rather than working to eliminate precarity, post-humanitarianism is implicated in its reproduction and governance. Central here is a historic change in how the human condition is understood. The rational *Homo economicus* of modernism has been replaced by progressive neoliberalism's cognitively challenged and necessarily ignorant *Homo inscius*. Solidarity with the vulnerable has given way to conditional empathy. Rather than structural outcomes to be protected against, not only are humanitarian crises now seen as unavoidable, they have become positively developmental. Post-humanitarianism no longer provides material assistance – its aim is to change the behaviour of the precariat in order to optimise its social reproduction. Together with the construction of logistical mega-corridors, this process is part of late-capitalism's incorporation of the vast informal economies of the global South. Building on progressive neoliberalism's antipathy towards formal structures and professional standards, through a combination of behavioural economics, cognitive manipulation and smart technology, post-humanitarianism is actively involved in the elimination of the very power to resist.

**Keywords:** behavioural economics, humanitarian innovation, late-capitalism, progressive neoliberalism, resistance, social reproduction

Drawing its energy from the wave of New Left and counter-cultural radicalism of the 1960s (Boltanski and Chiapello, 2005), an NGO-led direct humanitarian action pushed onto the international stage during the 1970s. The radicalism of this new anti-establishment *sans frontières* humanitarianism lay in its political challenge to the conventions of Cold War sovereignty. By being there on the ground it sought to hold sovereign power to account, witnessing its excesses while professing a face-to-face humanitarian solidarity with its victims. For a couple of decades it was successful in publicly challenging Western foreign policy in Africa, Latin America and Southeast Asia (Duffield, 2007: 51–4). Having once exercised a moral leadership, however, after a long struggle against donor absorption and UN control, an international direct humanitarian engagement finally yielded amid the horrors of Iraq and Syria.

The War on Terror imposed limitations. Compared to the 1970s and 1980s, humanitarian agencies found their political room for manoeuvre significantly restricted

(BOND, 2003). At the same time, despite agency growth and extensive efforts to professionalise relief work, there was little commensurate increase in effectiveness (Fiori *et al.*, 2016). Growing risk aversion and recourse to remote management, moreover, created problems of distancing and loss of familiarity (Healy and Tiller, 2014). Distracted by debt-fuelled uncertainty, rather than an indignant citizenry, Western publics now present as so many disillusioned, ironic spectators (Chouliaraki, 2013). Diplomatic influence has also declined (Mair, 2013). While NGOs lay claim to a 'non-governmental' status, direct action thrived when donor sovereignty was, paradoxically, still able to cast a shadow. Given the refugee crisis, few can today contemplate the wretched state of 'official' humanitarianism without some disquiet. Despite what we may wish or demand, however, it is unlikely that significant improvement will occur any time soon. But to then conclude that humanitarianism is dead would be a mistake.

While autonomous international direct action lies buried in the rubble of the West's urbicidal wars, a new

and optimistic, less direct but technologically updated humanitarianism has confidently stepped forth. More de-risked and requiring less professional expertise than the labour-intensive direct engagement of the past, it is a cheaper Western humanitarianism designed for connectivity rather than circulation. Often called humanitarian innovation (ALNAP, 2009; Betts and Bloom, 2014), a feature of this new humanitarianism is its enthusiastic embrace of adaptive design (Ramalingam *et al.*, 2014; HPG, 2018). Moreover, unlike autonomous direct action, which reached its peak in the late 1980s, humanitarian innovation sits comfortably with private partners and corporate sponsorship (Zyck and Kent, 2014), a necessary recalibration given its dependence upon what can be called the computational turn – that is, since the 1990s, the seamless penetration of commercial information and communication technologies, software platforms, automating apps and screen interfaces into all aspects of personal, social, national and international life *tout court*. Humanitarian innovation is politically safe, logoed, glitzy and smart.

Besides establishment acceptance, humanitarian innovation draws positivity from its disavowal of past failures and commitment to a future of ‘failing-forward in a spirit of honesty’ (HPG, 2018: 132). Transparency regarding current systemic ‘pathologies’ like institutionalising self-interest or neglecting the agency of the disaster-affected (*ibid.*: 22–3) is part of the self-cleansing necessary to birth a humanitarianism 2.0. This paper, however, questions whether humanitarian innovation can be any more effective than the past relief efforts it now disavows. Rather than system failure, just as important is that the world has changed. Societies are more fragmented and unequal than before (Piketty, 2014). International space has striated into fast, slow and stopped lanes (Brown, 2010) as debt, precarity and anger have flourished (Mishra, 2017). Rather than correcting past mistakes, humanitarian innovation is embarked on a wholly different project. It is helping create the systems and structures to govern global precarity. Important here is its privileging of the design principle over the need for, or even the possibility of, political change.

## Design Not Politics

The computational turn and societal dependence on digital technologies has changed the way the world is understood and the status of humans within it (Chandler, 2018). The privileging of the design principle is central to this change. Besides the spatial shift from circulation to connectivity, an ontological, epistemological and methodological translation has also taken place (Duffield, 2018). While anticipating late-modernity, the spirit of 1970s direct humanitarian action was fabricated

from a deductive process of knowledge formation framed by narratives of history, causation and reciprocity. Reflecting the rise to dominance of a cybernetic episteme, this register has been replaced by a reliance on inductive mathematical data and machine-thinking for sense-making (Rouvroy, 2012). Thinking has been transformed into calculation (Han, 2013).<sup>1</sup>

The current dominance within the academy of empiricism and behaviourism reflects this change in world-experience. What is often called *post-humanism* (Braidotti, 2013) brings several contemporary positivist stands together. These include the new empiricism, speculative realism and actor network theory. Post-humanist thought draws on process-oriented behavioural ontologies of becoming. These privilege individuals understood as cognitively limited by their unmediated relationship with their enfolding environments (Galloway, 2013; Chandler, 2015). An individual’s ‘world’ reduces to the immediate who, where and when of their changing network connections and disconnections. The overlap here with neoliberalism’s necessarily ignorant subject is returned to below. Importantly, the pure factuality of a post-humanist existence casts doubts on the distinction between a lived reality and a wider world, a distinction that is central to knowledge and the narrative of history. Without this separation there is no space, as it were, for a political commons of contrasting life-chances, contestation and critique that is essential if we are to successfully share the world with Others. In its absence, as Bruno Latour approvingly argues, the whole becomes smaller than the sum of its parts (Latour *et al.*, 2012). Rather than a shared world of circulation, we have the endless personalised and separate worlds of connectivity.

Post-humanism problematises the possibility of a shared or collective politics. Indeed, Latour (Latour, 2008) goes further in suggesting that design has now replaced politics. Building on his earlier rejection of grand narratives and critique (Latour, 2004), Latour claims that since encountering the scale of the ecological crisis, we are all now designers rather than modernisers. Across a wide arc of operational discourse, empathetic design attitudes reflecting such feminine sentiments as ‘attachment, precaution, entanglement, dependence and care’ have all but replaced earlier, more masculine Promethean commitments to ‘emancipation, detachment, modernization, progress and mastery’ (Latour, 2008: 2). In place of political change, Latour asserts the primacy of a conservative design-based ontopolitics. That is, the need to accept and work with the world as is – *rather than how it ought to be*. In celebrating the positive demand for empathy, humility and resilience, adaptive design supplants the call for systemic change. This conservatism is an example of how a progressive neoliberalism (Fraser,

2017) is dissolving and sapping the powers of resistance (Han, 2010). The excessive positivity of adaptive design, its endless willingness to happily fail-forward into the future, suits the economic logic of late-capitalism.<sup>2</sup> To draw this out, it is necessary to first review the latter's greatest achievement.

## Global Precarity

A characteristic of late-modernity, at least in relation to the global North,<sup>3</sup> is what Nikolas Rose has called the 'death of the social' (Rose, 1996). This demise is usually equated with the roll-back of the welfare state. Originally meant as a collective insurance-based shield against market forces, since the 1980s the welfare state has been residualised through means-testing, privatisation, cuts and the politics of austerity. Companies and businesses, however, have also shed their former social-democratic responsibilities (Boltanski and Chiapello, 2005). Jobs for life, intergenerational career structures, apprenticeships, subsidised canteens, social clubs, sports facilities and company pensions have disappeared. In the mid twentieth century, for the white working class at least, welfarism together with a Fordist employment culture provided a high degree of protection against market forces. Indeed, this was a defining political feature of the West's racial- and gender-inflected Cold War social-democratic settlement (Streeck, 2017). Over the last two or three decades, driven by the neoliberalism of the conservative counter-revolution, this social protection has largely evaporated.

Insurance- and company-based social protection has historically been limited or absent in the global South. Late-modern precarity begins here first (Munck, 2013). Encouraged by the imposition of structural adjustment, the South's informal economies began to rapidly expand from the end the 1970s, absorbing the surplus population thrown off as public-sector employment and services contracted (Cornia, 1987). Moving to catch up, so to speak, by the 1990s a 'post-social' economy was consolidating in the global North. While marked differences remain, the North and South have drawn together around the economic logic of precarity. In the latter, fuelled by jobless growth, for several decades a self-reproducing informal sector has been by far the largest employer and supplier of goods and services (Meagher, 2016). For the North, precarity has taken the form of the disappearance of 'good' jobs as the casualisation of work has increased. This includes the growth of insecure, poorly paid temporary work and marginal forms of self-employment (TUC, 2017). Wages have stagnated, and social mobility stalled. Moreover, it is widely accepted that today's young no longer enjoy the life chances of their parents (Corlett, 2017). Given this downturn, living

the dream has meant a massive expansion of debt financing (Streeck, 2017).

The acceleration of economic informality in the global South has been matched by the residualisation of market protection in the North. As this conjuncture suggests, the greatest achievement of late-capitalism has been to author an expanding post-social *global* precariat. While progressive neoliberalism celebrates the exchange of 'nanny-state' security for a contingent freedom to consume (Boltanski and Chiapello, 2005), late-capitalism is fraught with contradictions. Reversing a hitherto world-historical trend, since the 'long boom' ended in the 1970s there has been a secular decline in the rate of profit. Every recovery from the periodic business cycle has, from this period, been feebler than the last (Brenner, 2006). Recovery from the 2008 financial crisis, for example, has been the weakest and most prolonged on record (Streeck, 2017). Reflecting the realities of the downturn, the new freedom to consume has, to a remarkable degree, been unequally distributed (OECD, 2008; Oxfam, 2016).

Precarity is a by-product of the long downturn. It emerges at that historic moment when the economy becomes a site of permanent emergency (Streeck, 2011). A human surplus coexists with the 'jobless' growth resulting from the systemic urge to deepen automation at a time of declining profitability (Smith, 2017). Within a post-social world, risk and security have been individuated. Compared to the normative welfare systems of the past, a new disaggregated and personalised biopolitics has emerged. If biopolitical regimes could be likened to animal species, the welfare state catered for the herd. Today, it is the turn of the *predator*.<sup>4</sup> Rather than share risk, there is a new emphasis on individual responsibility. In the global North, the downturn has spawned a narcissistic culture of bodily fitness, healthy lifestyles and making good choices, while in the South, a post-humanitarian ethic has disaggregated, medicalised and reduced precarity to the basic nutritional, energy, health, sanitation, education, financial and psychic requirements needed to maintain bodily functioning (Jaspars, 2015). Everywhere, resilience, or the injunction to endlessly adapt before unmediated market and environmental forces, has become the zeitgeist of late-modernity (Evans and Reid, 2014).

As the uncertainty of active unemployment becomes the global work norm, the chronically poor and the disaster-affected have blurred. In an unmediated relationship with their environments, they are both subject to permanent emergency. They constantly change place and, at a time when economy and disaster have blurred, from a post-humanitarian perspective, they become indistinguishable. Since resilience is now equally required of the poor and exposed – as well as the 'first

responders' – the traditional distinction between developmental and humanitarian relief has also lost its meaning. Disasters are developmental; so development has been set the task of re-wilding a post-social world. Within the economic logic of precarity, however, the global South has a special place. Able to utilise the relatively unregulated conditions existing there (Hosein and Nyst, 2013), rather than eradicating poverty, the role of humanitarian innovation is to experiment, trial and anticipate the means to govern an emerging global precariat (Jacobsen, 2015). In particular, the challenge is to sustain precarity in the sub-prime conditions of the South by optimising its social reproduction. Having devoured, since the 1970s, the last areas of economic and institutional autonomy still outside of itself (Sloterdijk, 2013), other than profitably recycle the precarity it now produces in abundance, so to speak, late-capitalism has no other future.

### Incorporating the Wired Slum

For decades, the global South's huge informal economies have dwarfed conventional economic activity (Dunaway, 2014). Enabled by connectivity, the long downturn has encouraged late-capitalism to move beyond the South's enclaves and the special economic zones established during the 1980s as part of the North's deindustrialisation (Amsden, 1990). Private finance is investing in what are called infrastructural 'mega-corridors' (Hildyard and Sol, 2017). With China's Belt and Road Initiative just one example, this is a huge near-global expansion. Except Antarctica, no region is excluded with continental – even transcontinental – infrastructure plans in existence that seek to reappropriate the biosphere through a vast global infrastructure of smart logistical corridors. Securitised archipelagos of interconnected special zones, fast interconnectors and smart terminals are expanding across and between the global North and South. Hundreds of millions will be affected as they are cleared to make way for the new roads, ports, trains and airports, or else 'transformed into pools of cheap labour for the mines, plantations and factories that the corridors will service' (*ibid.*: 7).

In a connected world, free circulation declines as the security architectures of containment expand. On the ground, connectivity can be measured in terms of the global explosion of fences, barriers and check-points (Brown, 2010). Logistical mega-corridors are extra-legal boundary mechanisms that, working across multiple jurisdictions, both spatially separate and integrate the smart city and the wired slum, so to speak. They are spaces where the international mobility differential of commercial actors can be used to exploit the immobility and entanglement of a connected precariat. As sites

of active unemployment, the focus of this paper is late-capitalism's absorption and reproduction of the informal economies of the global South, especially the role of post-humanitarianism in governing global precarity. The question of social reproduction is important here.

Encompassing the reproduction of human beings as a biological species, social reproduction is an organic part of capitalism. It includes birthing and caring for the young, sick and old while maintaining family, friendship and wider community linkages, identities and moralities (Fraser, 2016). Traditionally unpaid and cast as women's work, although men have always done some, without these taken-for-granted but vital functions capitalism would not exist. Within the post-social world of late-capitalism, social reproduction is in crisis.

During the 1960s and 1970s, dependency theorists argued that in the South, capitalism gained from being able to drain what was then an autonomous, and largely rural, subsistence economy (Wolpe, 1972). Still mainly outside the sphere of capitalist production, this household-based economy kept wages low by freely absorbing most of the costs of social reproduction. At the same time, through subsistence farming, the household was able to subsidise those working in the wage economy (Laclau, 1971). At the moment of the dependency theorists' discovery, however, an autonomous, subsistence-based household economy was already in a state of dissolution (Duffield, 1981). Helped by the NGO-led aid invasion of the 1980s, and accelerated by the computational turn, late-capitalism has now absorbed what is now better understood as the vast, expanding informal economies of the global South (Duffield, 2018).

The spread of mobile telephony and broadband has created new ways of knowing, incorporating and acting upon the precariat (UNGP, 2009). Through the electronic traces created and assiduously recorded by digital technologies, data informatics makes visible what was previously denied to conventional accounting. Namely, the transactions, affordances and networks that maintain the social reproduction of the precariat under conditions of permanent emergency (UNGP, 2013). The incorporation of the wired slum has allowed late-capitalism to open up, absorb and more effectively drain the household production underpinning precarity. This has seen a significant freeing-up of women's labour and narrowing the gender gap in global labour force participation. Women now constitute the majority of informal income earners over most of the global South (Dunaway, 2014; Lebaron and Ayers, 2013).

In the past, informality was problematised because of its systemic tax avoidance and the flouting of commercial regulations (Meagher, 1990). The traditional aim of

development policy was to regularise informality. That is, to graduate the millions of workers, artisans, traders and enterprises that constitutes the informal sector into a rule-based economy. Such graduation, however, *is no longer the aim*; even though – through data informatics – the informal sector is mapped as never before. In a post-social world, late-capitalism has no intention of again assuming responsibility for social reproduction. To the contrary, the logic of the downturn is to externalise and preserve the household's subsidy to a declining rate of profit. With fewer opportunities for men in the commodity chains that constitute the emerging global gig economy, so to speak, women are increasingly unlikely to withdraw from the labour force during their child-rearing years (Dunaway, 2014). As the unequal distribution of chronic ill-health, under-nutrition and morbidity attest (WHO, 2017), the social costs of this hyper-exploitation have been transferred with deleterious effects to a contained and largely urban precariat.

Reflecting the parasitism of the downturn, rather than problematise informality, developmentalists now praise it as an authentic and valued expression of community mutuality and gender inclusion (Becker, 2004). Through such progressive reinscription, the informal sector has been repackaged through projects like 'Bottom of the Pyramid' economics (Prahalad, 2006) or 'inclusive capitalism' as an eligible and eager development and business partner. Consider, for example, UNDP's (2008) homely appraisal of NGO-assisted informality as a low-cost welfare infrastructure for an inclusive capitalism. It points out that where poverty prevails, formal rules and regulations are often less effective than informal arrangements. Moreover, inclusive business models can work with these shadow arrangements. Importantly, they can free-ride on existing community mutuality, such as local resource sharing and informal credit. External businesses, we are told, 'can count on these communal processes to fill gaps in the markets of the poor' (UNDP, 2008: 9).

While precarity has been absorbed, the costs of its social reproduction have been externalised. Rather like the security guard that must supply his own dog, these costs have to be met by the precariat itself. Under the rubric of humanitarian innovation, post-humanitarianism is primarily concerned with optimising the behaviour of the precariat to improve survival in a post-social wild. Women and their reproductive role are especially important targets. Post-humanitarianism is an example of a now dominant ontopolitics (Chandler, 2018) – in accepting the unacceptable, we are now all enrolled in the celebratory design task of making the most of the world as it is, rather than how it ought to be.

## Celebrating Ignorance

Although the rise of behaviourism within the academy predates the computational turn, it has been enhanced through this development (Rouvroy, 2012). Optimising individual behaviour and experience lies at the cybernetic heart of late-capitalism. Employing armies of practitioners, it embraces everything from moulding consumer preference and influencing voter behaviour to shaping the choices and experience of disaster-affected groups (HPG, 2018). The privileging of behaviourism over more conceptual approaches to understanding (Anderson, 2007) is reflected in the growing influence of 'behavioural economics' (Alcock, 2016). Before its sobering escape into the wild, as evinced in the Trump election and Brexit referendum (Cadwalladr, 2017), behavioural economics had been popularised as 'nudge politics'. Despite raising democratic concerns in targeting the sub-conscious, it has found favour among many Western governments.<sup>5</sup>

Behavioural economics operationalises late-capitalism's logistical requirement for people and things to be in the right place at the right time 24/7 (Srnicek, 2016). Humanitarian innovation embodies this cybernetic goal. Optimising precariat behaviour to strengthen decision-making, improve health, employment, life-style choices and, importantly, motherhood and child-rearing practices, is central to the post-social humanitarian regime currently in formation (World Bank, 2015). Humanitarian innovation, moreover, not only targets the behaviour of the precariat, reflecting late-capitalism's antipathy to professional hierarchies; it also seeks to change the attitudes and mindsets of humanitarian aid workers as well.

In justifying what, only a few decades ago, would have been called 'brain washing', behavioural economics has required a significant shift in how the actor-potential of the human subject is viewed. Throughout much of the twentieth century, this understanding was shaped by the behavioural avatar of *Homo economicus*. While *Homo economicus* could deceive and make one-sided decisions, it did make use of deliberative reason and rationality. More recently, and especially since the 2008 financial crisis, a new behavioural savant has appeared. Drawing on the neoliberalism of Friedrich Hayek (Hayek, 1945), this now dominant exemplar brings into question the usefulness, indeed, the possibility of human reason (World Bank, 2015; Cooper, 2011). Central to Hayekian neoliberalism is the essentially post-humanist proposition that due to the complexity of the surrounding world, apart from one's immediate environment and networks, humans are incapable of understanding society or the world as such.<sup>6</sup> As Douglas Spencer has shown with regard to architectural design, this state of necessary

ignorance is ‘fundamental to neoliberalism’ (Spencer, 2016: 17).

Given the contrast with *Homo economicus*, this not-knowing, unperceptive and necessarily ignorant behavioural avatar is here called *Homo inscius*. Behavioural economics divides human consciousness into ‘reflective’ and ‘automatic’ functions. The former utilises reasoned deliberation to achieve conscious goals. It is the latter, however, that is held more important in the shaping of behaviour. Operating below the level of conscious reason, behaviour is primarily influenced by the automatic play of unconscious heuristics, environmental cues, mental shortcuts and the unthinking operation of group preferences and shared models (World Bank, 2015: 3–4). Given these individuated biases, there is a risk that *Homo inscius*, if left on its own, will behave badly. Designing psycho-social governance technologies acting at the level of the subconscious has proven irresistible to the politically bankrupt elites presiding over the downturn. Because of *Homo inscius*’ inability to fully comprehend, together with its inherent biases, the compensatory appearance of the auto-correcting technologies and smart prosthetics of the computational turn appear fortuitous, if not providential. The necessary ignorance of *Homo inscius* is compensated by the signals and alerts that enfolding and surveillant smart environments are designed to supply and record (Stiegler, 2016; Duffield, 2018).

## Experiencing Precarity

The World Bank’s (2015) World Development Report, *Mind, Society, and Behaviour*, is a major intervention bringing precarity within the ambit of behavioural economics (Alcock, 2016). This initiative has been welcomed by developmentalists keen to draw parallels between the Bank’s work and leading-edge initiatives among NGOs such as *Doing Development Differently*<sup>7</sup> and *Thinking and Working Politically*<sup>8</sup> (Ramalingam, 2014; Green, 2014). The Bank’s initiative is also praised for spelling out that aid managers also have cognitive biases that can adversely affect the aid experience. Consequently, these biases also need to be considered in project design. Typical of many policy pronouncements following the 2008 global financial crisis, however, the World Bank finds it necessary to reject the need for significant political change or social redistribution (World Bank, 2015: 80). This is at a time when global inequality is at record levels and new forms of post-social servitude and abjection are appearing (Lebaron and Ayers, 2013). As a practical illustration of the ontopolitics of design, for the World Bank, its rejection rests on the alleged mental capacities of the chronically poor. Since the limitations of *Homo inscius*

are cognitive and environmental, it is argued that large-scale redistribution would have limited effect (World Bank, 2015: 80).

As a way of grounding *Homo inscius* in the global South, *Mind, Society, and Behaviour* redefines poverty in terms of ‘bandwidth’. This is the sum of the enfolding personal, environmental and infrastructural resources and mental aids – or lack of them – available to the chronically poor and exposed. While everyone has cognitive biases, personal behaviour is influenced by one’s social milieu. An example is given of a poor indebted farmer who, with the harvest still months away, is being pressed to decide whether to make the long-term investment of sending a child to school. This is happening when there is a hole in the roof, the kerosene has run out and finding clean water is a constant effort. In addition, his neighbour is also expecting reciprocal help with medical bills because the farmer’s family received similar support in the past. For behavioural economics, poverty is an experience grounded in the constant grind of having to make hard choices: educate a child, fix a roof or invest in communal reciprocity? Relentless hard choices ‘in effect tax an individual’s bandwidth, or mental resources. This cognitive tax, in turn, can lead to economic decisions that perpetuate poverty’ (*ibid.*: 81, emphasis added).

As off-grid environments, slums typically lack regular water, electricity, sanitation and other infrastructural services. This absence also increases the cognitive levy. A high mental tax creates poor frames of thought and makes for impaired decision making. For the World Bank, thinking has become a calculative zero-sum game. The more ‘bandwidth’ the poor consume in their daily grind, the less they have for making important decisions. Presumably, the greater the stress and privation, the more mindless *Homo inscius* becomes.<sup>9</sup> It follows that reducing this cognitive tax leaves more bandwidth for better decision making. And better decision making on the part of the poor fortuitously negates the need for ‘a large-scale redistribution of resources’ (*ibid.*: 80).

Compared to the political solidarity that underpinned direct humanitarian action, Lilie Chouliaraki (2013) has argued that today’s post-humanitarianism is grounded on empathy – including the ability of aid workers or the public to understand and emotionally associate with the experiences of the disaster-affected. This post-humanist privileging of the subconscious also changes how poverty and exposure to disaster are perceived. Rather than demanding political change, vulnerability becomes a direct or unmediated experience characteristic of the life-world of the person concerned. Just as important as material aid, if not more so, is fast access to sympathetic value-added information. With design having supplanted politics within the post-humanitarian canon, the discursive field

is bounded by the interplay between the *empathy* of the onlooker or practitioner and the direct *experience* of the affected.<sup>10</sup> The aim is no longer to control or contain disasters – it's more about improving how they are experienced.

## Optimising Reproduction

The arrival of satellite sensing and data informatics enables the constant hard choices made by the precariat to be visualised as behavioural patterns (Meier, 2015). Through the cybernetic feedback loops of adaptive design, behavioural economics seeks to reverse engineer, if you will, the experience of poverty. The aim is to increase the mental bandwidth available to the precariat by optimising behaviour. This includes the timely and iterative delivery of context-specific, value-added information together with the deployment of smart humanitarian objects and technologies that compensate slum-dwellers for the absence of an infrastructural fixed grid.

Behavioural economics is premised upon the constant tailoring and readjustment of information 'to fit the human body and its cognitive abilities' (World Bank, 2015: 2). The feedback process of adaptive design has four distinct stages: first, behaviour must be captured, stored and algorithmically analysed; second, the returned information must be personalised to the individual or group in a way that resonates emotionally; third, this value-added information should illuminate a way forward; and, finally, there must be a clear moment when the individual can, through actions or choices, recalibrate their behaviour. This recalibration is measured, 'and the feedback loop can run once more, every action stimulating new behaviours that inch us closer to our goals' (Geotz, 2011). Resilience, with its emphasis on constant adaptation, sits well with ideas of feedback and design.

Social reproduction can be optimised by changing behaviour relating to household savings, energy consumption, educational priorities, mental and physical productivity and maternal and child health (World Bank, 2015: 2). Taken together, these factors are important for the reproduction of the cheap, territorially immobile, low-level sensorimotor skills (Joshi, 2017) that drive the vast informal economies of the global South. *Mind, Society, and Behaviour* emphasises in several places that cognitive techniques cost relatively little, need not be complex and are already widely practised in the private sector. Rather than requiring radical change to existing aid programming, it is largely a question of 'nuances of design and implementation' (*ibid.*: 3). Taking 'the cognitive taxes of poverty into account' (*ibid.*: 81) might simply involve

changing the timing of cash transfers, altering the labelling on foodstuffs, simplifying processes or service take up, sending out regular reminders, marketing new social norms or 'reducing salience of stigmatised identities' (*ibid.*: 3). The cognitive tax on the precariat could be reduced by shifting the timing of critical decision-making regarding, for example, education, health or employment 'away from periods when cognitive capacity and energy (bandwidth) are predictably low'. At the same time, assistance can be targeted 'to decisions that may require a lot of bandwidth' (*ibid.*: 81). For the Bank, not only is large-scale redistribution unnecessary, improving the experience of precarity also costs little and creates minimal organisational demands.

Another important aspect of cognitive streamlining and experience improvement concerns critical infrastructure. In a gesture of transparency, humanitarian innovation accepts that after sixty years of terrestrial development, a billion or more people still lack access to piped water, stable electricity, proper waste disposal, adequate housing, comprehensive schooling, professional health care and regular financial services. Levelling up or reconstructing a fixed grid, however, hasn't been a serious international objective since the onset of the downturn. The logistical mega-corridors that are being built sidestep the crisis of urban renewal. This aversion has deepened with the growing infrastructural gap, accumulating disrepair and damage caused by natural disasters and wars, the massive urbicidal destruction unleashed in the Middle East and the ongoing dispossession resulting from the expanding mega-corridors themselves.

For the World Bank, the crisis of urban renewal negatively impacts precariat bandwidth. Having to daily exert a great deal of mental energy just to access such basic necessities as food and clean water means the precariat 'are left with less energy for careful deliberation than those, simply by virtue of living in an area with good infrastructure and good institutions' (*ibid.*: 13). Thus, the absence of a universal fixed grid 'like piped water, organised child care, and direct deposit and debit [accounts for] earnings – encumber those living in low income setting with a number of day-to-day decisions that deplete mental resources even further' (*ibid.*: 81). Since the mid 2000s, reflecting the call for an inclusive capitalism, the increasing corporatisation of poverty has been evident (Schwittay, 2011). One register of this has been the rapid growth of commodities, objects and financial products specifically designed for the precariat (Cross and Street, 2009). With behavioural economics providing a cognitive justification, the goal of humanitarian innovation is to normalise the application of private sector business models and smart technology to

chronic poverty and disaster vulnerability (Betts and Bloom, 2014: 5).

Technoscience is developing a series of add-ons to address the crisis of urban renewal. Unlike the levelling-up effects of a universal fixed grid, however, smart technology is different – it levels downwards (Duffield, 2016). It folds into the fabric of society, adapting and adjusting itself to the inequalities encountered, and the differences of speed and bandwidth found. Smart technology adapts itself to the social milieus within which it operates (Zuckerberg, 2014). Throughout the global South, there is an expanding suite of smart humanitarian objects and technologies providing a range of services that support the social reproduction of the precariat by substituting for an absent fixed-grid (Jacobsen, 2015). Together with cash-transfer programmes (Lavinias, 2013), this includes biometric registration and experimentation with block-chain authentication as a means of managing aid and work entitlements (Dodgson and Genc, 2017). Solar power lighting and charging solutions are widely marketed together with portable ceramic water filtration systems (Redfield, 2015). Replacing a need for medically-staffed feeding centres, take-away mother-administered therapeutic foods to tackle malnutrition are now common (Scott-Smith, 2013). Making good the paucity of health and educational services, e-medicine and e-learning smart phone apps are being widely trialled.

While these are only a few of the many objects and services available, a common feature is an emphasis on self-administration, personalisation and portability. Rather than invoke the community solidarity that underpinned earlier forms of participant development, these smart technologies now call forth dependent *communities of users* permanently enrolled in prototyping the technologies that govern them (Duffield, 2018).

## Eliminating Professionals

From the outset, the aim of cybernetics was to exclude human beliefs, motivations and intentions from the development of the human-machine interface (Halpern, 2014). Now a defining feature of late-modernity, this exclusion shaped early computer programming. Politically, it found a reflection in the counter-cultural anticipation of artificial intelligence as a means of undermining the professional hierarchies of modernism. Computers would, it was argued, allow the design capabilities and expertise of professionals to be transferred to the popular masses (Turner, 2006).

In the mid 1970s, the architect Nicholas Negroponte<sup>11</sup> sought to eliminate professional privilege by facilitating public participation and ownership of the architectural design process through computer programming. The

intention was to create ‘soft architectural machines’ that could translate human imperfections, anxieties and emotions into the rich architectural designs of a ‘new “redesigned” design process’ (Negroponte, 2003: 359). Defining Negroponte’s approach to programming was a constructivist conception of learning by doing – the analogy being how a child is said to learn. Not so much through formal teaching ‘but by interacting with the world, by having certain results as a consequence of being able to ask for something, or being able to stand up and reach it’ (Negroponte, 2006: 1-53) – that is, through endless feedback loops of iterative environmental interaction involving an automatic and continuous process of reaching out, discovery and recalibration. Such constructivist assumptions regarding human learning have long operated as place-holders for the arrival of machine-thinking.<sup>12</sup>

Running parallel with early computer programming, by the 1980s constructivism was also appearing in the form of progressive pro-poor international development. Michael Edwards (1987), for example, in his celebrated piece, *The Irrelevance of Development Studies*, rehearses the late-modern antagonism towards professional knowledge using the post-humanist premise that the ‘real world’ is defined by its empirical diversity and complexity. And hence, echoing Hayekian neoliberalism, largely beyond human comprehension. Development problems are specific to a given time and place. Indigenous livelihood and coping systems have evolved over centuries through discrete, complex interactions between people and their ‘hostile environmental conditions’ (Edwards, 1987: 120). Rather than trying to transfer knowledge through explanation, demonstration and reason, like Negroponte’s child, authentic learning is the organic product of trial and error on the part of local communities. Development professionals short-circuit this natural process and prevent people from thinking and acting for themselves. Anticipating the attention-deficit *Homo inscius*, the role of progressive NGO-led participatory development was to sensitively guide and empathetically allow for the constraints, imperfections, anxieties, fears and emotions shaping the actions ‘of real, living people’ (*ibid.*: 121). Putting the last first, as it were, so they can reinvent their own more authentic wheel.

Behavioural economics radically extends progressive neoliberalism’s antipathy towards professional hierarchies from individual comportment to institutions themselves. Not only are aid managers subject to cognitive bias and mindset limitations, the ability of organisations to reform or improve is also now questioned. In separating itself from the failures of the past, humanitarian innovation problematises the concerted attempts since the 1990s to professionalise the aid system, especially the numerous moves to standardise

humanitarian engagement through behavioural codes, ground rules, technical guidelines and performance benchmarking (Fiori *et al.*, 2016).

Reflecting late-capitalism's disdain for independent standards and autonomous expertise, side-lining humanitarian professionalism can be seen as a necessary condition for the increasing involvement of the private sector (Meier, 2012). While aid managers may have more bandwidth than the precariat, for the World Bank (2015) their thinking is equally constrained by established subconscious reflexes, mental models and heuristic devices. Such 'deeply ingrained mindsets' (*ibid.*: 180) constrain decision making in many ways. Besides the confirmation bias of favouring evidence that supports one's views, they can also limit the ability to empathise with the experience of the precariat. Importantly, when faced with change and complexity, the 'automatic' mind reverts to rules, standardisation and guidelines (*ibid.*: 180–2). Given the unthinking recourse to such limiting heuristics among aid professionals, it is particularly important for organisations to have mechanisms in place 'to check and correct for their biases and blind spots' (*ibid.*: 183). Based upon the creation of iterative feedback loops interconnecting aid managers and the disaster-affected, adaptive design provides such a mechanism.

For the World Bank, adaptive design involves front-loading problem diagnosis, building in constant prototyping, tolerating failure and changing institutional incentives to counter professional mental models and rule-based thinking (*ibid.*: 192–3). The aim of adaptive design is to correct the cognitive biases of aid managers while, through increasing bandwidth, encouraging the agency, auto-projectising and self-acting capacities of the precariat. Important here is strengthening the *empathy* of managers while improving the users' *experience* of the system. The Humanitarian Policy Group's (HPG, 2018), *A Design Experiment: Imagining Alternative Humanitarian Action*, is a comprehensive attempt to envision such an exercise.

## Liquefying Resistance

From an adaptive design perspective, rather than top-down one-size-fits-all interventions, humanitarian agencies should constantly change organisational form according to the nature of the emergency involved. This requires situating the design process within the lived experience of all key actors. Apart from those directly affected by the disaster, this includes the practitioners working within the system as well as those actors ancillary to it (*ibid.*: 48). The aim is to identify the key 'touch points' that offer the least resistance to reform. To illustrate the ideal process, HPG has constructed a

number of behavioural profiles which it calls 'personas'. They are 'fictitious characters who bring to life the needs, goals, values, drivers and behaviours of larger groups of people' (*ibid.*: 49). As with the humanitarian objects mentioned above, rather than potentially autonomous self-acting communities, these profiles suggest a recasting of the disaster-affected as so many surveilled communities of bandwidth-users permanently enrolled in prototyping the means of their governance.

Possible aid manager mindset profiles include, for example, the 'cautious investigator', the 'defender of turf', the 'critical thinker', the 'proceduralist', the 'constrained leader' and the 'risk taker'. Among the disaster-affected one encounters the 'change agent', the 'embracer', the 'over-burdened', the 'reluctant', the 'self-reliant', the 'system-reliant' and the 'under-served' (*ibid.*: 52–3). Each of these profiles is given his/her appropriate aspirations, frustrations, and changes they would like to see. *A Design Experiment* also includes the creation of post-humanist user 'experience maps' covering a dozen different emergency situations. Each one gives an example of how such behavioural profiles could interact, while highlighting what is enabling or disabling, or spoiling the user experience of the humanitarian system. Such profiles and maps are argued to be useful as they allow 'us to walk in users shoes by traveling [sic] with them as they interact with a service/organisation/system' (*ibid.*: 61). These experience maps not only show a person's touch points with the system, but 'also their thoughts and feelings about that experience' (*ibid.*). Through incentives, actor alignment and sequencing, key touch points can be reimagined as design sites for leveraging institutional adaptation and improving user experience.

Like the World Bank, HPG maintains that implementing such a programme does not require major change to what already happens – it does not need 'whole system, top-down re-design' (*ibid.*: 61). If the aim is for organisations to flexibly adapt to the changing requirements of permanent emergency, such a top-down re-design would, in any case, be a contradiction in terms. Instead, within *A Design Experiment*, we can see something different. Building on progressive neoliberalism's questioning of professional hierarchies, organisational boundaries are also now dissolving and liquefying (Bauman, 2000). Touch points, which vary according to the nature of the emergency, the mindsets of managers and social milieu impacted, are transitory portals that allow a penetration and reaching across organisational boundaries. They enable managers to improve their empathy while increasing the disaster-affected's positive experience of the aid system.

This interaction of behavioural profiles raises the question – if this design experiment is to succeed, what

type of manager or recipient behaviour is ideally preferred or allowed? An examination of HPG's actor profiles reveals an excess of positivity. While many exhibit difficulties, constraints and fears, none present a fundamental or systemic challenge. There is an assumption that, in opening to divergent cross-boundary interactions, success is possible because reasonable people recognise some shared responsibility in making aid better. While HPG's profiles display various potentials, limitations and conflicts, ultimately everyone involved – aid workers, donors and the disaster-affected – share the same humanitarian goal of better 'access to basic services, safety, and opportunity, with the capacity to absorb shocks, and the agency to shape her/his future' (HPG, 2018: 90). In other words, *A Design Experiment* is thinkable because, in the last analysis, all actors think the same.

Paraphrasing Bruno Latour (2008), the profiles that animate *A Design Experiment* tend to privilege compliant feminised design sentiments such as attachment, precaution, entanglement, dependence and care. Absent are troublesome masculine tropes like emancipation, detachment, modernization, progress and mastery. From the start of the experiment, the negativity and recalcitrance that defines the real world is excluded. Within HPG's 'experience maps' you will find no angry Arab refugees tearing down the razor-wire keeping them out of Europe. History's awkward customers are absent – no stone-throwing Palestinians, no Hutu refugees, no Darfuri nomads. You will look in vain for the ground friction and anger shaping our present predicament (Mishra, 2017). And without the negative, critique is impossible.

Humanitarian innovation reflects progressive neoliberalism's recoil from the negative. Determined to disavow the alterity of the Other for the security of the Same, 'our society of positivity is steering clear of everything that offers resistance' (Han, 2013: 33). Helped by the erosion of professional hierarchies, organisational responsibilities and independent autonomy, under the conditions of late-capitalism the power to resist is, itself, disappearing – that is, the negative potency of being able to say no, to remain unknown, uncounted and forgotten. It is the power to interrupt, to slow the flow, and create spaces where things can be stopped and discussed (Rouvroy, 2012). To gain entry to the mega-corridors of spiralling feedback loops optimistically failing-forward to an uncertain future, humanitarian innovation demands compliance, behavioural malleability and, not least, necessary ignorance. Unfortunately for post-humanitarianism, however, it has little to offer in return – other, that is, than timely value-added information such that the precariat can positively enjoy the experience of its own abjection.

## Notes

- 1 While important, current concerns over data privacy and the power of Silicon Valley are secondary to these paradigmatic changes. Things like privacy can be addressed. Changes in the way the world is understood, experienced and interrogated represent a greater political and existential challenge.
- 2 For an excellent periodisation, see Brown (2018).
- 3 The terms global North and South are used here figuratively. Loosely associated with modernist distinctions between developed and underdeveloped countries, they no longer imply any fixed geographical or social homogeneity. Their use, however, serves to retain the sense of historic, political and economic divisions that continue to produce global power and distribute life-chances unequally.
- 4 Crawford Holling's often quoted article on ecological resilience is a critique of equilibrium theory based upon research on predator/prey relations in the wild (Holling, 1973).
- 5 In 2010, for example, the UK government established a Behavioural Insights Team (also known as the Nudge Unit). Since 2014, it has existed as a 'social purpose company' that is partly owned by the Cabinet Office, its employees and the data-innovation charity Nesta. See, <http://www.behaviouralinsights.co.uk/>
- 6 Except for limited pattern recognition, for Hayekian neoliberalism humans are held to be incapable of understanding society due to its alleged complexity. Fortunately, however, the market compensates for human ignorance. The price mechanism functions like a computer and is able to achieve optimal resource allocation through its powers of spontaneous self-organisation.
- 7 A policy-exchange network managed by the Center for International Development at Harvard University. See: <https://bsc.cid.harvard.edu/doing-development-differently>.
- 8 An international research initiative run by the Development Learning Programme based at the University of Birmingham. See: [www.dlprog.org/research/thinking-and-working-politically-community-of-practice.php](http://www.dlprog.org/research/thinking-and-working-politically-community-of-practice.php).
- 9 By the same token, elites must have super-brains.
- 10 Since the mid 2000s, there has been a growing number of computer games and software programmes that claim to allow interested parties to experience what it is like to be a refugee or subject to a disaster. The Darfur content on Google Layers, for example, was an early attempt to encourage emotional understanding. Computer games produced in collaboration with humanitarian agencies go further. They allow a player to 'become' a refugee. A player would, for example, have to navigate the difficulties of fleeing a country, moving through dangerous border regions and starting a new life in austere and unfriendly exile. The game *Against all Odds*, produced by UNHCR in collaboration with Microsoft and several

media companies, is described as letting you ‘experience what it’s like to be a refugee’ (UNHCR, 2005). The UN Regional Information Centre for Western Europe (UNRIC) together with the mtvU student media group at the University of Southern California, has produced *Darfur is Dying*. This simulation allows players to negotiate the ‘forces that threaten the survival of his or her refugee camp. It offers a faint glimpse of what it’s like for the more than 2.5 million who have been internally displaced by the crisis in Sudan’ (HRE, 2009).

- 11 Then head of MIT’s Architecture Machine Group that would become the Media Lab in 1985.
- 12 It is often said that children are more adept than adults at intuiting how computers work. This is because they have been designed to make them child’s play, so to speak.

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