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Habit and the Politics of Social Change: A comparison of nudge theory and pragmatist philosophy

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Abstract

Rethinking the political workings of habit and habituation, this paper suggests, is vital to understanding the logics and possibilities of social change today. Any endeavour to explore habit's affirmative potential, however, must confront its legacies as a colonialist, imperialist and capitalist technology. As a means to explore what it is that differentiates contemporary neoliberal modes of governing through habit from more critical approaches, this article compares contemporary 'nudge' theory and policy, as espoused by the behavioural economist Richard Thaler and the legal scholar Cass Sunstein, with the pragmatist philosophies of habit offered by John Dewey, William James and Shannon Sullivan. While nudge advocates focus on how policymakers and corporate leaders can intervene in the 'choice architectures' that surround us to outsmart or bypass problematic human tendencies, I argue, pragmatist philosophers appreciate the necessity of collective efforts to develop new and flexible forms of habituation in order to engender more enduring and democratic forms of social transformation.

Keywords

Habit; John Dewey; neoliberalism; nudge theory and policy; social change; speculative pragmatism

In their bestselling book *Nudge*: *Improving Decisions About Health, Wealth and Happiness* (2008), economist Richard Thaler and legal scholar Cass Sunstein argue that simple 'nudge' techniques can help us break bad habits and make a range of choices in our own best interests.ⁱ Mobilising insights from behavioural economics, they suggest that by implementing minor alterations to everyday architectures and infrastructures, governments

and private institutions can steer people towards making better decisions with the potential to fundamentally 'improve their lives' (2008: 5). Nudge-style forms of governance have been employed most commonly in North America and Western Europe to address lifestyle issues linked to diet, exercise and smoking, financial practices related to saving and investment and 'anti-social' behaviour such as loitering and speeding. Thaler and Sunstein argue, however, along with other nudge advocates, that behavioural techniques have the potential to positively transform a wider range of societal problems, from racism, to suicide, to climate change (see also Halpern, 2015). What is significant about nudge theory's approach to individual and social change, I want to suggest, is that it eschews direct intervention or legislation in favour of more subtle tweaks to the environments that shape unconscious, automated or habitual behaviour.

Nudge opens, for example, with the story of Carolyn, who runs a school cafeteria and has learnt that if she displays healthier food options such as fruit, vegetables and salads in more prominent and easier to reach locations, students will be up to four times more likely to select them over less healthy options. In doing so, Thaler and Sunstein contend, Carolyn has the opportunity to act as a 'choice architect', nudging students towards healthier lifestyle choices, which may make ameliorative contributions to much bigger issues, from childhood obesity to adult heart health. Importantly, the authors argue, these kinds of indirect prompts are much more effective in getting people to modify their habitual behaviour than are more heavy-handed approaches, from direct marketing to legal regulation. Moreover, unlike rules and laws, nudging techniques fundamentally preserve people's freedom and choice. Thus, while Thaler and Sunstein acknowledge that their approach is paternalistic in claiming that it is 'legitimate for choice architects to try to influence people's behavior in order to make their lives longer, healthier and better', it is also, they argue, libertarian: people are not required to comply with nudges; rather, they remain 'free to choose' (2008: 5)."

Nudge theory's brand of 'libertarian paternalism' was catapulted into the mainstream of American public policy with the election of Barack Obama, a former colleague of Sunstein's at the University of Chicago Law School, who appointed him as head of the White House Office of Information and Regularity Affairs. The Obama administration employed nudge

approaches in an array of areas 'from healthcare and financial reform, to healthy eating and energy efficiency' (Thaler, 2015: x) and behavioural thinking became embedded in the affordable care act, financial law reform, climate change policy, and consumer protection policy (Halpern, 2015). In the UK, nudging techniques and policies came to the fore with the conservative-led coalition government's establishment in 2010 of the Behavioural Insights Team, widely thereafter referred to as 'the nudge unit'. As David Halpern, the Cambridge University psychologist appointed to lead the team, notes in his book *Inside the Nudge Unit* (2015), nudge approaches were particularly attractive to the UK government as part of their austerity agenda following the 2008 economic crisis because such interventions required few economic resources but could have 'big pay-offs' in the form of behavioural transformation.ⁱⁱⁱ

Following in the footsteps of their American colleagues, one of the nudge unit's first and most successful policy interventions was in the area of pensions reform. While UK employers had previously, by law, required employees to *opt-in* to available pension programmes, the unit's new policy required employers to automatically enrol workers into the program, while enabling them *opt-out* if they so wished. By changing the default options in this way, Halpern argues, the pension reforms mobilised the behavioural principle of inertia (that people have a 'strong tendency to go along with the status quo or default option') to nudge people into 'more prudent' retirement savings habits without ever removing their freedom of choice (Thaler and Sunstein, 2008: 8). Other experiments conducted by the unit showed that 'simple' behavioural interventions could 'reduce carbon emissions, increase organ donation, increase the quit rate of smoking, reduce missed medical appointments, help students finish their courses, reduce discrimination and boost recruitment' (Halpern, 2015: 9). Behavioural thinking now 'permeates almost every area of government policy' in Britain and nudge-style policy-making expertise is 'in demand across the world' (Rutter, 2015). iv

Despite their global impact, however, nudge theory and policy are not without their significant detractors. Unsurprisingly, the paternalistic aspects of such behavioural techniques have garnered particular criticism. In the UK, for example, behavioural policies tend to 'psycho-demographically segment certain portions of the population as being in

most need of behavioural intervention' (Jones et al, 2012: 51) and nudge techniques have been interpreted by some as yet another avenue for elites to police working class lifestyles and pleasures (Burgess, 2012). More generally, the behaviour change agenda has been described as 'marred by a tendency to disempower, as it subconsciously prompts people to act in certain ways' – a process with potential long-term consequences, as opportunities for 'social learning' are elided (Jones et al, 2012: 52). Critics also address the problematic relationship between behavioural economics and neoliberal capitalism, highlighting the ways in which many nudge-style policies draw heavily on corporate techniques and are largely 'market-corrective' in orientation (2012: 47). From this perspective, the deployment of nudge practices to effect change at the level habitual behaviour is not neutral; rather, it reflects particular ideological commitments linked to patterns of socio-economic injustice and inequality.

For these reasons, I want to suggest, it is important to situate nudge within much longer histories of governing through habit – histories which reveal the capacity for habit to be employed an exclusionary technology of social and geo-political regulation. As Tony Bennett et al argue, in determining whether populations were capable of self-governance, nineteenth century political, medical and scientific authorities routinely discounted groups deemed lacking in the capacity for will 'due to the excessive sway of habit' (2013: 6). Colonised populations and the domestic poor were key targets for such logic, as were, of course, women, across various locations and socio-economic classes. And yet, for those positioned as 'slaves to habit', such authorities nonetheless prescribed 'a reinforcement of the disciplinary rigors of habit as the only effective means of guiding conduct' (6). In a similar vein, Lisa Blackman (2013) explores how pervasive liberal strategies of governmentality in the twentieth century intertwined imperialism, eugenics and the psychological sciences through a focus on discipline and habit modification. For over two centuries, then, governing through habit has functioned as a double-sided disciplinary technique: purported 'bad' habits, or a more general tendency towards 'mindless repetition', were employed to deprive whole populations of basic rights and freedoms, yet the inculcation of new rhythms and habits was simultaneously deemed essential to the improvement of their behaviour and governability.vi

While Thaler and Sunstein recognise that the scope for government or corporate abuse of nudge-style behavioural techniques is, in principle, significant, they nonetheless claim that 'not nudging' is a 'non-starter' because 'there is no such thing as neutral design' (2008: 3). Whether they intend to or not, governments and private institutions are always creating particular choice architectures, and thus, citizens, tax-payers, employees, consumers, drivers, smokers, potential organ donors etc. are continually being nudged in one way or another. Thus, the imperative, they insist, is not to refrain from nudging but rather to compel those in positions of power to 'Nudge for the good' (Thaler, 2015: 8). Of course, this request presumes that we can know in advance the difference between 'good' and 'bad' behavioural interventions and outcomes - a point I return to later on.

Nudge theory, and its parent discipline of behavioural economics, however, is not the only framework available for thinking through the links among habit, politics and social transformation. Rich legacies of theorising habit and habituation exist at the intersections of philosophy and psychology (among other fields) – which are increasingly being engaged by contemporary scholars to understand the changing dynamics of socio-political and material life.vii Although philosophical inquiry in the tradition of Descartes and Kant had figured habituation as a stultifying force that thwarted creativity and progress, the late nineteenth and early twentieth pragmatist philosophers John Dewey and William James viewed habit as essential to our everyday conduct as well as wider biological, social and environmental processes of transformation. Rather than assuming that breaking pernicious habits is what drives social change, the pragmatists focused on how existing tendencies and modes of habituation could be opened up to alternative material forms and possibilities. In his book, Habit ([1914]2014), for example, James, who was trained as a medical doctor and psychologist, suggested that, in embodying the 'plasticity' of living organisms and social systems, habits hold the key to material transformation. While the automatic force of habit can compel us to repeat previous modes of action again and again, it is nonetheless only through embodied processes of habituation that new tendencies may be created which are deeply rooted and robust enough to endure. Similarly, for Dewey, who, of all the philosophers of habit was most interested in the links between habituation, democracy and social justice, 'habit-forming' is conceived most fruitfully as 'an expansion of power not its shrinkage' ([1922]2012: 41).viii From this perspective, it is through the *creation of habits*,

not their cessation, that more progressive and enduring forms of social transformation might be achieved.

Central to pragmatist philosophy is the idea that habits are formed and re-formed through the ongoing interactions of bodies and 'the environment, natural and social' (Dewey [1922]2012: 9). Habits, from this perspective, are not simply individual capacities or modes of behaviour but rather the product of evolving transactions between organisms and the milieus they inhabit. It follows that approaches to transformation that target the individual subject in isolation, or appeal exclusively to cognitive reason, are not likely to be effective. To illustrate this point, Dewey employs the example of the ineffectiveness of repeatedly telling someone with a problem with his posture to 'stand up straight'. As he stresses, 'A man who does not stand properly forms a habit of standing improperly, a positive, forceful habit [...] conditions have been formed for producing a bad result, and the bad result will occur as long as those conditions exist' ([1922]2012: 15). What is required is an approach that accounts for the imbricated embodied and environmental factors that work to support and perpetuate existing patterns of behaviour – in this case, anything from a sedentary lifestyle, to occupational demands, to a poor ergonomic work set-up. Extending classical pragmatist theories of habit, the feminist and critical race scholar Shannon Sullivan offers a different kind of example: It has often been assumed, she suggests, that providing data regarding the lack of scientific basis for the category of 'race' or raising consciousness regarding the destructive implications of racism will contribute to the end of racial discrimination. Yet, in targeting conscious rationality, such strategies do not address the unconscious psychic and embodied habits underlying white privilege – habits which may actively resist efforts to unveil them. Rather than confronting such habits directly, Sullivan argues, we may more productively focus on transforming the 'political, social, physical, economic, psychological, aesthetic and other environments that "feed" them' (2006: 9). Thus, like adherents of nudge theory and policy, pragmatist philosophers advocate an approach to personal and social change that operates at the level of automated or habitual behaviour and favours environmentally-oriented interventions.

Despite their similarities, however, there are significant differences between nudge theory and pragmatist philosophy which point to their contrasting political and ethical sensibilities

and potentialities. Taking this comparison as its focus, this article employs pragmatist scholarship, and particularly Dewey's work, to expose nudge theory's thin understanding of habituation and its consequently limited approach to addressing the links among habit, political governance and social transformation. There are, it must be acknowledged, challenges involved in comparing existing policies and practices with a set of historical philosophical principles – particularly given that Dewey and James provide relatively few sustained empirical examples. My focus throughout, however, is on tracing the ontological and epistemological principles underlying both nudge theory and pragmatist accounts of habit and their potential socio-political implications. As necessary background, the first part of the article offers a partial genealogy of the emergence of behavioural psychology and pragmatist philosophy at the turn of the century, paying particular attention to their differing views of human nature and habituation. I then track the birth of nudge theory, and the wider behavioural change policy agenda, as a product of more recent engagements among behavioural and cognitive psychology and neoliberal economics. Drawing on these histories, the second part of the article compares nudge theory and pragmatist philosophy across four key themes, highlighting the psycho-social processes through which habits are formed; the spatialities and temporalities of habituation; the neoliberal sensibilities of behaviour modification; and the differences between predictive and speculative pragmatism.

I argue that while nudge advocates focus on how policy-makers and corporate leaders can intervene in the 'choice architectures' that surround us to outsmart or bypass problematic human tendencies, pragmatist philosophers of habit appreciate the necessity of collective efforts to develop new and flexible forms of habituation in order to engender more enduring and democratic forms of social change. Furthermore, whereas nudge theory claims that complex social problems can be addressed through harnessing expert knowledge of pattered psychological and economic behaviour, pragmatists highlight the difficulties and pitfalls of assuming that we can know in advance the nature of progressive social or ethical conduct. What this comparison illustrates most potently, I will contend, is that, although habit formation is central to social change, meaningful and inclusive forms of transformation are not likely to be engendered through overly calculative, instrumentalist and individualist techniques of habit management and modification.

Nudge theory and habit philosophies

On the surface, nudge theory and pragmatist analyses of habit have much in common. To start, both proponents of nudge (like Thaler, Sunstein and Halpern) and pragmatist philosophers (like Dewey, James and Sullivan) suggest that personal and social change is often best approached through a focus on habitual processes. Granted, 'habit' is not the primary term employed within the nudge literature, which refers mainly to 'behaviour' and addresses a range of psychological processes (such as 'framing' and 'priming') that cannot necessarily be encapsulated by the language of habit or habit modification. Nonetheless, much of the behaviour that nudge advocates aim to understand and redirect, from 'unhealthy' eating patterns to a tendency to select the 'default option' across various administrative contexts, could be considered habitual – that is, as Dewey puts it, behaviour premised on 'an acquired predisposition to ways and modes of response' which is ready to spring into action when the appropriate cue is given ([1922]2012: 19). Moreover, nudge theorists sometimes use the terms 'habit' and 'behaviour' interchangeably, particularly with respect to recurring forms of activity: For Halpern, for instance, 'habits' can be understood as 'repeated behavioural patterns and associations' that become 'entrenched' (2015: 130). ix

Significantly, like the pragmatist thinkers, nudge advocates underscore that creating more knowledge or conscious awareness of problematic behaviour, or directly prohibiting it, is often not sufficient, and indeed may be counterproductive, to the production of enduring change. As Dewey underscores with respect to his example of bad posture, telling someone to 'stand up straight' not only ignores the underlying psychic and material conditions that maintain a particular habit of standing, it also unhelpfully focuses attention on 'the bad result' instead of a potentially generative change in the making. Rather than catalysing transformation, repeated acts of highlighting 'the bad' often work precisely to reproduce its force (Dewey, [1922]2012: 15). Similarly, *Inside the Nudge Unit* emphasises 'the big mistake' made by many policy makers and marketers alike, as articulated by one of nudge's most prominent expert advisors, the American social marketing professor Robert Cialdini: 'emphasizing what people *shouldn't do*, instead of what they *should'* (original italics, Thaler,

2015: 34-5.). As Halpern notes, 'while laws and punishments have often proved reasonably effective at getting people to *stop* doing something, they are often much less effective at getting people to *start* doing something, and certainly to persist with it' (2015: 21, original italics). Like Dewey, Sullivan and others, nudge scholars argue that changing entrenched behaviour is approached most effectively through less direct, and sometimes less-than conscious, strategies that work through modes other than reasoning or proscription. As Halpern puts it, 'A nudge is essentially a means of encouraging or guiding behaviour but without mandating or instructing, and ideally, without the need for heavy financial incentives or sanctions' (2015:22).

Relatedly, in making sense of the workings of individual and social change, both nudge theorists and philosophers of habit focus on the connections between embodied beings and their environments. Given the unconscious nature of most forms of habituation, and the ways in which habits are constituted in and through external conditions and infrastructures, both camps argue that emphasis may be best placed on techniques that address 'the environments that "feed" habits' (Sullivan, 2006: 9). As Dewey contends,

We may desire abolition of war, industrial justice, greater equality of opportunity for all. But no amount of preaching good will or the golden rule of cultivation of sentiments of love and equity will accomplish the results. There must be a change in objective arrangements and institutions. We must work on the environment and nor merely on the hearts of men ([1922]2012: 13).

Similarly, nudge advocates argue that behavioural change is most effectively catalysed not through passionate appeals to 'hearts and minds' but rather via more subtle modifications to the choice architectures that surround us (Thaler and Sunstein, 2008) – from the use of speed-bumps to control dangerous driving to the adjustment of access to prescription drugs to reduce suicide rates (Halpern, 2015). Indeed, while nudge theory emerges from behavioural economics' fusing of psychology and economic theory, it also employs insights from the field of cognitive design - which examines how everyday devices like thermostats or computer interfaces 'contribute to a kind of environmental limitation on human

rationality' (Jones et al, 2012: 14-15). From this perspective, transforming behaviour requires addressing 'the irrational push of the world around us' (2012: 16).

Read together, these literatures make a powerful statement about the enduring relevance of habits and habituation to individual-collective change, as well as the importance of theorising social transformation from a perspective that addresses human-environment interactions and appreciates the significance of psychic, embodied and other less-than conscious forces. Yet, as I have indicated, there are important differences between nudge and pragmatist philosophy with critical implications for how we understand the wider links between habit, politics and transformation. In order to make sense of these disparities and their political and ethical significance it is necessary to trace some of the earlier scholarly initiatives and debates out of which they emerged.

Re-making habit: behaviourism and pragmatism

Philosophical analysis of habit dates back at least as far as the work of Aristotle, who employed the concept to 'explain the persistence of actions that are sometimes active, sometimes dormant' (Sparrow and Hutchinson, 2013: 3). Significant developments in theorising habit and habituation, however, occurred in the late nineteenth and early twentieth centuries, as psychology sought to separate from philosophy and form itself as a discrete discipline. By the 1890s, the 'new psychology' influenced by the experimental methods of Wilhelm Wundt in Germany had begun to carve out distinct disciplinary space by aligning itself with the ascendant concepts and techniques of Darwinian biology. Within experimental psychology, habit was redefined as 'an essentially biophysiological phenomenon' and accorded a central role in explaining human behaviour (Camic, 1986: 1067). This view of habit as mechanistic reflex was consolidated within early twentieth century American psychology with the rise of John Watson's behaviourist movement, which was later popularised by B.F. Skinner.

Like the experimental and behavioural psychologists, the pragmatists had been greatly influenced by Charles Darwin's *On the Origin of Species* (1859) and associated developments

in evolutionary theory and the biological sciences. James, for instance, once described habits as 'nothing but the concatenated discharges of the nerve-centres, due to the presence there of systems of reflex paths, organized as to wake each other up successfully' ([1914]1922: 43). More generally, in their empirical interest in how habitual behaviour emerged through interactions between organisms and environments, the pragmatists and the behaviourists covered similar ground: In fact, Dewey was one of Watson's doctoral thesis advisors at the University of Chicago. Nonetheless, pragmatism and behaviourism are underpinned by distinct views of human nature and subjectivity with salient implications for my comparison of nudge theory and philosophies of habit. On the whole, if the behaviourists offered a mechanistic, atomistic and scientistic view of human activity, the pragmatists advocated a more relational, processual and socially attuned account, which resonated with both William McDougall's social psychology^{xi} and Alfred North Whitehead's 'process' philosophy.

Widely interpreted as behaviourism's founding document, Watson's essay 'Psychology as the Behaviorist Views It' (1913) argued that psychology had failed to become an objective natural science because it remained caught up in speculative questions about consciousness that could not be tested and verified by experimental means. Watson accordingly proposed a fundamental shift away from the study of consciousness through introspective methods and towards analysis of empirically-observable behaviour. In doing so, he was strongly influenced by the rise of animal psychology, namely the Russian psychologist Ivan Pavlov's famous study of conditioning in dogs, which was first translated into English in 1909 (Camic 1986). Within Watson's framework, habits were formed via organisms' ongoing adjustments to their environments, in which certain stimuli produced particular responses. Whether in rats, dogs, or children, responses that elicited productive environmental adaptations were likely to be repeated, gradually congealing into habitual modes of behaviour, whereas those that were inadequate or dangerous were likely to be avoided in the future. Crucially, the aim of behaviourism was not to understand and explain states of consciousness but rather to determine methods by which behaviour could be predicted and controlled. As I will discuss further later on, behavioural psychology was an important forerunner for the development of behavioural economics, out of which nudge theory and policy emerged.

Seventeen years before Watson published his behavioural manifesto, Dewey had already articulated key analytical shortcomings in the emergent stimulus-response psychology. In his influential essay, 'The Reflex Arc Concept in Psychology' (1896), he argued that while behaviourists understand 'stimulus' and 'response' as discrete and temporally sequential, this is possible only through artificially extracting seemingly *linear* stimulus-response reactions from the more complex circuits of 'sensori-motor coordination'. In other words, sensations, thoughts and acts cannot be as rigidly distinguished as behaviourists assume and how 'stimulus' and 'response' are defined depends on the position from which one views a given empirical situation. In a 1913 paper at the joint session of the American Philosophical and American Psychological Associations, Dewey offered further criticism of behaviourism, citing, in particular, its tendency to 'ignore the social qualities of behavior' (Dewey, 1913 cited in Manicas, 2002: 282). In analysing how habits emerge through ongoing interactions between organisms and their environments, then, the pragmatists drew on a much more expansive understanding 'environment' than did the behaviourists - addressing the 'whole biosociocultural context of this or that experience, where experience is taken in its widest, deepest sense' (Fesmire, 2015: 51). As such, Dewey sees a habit as much more than the physiological product of repeated reactions to physical stimuli – indeed, from his perspective, 'habits are arts' ([1922]2012: 10): they are at once socio-cultural and biophysical and require particular forms of intuition and ingenuity.

The above points underscore the important distinction within behaviourist and pragmatist literatures between 'behaviour' and 'conduct'. Both terms refer to activity enabled by habit yet, in contrast to Watson's account of behaviour as rooted in physiological reflex, Dewey's concept of conduct encapsulates the ways in which human action imbricates the biological, physiological, psychic, social and cultural all the way down. These divergent views of human activity open out to distinct understandings of individual and collective change. Extending Watson's behaviourism, Skinner ([1938]1966] argued that learned maladaptive behaviour could be transformed via conditioning techniques premised on positive or negative reinforcement: for example, a child with a debilitating fear of going to school might be conditioned to associate education with more pleasant sensations and rewards. Change, from this perspective, results from directive techniques in which trained practitioners (or

other authority figures) intervene to redirect particular stimulus-response relationships. Whereas, from a pragmatist standpoint, transformation is an ongoing process that depends not only on efforts to alter aspects of the environments in which habits are formed, but also on 'intelligent invention' on the part of subjects and collectives ([1922]2012: 15). For instance, Dewey argues that if we want to cultivate 'democratic intelligence' among citizens we need to transform educational environments, yet these interventions should be designed precisely to enable students to develop the experimental sensibility necessary to engage in 'intelligently-controlled habit' – that is, 'inquiry to discover the means which will produce a desired result' and 'invention to procure the means' (16).

That being said, for pragmatist philosophers the fact that habits are continually formed via interactions between organisms and environments means that change via habit is a process we can never master. Constituted ourselves as 'bundles of habits' (James, [1914]2004: 1), we are always already part of the shifting relations in which we seek to intervene and, as such, 'there is no ready-made self behind activities' (Dewey, [1922]2012: 13). Moreover, singular actions can have unexpected ripple effects throughout relational networks and consequently prediction of human-environmental interactions is a tenuous exercise. Empirical observation and experimentation thus requires remaining alert to the changing dimensions of a situation as it unfolds temporally and spatially, rather than assuming that fixed trajectories can be known in advance. Fundamentally, then, if we wish to approach social change at the level of habit, Dewey argues, our efforts can only be *speculative* of present tendencies, rather than *predictive* of future outcomes.

Nudge theory and the rise of behavioural economics

Moving to the contemporary realm, nudge advocates employ a discourse of 'behaviour' informed by Watson's legacy, which means that they are much less concerned with the role of wider socio-cultural and political structures and relations in shaping human activity than are pragmatist accounts of 'conduct'. Yet nudge approaches also draw from more recent developments in cognitive psychology which, following the 'cognitive revolution' of the 1950s, returned psychologists to the concept of 'the mind' that behaviourists so vehemently

eschewed (Sent, 2004). Consequently, nudge theory's account of human behaviour is not limited to empirically observable stimulus-response reactions; it also incorporates analysis of higher mental processes such as attention, memory, perception, reasoning and decision making. The other key field informing nudge approaches is, of course, economics and, as I will discuss, it is the melding of psychology and neo-classically inspired economic theory that lends contemporary behaviour change policies and practices their distinctly neoliberal flavour.

In Changing Behaviours: On the Rise of the Psychological State (2012), Rhys Jones, Jessica Pykett and Mark Whitehall link the birth of behavioural economics with the publication in 1945 of the American psychologist and economist Herbert Simon's book Administrative Behavior. In this influential account of decision making within organisations, Simon argued that there were 'practical limits to human rationality', but that these limits were not fixed; rather they 'depended on the organizational environment in which individuals' decisions take place' (Simon, 1945: 240-1 cited in Jones et al 2012: 4). Leading to the founding of the Carnegie School for the study of organisational behaviour in Pittsburgh, Simon's analysis of 'bounded rationality' offered a clear critique of mainstream economics' model of rational action, as codified in the figure of 'Homo economicus'. Its potential to engender a radical re-thinking of human subjectivity within economic theory, however, was never born out as it was the Chicago School, and its neoclassical economic agenda led by Friedrich Hayek and Milton Friedman (who would later become known as the intellectual architects of neoliberalism), that would arise as dominant in the US and internationally (Sent, 2004; Jones et al, 2012). Nonetheless, the Carnegie School's legacy was laying the groundwork for ongoing scholarly collaboration between psychology and economics.

By the 1970s, a new wave of behavioural economics had emerged. It was associated most closely with the work of the Israeli-born scholars Amos Tversky and Daniel Kahneman, who drew on cognitive psychology and economic design making to illustrate 'how human decisions may systematically depart from those predicted by standard economic theory' (Sent, 2004: 736). Habitual errors occur in human decision making, they argued, because of the 'heuristics' or shortcuts we regularly rely on to make sense of complex and uncertain situations (Tversky and Kahneman, 1974). Although indebted to Simon's pioneering work,

Tversky and Kahneman did not bring to fruition his earlier efforts to fundamentally reconceive the economic subject. Rather they maintained the 'rationality assumption' of mainstream economics as 'the yardstick' (Sent, 2004: 747) and sought to understand how irrational behaviour could be reliably forecast and corrected – a perspective consistent not only with the founding ethos of the Chicago School, but also with the predictive thrust of Watson's behavioural psychology. This 'desire to rationalize the irrational' (Jones et al, 2012: 12) has become a central marker of the contemporary behaviour change agenda in Europe and North America.

Extending Tversky and Kahneman's work, Nudge (2008) and Inside the Nudge Unit (2015) focus on how the 'new behavioural economics' can be translated into policy and practice with the help of techniques from the fields of cognitive design and social marketing. Contemporary nudge theorists explore a range of behavioural techniques (from 'choice editing', to 'anchoring', to 'peer-to-peer pressure'), some of which aim to promote conscious reflection: for example, the presentation of government-produced nutritional advice in a manner more intuitive to the ways people tend to process information (Halpern, 2015). Yet the majority of nudge-style interventions (like Nudge's opening example of the redesigned cafeteria) work through less-than-conscious means, re-directing habitual behaviour in ways deemed effectual precisely because they circumvent the predictable irrationalities of human decision making processes. It is in this respect that the paternalistic aspects of Thaler and Sunstein's 'libertarian paternalism' come to the fore: unlike Dewey's ([1927]1954) vision of 'participatory democracy', nudge represents a mode of expert governance in which leaders and professionals with requisite scientific and behavioural expertise are seen to be much more capable than ordinary people in determining what constitutes rational, healthy or prudent behaviour and how best to engineer it. Significantly, what is viewed as 'rational' within behavioural economics tends to be action that would most benefit people in a market-based society (i.e. 'making efficiency savings, investing wisely in the financial market, and opting into company pension schemes' (Jones et al, 2012: 47-8). As such, we might go as far as to argue that, at a time when the dominance of neoliberalism may be in peril, nudge advocates aim to 'correct behaviour that appears to threaten the future of a market-oriented society' (2012: 50).

As the preceding sections have explored, nudge theory and pragmatist philosophies of habit developed at different historical moments and out of disparate intellectual trajectories - which have differently shaped their ideological and ethical impulses as well as their understandings of human nature, behaviour, conduct, habit, change and political governance. The following parts of the article explore the nature and implications of these particularities in further depth.

The psychic life of habits

The first key claim I wish to make is that, although nudge proponents argue that individual and social change is most effectively addressed at the level of automatic or habitual behaviour, they do not seem to appreciate just how complex and deeply rooted many habits and tendencies are. As I have discussed, pragmatist philosophers view the fact that we can modify existing habits and form new ones as central to our capacity for freedom and material transformation. However, they also acknowledge how rigid and resistant to change many forms of habituation can be. From Sullivan's (2006, 2015) perspective, this is the case, in part, because most habits are by their very nature non-conscious (or even unconscious) most of the time. The psychological workings of repression and resistance mean that transforming deep-seated habits is neither easy nor straightforward. Moreover, the psychic roots of many forms of habitual behaviour are highly ambivalent. As the legacies of Freudian psychoanalysis indicate, people may continually act in ways that seem antithetical to their own interests, repeat the 'mistakes' of their past, or feel compelled to relive traumas for a host of psycho-social reasons linked both to early life experiences and the ongoing social structures and relations in which they find themselves. As such, grappling with the complexity of human habits and tendencies requires acknowledging the workings of psychic conflict and ambivalence – or, as the late queer theorist Eve Sedgwick puts it, 'the simple, foundational, authentically very difficult understanding that good and bad tend to be inseparable at every level' (2011: 136).

By contrast, within nudge's melding of behaviourism, cognitive psychology and economic theory, human behaviour is understood as frequently 'irrational'; however, this is linked not

to psycho-social complexity but rather to the fact that human neural processing capabilities are limited (compared to those of machines), which means that we are frequently prone to make 'errors' that lead to 'poor' decisions. xii For nudge theorists, decisions themselves are generally either 'good' or 'bad', and it is the role of experts (government officials, corporate leaders, professional consultants) to employ nudging techniques to push people in the direction of 'their own best interests' (as judged by these experts). As long as adjustments to our everyday choice architectures are employed effectively to circumvent our often short-sighted or hassle-averse modes of habitual conduct, it is claimed, such behaviour can be easily altered or re-directed to 'improve people's lives' and address a range of 'wicked' social problems (Halpern, 2015: 170).

From a more critical psycho-social perspective, however, people's tendency to automatically repeat particular modes of activity cannot be explained by 'processing errors' alone; the psychic contours of human conduct are much more complicated than nudge theories suggest. Take, for instance, Thaler and Sunstein's opening example of Carolyn and her reorganisation of the school cafeteria. While Carolyn's application of nudge techniques may well encourage some students (with the required financial resources) to select fruit or salads over chips or crisps when they purchase food at school, such techniques do nothing to acknowledge the interrelated psychic, social and economic factors that may play into cafeteria behaviour and eating habits (and related issues of malnutrition, body image and disordered eating) - from poverty, to academic pressure, to abuse and trauma, to sexism. In the UK, for instance, the school canteen has become a microcosm of class-related inequalities and their affective dynamics - from the experiences of children who receive state-financed meals being marked in the lunch queue as 'poor', to reports on the shocking nutritional content of the catering in publically-funded schools, to research showing the huge problem of hunger, and resultant concentration deficits, among school-age children who are, for a range of reasons, not fed enough at home. As these examples begin to show, nudge techniques barely scratch the surface of the politics of school cafeterias. They also fail to address how commonly food becomes a fraught affective flashpoint for a host of unresolved psychic tensions, including issues related to power, control, protection, desire and lackxiii – nor, unsurprisingly, are they interested in the relationship between eating and

pleasure; indeed, *pleasure and desire*, more generally, sit rather uneasily within nudge's rigid epistemology of self-control and future 'wellbeing'.

Of course, this is partly Thaler and Sunstein's point - the nudge paradigm is attractive to many precisely because, in the tradition of Watson's classical behaviourism, it promotes the fantasy that we do not have to wade into murky abyss of psychic ambivalence or sociopolitical relations to transform individual or collective behaviour – through superficial administrative tweaks, this complexity can now simply be bypassed. Yet, although the kinds of environmental modifications nudge advocates describe may be successful in prompting people to do something different than they normally would in a very specific context or set of circumstances, there is little evidence to suggest that such techniques work to address the roots of patterned behaviour at a deeper level - or indeed, that nudge techniques actually help to cultivate *new and enduring habits and tendencies*.xiv Yet as pragmatist philosophers argue, 'freedom and power are to be found in and through the constitution of habits, not through their elimination' (Sullivan, 2006: 24).

Ultimately, nudge theorists are most persuasive when they describe the effectiveness of nudge techniques in the context of relatively non-contentious administrative and financial issues such as encouraging people to save earlier for retirement or to pay their taxes on time. Their advocacy of behavioural techniques is much less compelling when they extend it to a host of more socially fraught and complex issues, from gender inequality and racial discrimination, to teenage pregnancy and suicide. In positioning nudge theory as a universal 'catch all' solution to 'society's major problems' (Thaler and Sunstein, 2008: 9), its advocates can address neither the underlying structural factors at play across such a disparate range of issues, nor the differences between subjects to be nudged and their own psychological and social histories and experiences. Yet, as Dewey insists, 'the distinctively personal or subjective factors in habit count' ([1922]2012: 13). Although change at the level of habit is often best addressed through modifications to the wider environments in which embodied tendencies are formed, he argues, 'the stimulation of desire and effort is one preliminary in the change of surroundings' (13). Grappling with the constitutive links between habit, tendency and desire would thus seem to require a critical framework equipped to negotiate complex psycho-social relations.

All this being said, it is important to recognise that, when it was published in the 1920s, Dewey's Human Nature and Conduct: An Introduction to Social Psychology was intended, in many ways, as a counter-narrative to the rise of Freudian psychoanalysis. From Dewey's perspective, the problem with orthodox psychoanalytic perspectives is that they routinely separate 'mind from body' ([1922]2012: 19). Consequently, psychoanalysis 'thinks that mental habits can be straightened out by some kind of purely psychical manipulation without reference to the distortions of sensation and perception which are due to bad bodily sets' (17). Significantly, however, Dewey is just as critical of early twentieth century physiology. In assuming that refashioning human conduct requires only that we 'locate a particular diseased cell or local lesion, independent of the whole complex of organic habits' (x), physiology similarly elides the intertwinement of the psychological and the biological. Like psychoanalysis, he suggests, it also fails to address the 'objective conditions in which habits are formed and operate' (36-7). Thus, in calling for the development of a social psychology with the concept of habit at its heart, Dewey was underlining the importance of a genuinely interdisciplinary approach to theorising individual and socio-political change – one that integrates psychology, biology, physiology, physics and socio-cultural analysis to make sense of, and transform, habitual conduct and relations.

Temporality, spatiality and habit assemblages

Secondly, I want to argue, nudge advocates stress the importance of re-directing habitual behaviour through modifications to the choice architectures that surround us; however, they do little to address the complexity of the ongoing interplay among bodies and environments through which habits are constituted. For Dewey, like James and contemporary thinkers such as Sullivan, habits are never static: they are continuously formed and reformed through the constitutive interaction of subjects, objects, infrastructures and environments. As Sullivan explains, habits are 'transactional': this 'means not only that the environment helps constitute the function or habit, but also that the function or habit helps constitute, and possibly change, the world' (2015: 12). For example:

'[A]s a gendered world shapes a woman's (and a man's) habits of walking and occupying space, those habits both enable and constrain the way that she might respond to the world, perhaps maintaining gendered expectations regarding shoes and locomotion and perhaps challenging or transforming them. Either way, her response helps (re)constitute the environment that then feeds back into expectations for both her and other women's (and men's) foot-wear habits' (2015: 13).

From this perspective, individual habits are not discrete or fully separable from social, institutional or environmental patterns or tendencies; rather, they are always intimately intertwined. Instead of conceptualising individual habits in isolation (as if they were *owned* by discrete subjects) then, a critical approach inspired by the work of these philosophers compels us to think through the workings and implications of *habit assemblages*.*V

Take, for example, the case of digestion as a habit assemblage: In order to illustrate the 'transactional' workings of habits, Dewey compares them to psychological functions. Like processes of respiration and digestion (which require oxygen and food to function), he suggests, habits are 'not complete within the body'; they necessitate 'the cooperation of an organism and an environment' ([1922]2012: 10). Extending Dewey's analysis, Sullivan argues that 'a person can have a distinctive character based on the kind of physiological habits than compose her' (2015: 11). Digestion is a transactional habit, she suggests, not merely because it 'occurs only when the stomach and intestines have food to process and absorb' (12), but also because it is continually is shaped by, and materially incorporates, wider socio-cultural and political relations – including those linked to social privilege and oppression. For instance, Sullivan notes, 'women who have been sexually abused disproportionally suffer from gastrointestinal maladies, such as IBS and Crohn's disease' (2015: 19). Moreover, epigenetic research indicates that 'racism can have durable effects on the biological constitution of human beings', including processes of digestion, that can extend to future generations (20). Thus, like other habits, digestion is not an unchanging mechanical reflex; it constantly evolves as human psychology and physiology are re-shaped by personal and transgenerational experience, as well as wider environmental dynamics

from social hierarchies to industrial farming and food-processing practices. Public health initiatives to address digestion-related disorders that focus exclusively on prompting individuals to make different dietary choices, then, are likely to be limited in the long-term as they are tackling only one strand within a wider assemblage of forces. In turn, as Sullivan argues, work to transform habitual forms of sexism and white privilege 'needs to address all aspects of that transaction, including the biological' (2015: 22) — while appreciating that each strand of an assemblage is itself constantly in motion as it interacts with other strands.

By contrast, although the ability of experts to modify 'problematic' patterned human behaviour is central to nudge theory, scholars like Thaler and Sunstein present habits themselves as curiously isolated and inert.xvi Within their framework, persistent cognitive and embodied tendencies drive much of our everyday conduct (often in ways that steer us away from what is 'best' for us and our societies), but can be powerfully re-directed through well-executed, context-specific nudges. Yet the authors provide little analysis of how particular habits may have been formed in the first place, or indeed how they may continue to develop and transform after being nudged. In other words, for these thinkers, 'transformation' is located with the event-space of the particular nudge at hand, but the pre- and post- nudge periods are seemingly devoid of movement and activity. For example, a behavioural initiative that gives American high school girls a dollar for every day that they avoid getting pregnant may play a small role in reducing teenage pregnancy rates in a particular context (Thaler and Sunstein, 2008), but what happens after the girls leave the secondary school environment - particularly if they have received no adequate sexual education? How might their patterns of intimacy and sexual health shift or deteriorate as they inhabit new cultural and socio-economic constraints, pressures and atmospheres?xvii Relatedly, nudge advocates (similar the classical behaviourists) conceive of 'environment' in a rather limited way: environment is, for instance, a temporary administrative framework that provides small monetary awards to school girls who avoid getting pregnant, but not the broader conditions of poverty and lack of opportunity in which teenage pregnancy often occurs. It is, moreover, the physical layout of a cafeteria but not the wider socio-political and economic structures and relations in which student eating and food purchasing practices are embedded. Indeed, within nudge theory, tweaks to choice architectures can

re-direct human behaviour (at least temporarily), yet wider physical, socio-political, cultural and economic environments are never substantively transformed.

As such, nudge is, in many ways, a patently neoliberal endeavour. In extolling the benefits of 'libertarian paternalism', Thaler and Sunstein (2008) laud the concepts of 'freedom' and 'choice', praise the merits of modest government, and retain faith in regulatory role of 'the market' (at least most of the time). Similarly, Halpern applauds David Cameron's neoliberal 'Big Society' agenda and describes the nudge unit's role in offering individualist behavioural nudges for 'wellbeing' while the Conservative-led coalition government drove forward Thatcher's project of dismantling the welfare state (2015: 142). At the end of the day, I want to suggest, nudge theory's focus is on changing individual behaviour (though superficial modifications of administrative arrangements and other choice architectures) rather than enacting deeper social or structural changes, or indeed, understanding the complex and shifting interactions among bodies, infrastructures and environments. Within nudge's epistemological framework, obesity, heart disease and teenage pregnancy are predictably figured as the result of 'bad' habits fuelled by 'poor' individual decisions that can, in turn, be resolved by compelling people to make 'better choices' (2008: 8). This is, by now, very familiar rhetoric in a post-Fordist, neoliberal society that promotes austerity as an ideological project and repeatedly blames individuals for structural failures viii – it is also one that resonates strongly with much older biopolitical practices of governing through habit.

It is true that Dewey, and pragmatism more generally, have been critiqued for prescribing 'liberal reform' (rather than radical social change) that avoids direct critique of ideological assumptions and structural relations of power (Paringer, 1990; Sullivan, 2006). This is an important point and one that might lead us to ask whether pragmatist philosophies of habit might be just as amenable to neoliberal political and economic aims as other approaches to habit modification. In principle, embodied technologies that work at the level of habit are equally available to all political ideologies. What is vital to highlight here, however, is that, because Dewey understands transformation as emerging through ongoing adjustments to 'mind-body-environmental assemblages' (Bennett et al, 2013: 12), his analysis suggests that social change cannot plausibly or ethically be thought of exclusively (or primarily) as a project of changing the subject. This point underscores the differences between his

approach and dominant neoliberal technologies, which institute self-discipline and responsibility at the level of habit without attention to (or indeed precisely as a means to avoid addressing) structural conditions and frameworks. While Dewey pays careful attention to individual experience and desire, his analysis is interested precisely in how embodied subjectivities, capacities and habits are continuously refashioned through wider relational networks and assemblages.

Agency, neoliberalism and habits of democracy

Thirdly, although nudge theory repeatedly stresses the importance of maintaining individual choice and personal liberty, it actually treats 'ordinary' people as exceedingly impotent and inept. Viewing human subjects, with their limited cognitive capacities, as routinely bad at making 'the right' choices, nudge theory delegates significant decision-making powers to officials and experts – indeed, as I noted earlier, nudge offers a form of expert governance at significance odds with more participatory visions of democracy. While the authority and agency of various political and corporate leaders is augmented through the introduction of nudge techniques, everyone else (and particularly those with less social and cultural capital and fewer economic resources) is figured as remarkably passive.xix

Thus, while, in the previous section, I figured nudge as an exemplary neoliberal technology, it actually does not quite fit the standard neoliberal model of individual responsibilisation. As Natasha Dow Shüll argues, nudge 'assumes a choosing subject, but one who is constitutionally ill-equipped to make rational, healthy choices' (2016: 12). Indeed, from Thaler and Sunstein's perspective, the paternalistic thrust of libertarian paternalism is necessary precisely because 'individuals make pretty bad decisions' most of the time (2008: 6). While nudge's envisioned subject values neoliberal 'freedom of choice', they simultaneously lack the cognitive capacity necessary to be an 'autonomy-aspiring actor' (Dow Shüll, 2016: 12). Responsibility must therefore be delegated to 'choice architects' with the requisite knowledge and foresight to steer behaviour in appropriate directions. As such, the nudge paradigm at once 'presupposes and pushes against freedom' and 'falls somewhere between enterprise and submission' (2016: 12).

From this perspective, nudge approaches may actually be *more pernicious* than previous neoliberal forms of governance. Typical neoliberal technologies of the 1990s and early 2000s were designed to compel us to develop certain cognitive, psychic and embodied capacities and skills so that we could play a full role as responsible, self-regulating, entrepreneurial citizens in a capitalist economy. Cultivating such self-sufficient neoliberal subjects functioned, of course, to fuel market logics, while enabling a shrunken state and culled back social and health services. However, the possibility at least existed for subjects to re-appropriate such competencies and employ them against the grain of neoliberalism in ways that might furnish alternative personal and political goals and agendas.xx Indeed, while docility, as theorised by Michel Foucault ([1975]1995), enables a reconfiguration of embodied conduct to make individuals amenable to governance, it also endows subjects the power to shape their own bodily movements and capacities in ways that can exceed these disciplinary aims. In a similar vein, Dewey argues that, although 'docility has been identified with imitativeness', it must also be recognised as a 'power to re-make old habits, to recreate'. From this perspective, it does not make sense to figure 'plasticity and originality' as eternally opposed ([1922]: 2012: 41).

By contrast, nudge is not particularly interested in (or indeed capable of) harnessing embodied plasticity to build flexible and enduring *capacities* or skills. As I have discussed, nudge techniques work in the specific context they are designed for but are not generally equipped to extend to new or different settings. For example, changing the 'opt-in' settings on a pension plan to 'opt-out' may be successful in encouraging more people to pay into a recommended pension plan than would have otherwise, but it does not address wider financial or savings habits outside this specific administrative configuration. As such, nudges do not promote the embodied and cognitive *repetition* usually required to cultivate enduring new habits. Given that nudges often operate below the level of direct consciousness, they also do not invite the kind of critical reflection that might enable subjects to hone capacities and techniques that resonate with their own experiences, goals and desires. Indeed, as Thaler explains, nudge was envisioned as an attractive approach to improving 'the efficiency and effectiveness of government policies' precisely because it wouldn't require 'anyone to do anything' (italics, mine, 2015: ix-x). Moreover, and crucially,

as nudge techniques themselves are generally the purview of authorities and experts (or delegated technologies), people do not have a say in the kinds of nudges to which they are subjected.**Xi** Consequently, nudge approaches offer less of a platform for Foucaultian 'projects of the self' than they do a post-neoliberal technology of paternalistic control.**Xii** The kind of behavioural change that government and corporate nudge-style interventions deliver is therefore both limited and antithetical to genuine democratic citizenship and participation.

Pragmatist philosophies of habit offer quite a different framework for thinking through the subjective and political possibilities of transforming embodied habits and tendencies. From Dewey's perspective, the potential for 'progressive' social change lies in the 'complication and extension of significance found within experience' – and this enhancement of experience comes with our ability (in conjunction with existing infrastructures and environmental conditions) to generate 'intelligent' habits that coordinate and expand our productive capacities in the world ([1922]2012: 110). A key objective of democratic governance, he argues, should thus be to cultivate conditions whereby 'intelligence' (the embodied appreciation of the significance of one's present actions and an openness to change) might become a capacity available to all. 'In theory', Dewey suggests, 'democracy should be a means of stimulating original thought, and of evoking action deliberately adjusted in advance to cope with new forces' (italics mine, 29). Thus, whereas nudge offers a top-down technology of behaviour modification, Dewey envisions personal and social change as an embodied process emerging from the ground up, whereby people should be enabled to 'take command of their own powers, so that they can find their own happiness in their own fashion' (x). How such a participatory democratic vision might be actualised in current socio-political and economic conditions, however, is precisely the challenge with which we must grapple.

In his attention to how 'conduct is always shared', Dewey's analysis also opens up consideration of how habituation can support the development of progressive collectives and solidarities ([1922]2012: 11). His focus on the workings of 'habit assemblages' means that he is particularly interested in the imbrication and 'cooperation' of bodies with other bodies, as well as objects, infrastructures and environments. In these ways, Dewey's work

resonates with more recent analysis on the collective embodied gestures and habits of social movements. Think, for example, of Judith Butler and Athena Athanasiou's discussion of the anti-capitalist movements (such as the Indignados of Spain, the Outraged of Greece, and Occupy Wall Street) which have repeatedly assembled to protest neoliberalism, austerity and induced precarity. What is important in this coming together of bodies, and their performance of the everyday habits of life in public squares around the world, Butler and Athanasiou suggest, is not that everyone 'acts together or in unison', but rather, similar to Dewey's analysis of habit assemblages, that 'enough actions are interweaving that a collective effect is registered' (2013: 80). Compare this to Thaler and Sunstein's Nudge and Halpern's Inside the Nudge Unit, in which the only collectives named are governments and corporations. Indeed, within the world of nudge theory, not only is there no role of social movements and political activism in processes of socio-political change, the entire public sphere is almost completely evacuated. Granted, nudge theorists' focus is improving the efficacy of government policies (rather than theorising the broader workings of social transformation). Nonetheless, nudge advocates consistently over-estimate the capacity of behavioural techniques specifically, and government policies more broadly, to ameliorate a host of complex problems linked to entrenched histories of social conflict and inequality. It matters, therefore, that the vision of 'the social' they offer is considerably impoverished. Moreover, nudge theorists routinely equate social transformation with the effects of social marketing on citizen or consumer behaviour. What pragmatist philosophers like Dewey emphasised, by contrast, is that progressive and enduring forms of change inevitably exceed the aims and technologies of political or corporate governance – they emerge from, and are embedded within, the ongoing routines, habits, experiments and solidarities of everyday life.

Predictive vs. speculative pragmatism

Fourthly, and finally, like philosophers of habit, nudge theorists sometimes frame their behavioural account of social change as a form of 'pragmatism'; yet while nudge's pragmatism is predictive and calculative, philosophies of habit offer a more speculative and responsive approach. For Halpern, being 'a pragmatist' means 'we should do whatever

works, particularly if it has minimal costs' (2015: 317). As I have discussed, nudge-inspired approaches argue not only that people frequently make mistakes in 'remembering, predicting and deciding', but also that 'these errors [are] not random, but predictable' (29, italics mine). Invoking the legacy of Watson's behaviourism, as well as Tversky and Kahneman's theories of cognitive bias, nudge advocates claim that, because human processing errors can be anticipated, experts can reliably calculate how best to avoid common 'mistakes' and skilfully prod individual behaviour in more desirable or satisfactory directions. If nudges can be proven to 'work better' than legislation or consciousness-raising, while serving the dominant austerity agenda, nudge theorists argue, they should be integrated into the heart of governance to address a range of social problems and make people 'healthier, wealthier and happier' (Thaler and Sunstein, 2008).

By contrast, for Dewey, the nature of 'progressive' social, political, or ethical conduct cannot be fully known in advance. Approaching socio-political change in a strictly calculative way is problematic, not only because we cannot pre-emptively know 'good' and 'bad' in any clear cut way, but also because, when we are certain that we do, we are often unable to sense change when it is actually happening.^{xxiii} As Dewey puts it,

In quality, the good is never twice alike. It never copies itself. It is new every morning, fresh every evening. It is unique in its every presentation for it marks the resolution of a distinctive complication of competing habits and impulses which can never repeat itself ([1922]2012: 61).

Pragmatic and open-facing approaches to social transformation will therefore 'not import mathematics into morals'; instead, they will 'be alive and sensitive to consequences as they actually present themselves' because such dynamics 'give the only instruction we can procure as to the meaning of habits and dispositions' (24). In these ways, Dewey's framework resonates with what the critical philosopher Erin Manning calls 'speculative pragmatism' – an approach to sensing (and making sense of) the changing nature of material life that views gestures and acts as 'singularly connected to the event at hand' and yet always 'exceeding the bounds of the event, touching on the ineffable quality of its morethan' (2016: 2).xxiv Importantly, the critique of calculative prediction philosophers of habit

offer is not a disavowal of the salience of knowledge gleaned from past observation and experience – indeed, Dewey's advocacy of intelligent 'forseeing' in the adjustment of habits is premised precisely on careful analysis of the outcomes and implications of previous (re)actions. What is vital, however, is that efforts to forsee are speculative and responsive, rather than rigid and calculative, so that they can account for unintended consequences and remain open to the unexpected.

With respect to temporality, the predictive logic of nudge-style pragmatism is geared firmly towards the future, which it assumes is actionable in particular ways. While 'future wellbeing' is the impetus for long-term planning and wise investment, 'the present' is the time of impulsivity, temptation and poor decisions. As Halpern notes, 'a series of studies show that what we choose for our future selves often differs greatly from what we choose for our present selves'. From the perspective of behavioural economics, this phenomenon is linked to hyperbolic discounting: 'the further into the future a cost or benefit, the disproportionally smaller it becomes relative to immediate costs and benefits.' As such, Halpern argues, we are 'prone to be trapped in our present' (2015: 139, italics mine). In this context, nudge advocates argue, policy-makers and corporations can employ well-designed nudge techniques to enable 'people to shape choices for their future selves, and help them resist moments of temptation that they may later regret giving into' (141) – whether with respect to dietary choices, financial savings, or gambling practices. From the perspective of nudge theory, then, it is our 'future selves' that matter - (bad) habits are what thwart or prevent progress, and thus must be resisted, broken or redirected if we are to enter the future on good footing

For philosophers of habit, however, *current* tendencies and forms of habituation are precisely what need to be felt, appreciated, and reflected upon if we are to approach affirmative transformation (however that might be defined in a given context). When we fixate on 'the future' as what can be colonised to make good on the promise of better selves, or a more socially just world, Dewey argues, we perpetually turn away from the richness and complexity of embodied and social life in the present. Moreover, when we assume that 'inducing an improved society' requires an already 'formulated definite ideal of some better state' we sacrifice flexibility and responsiveness and risk simply 'substituting

one rigidity for another' ([1922]2012: 52). As such, it is only by *inhabiting* our ongoing sensorial experience in the present that we can 'come to know the meaning of present acts' and develop our ability to 'use judgment in directing what we do' (82). Indeed, it is precisely this empirical and speculative capacity that Dewey's vision of lifelong education and participatory democracy sought to cultivate. Furthermore, and importantly, attending to the quality and variation of experience as it happens enables us to hone our attunement to *alternative possibilities* in the making – to the potential for human and socio-political habits and tendencies to become otherwise.

Conclusions

Contributing to growing critical and interdisciplinary work on habituation, this article has argued that rethinking the concept of habit is fundamental to making sense of the contemporary logics and possibilities of social transformation. Rather than focusing on the dissolution of pernicious habits, I have suggested, we might more fruitfully explore how existing forms of habituation can be opened up to alternative material, ethical and political possibilities. Though, as pragmatist philosophers such as Dewey make clear (contra nudge theory), the precise content of 'social progress' and 'ethical habits' cannot be known in advance. Yet, through 'watchfulness concerning the tendency of acts' and attention to 'disparities between former judgments and actual outcomes' ([1922]2012: 82), we may be able move beyond the fantasy of 'breaking bad habits' to the difficult work of honing new tendencies. As my comparison of nudge theory and philosophies of habit has illustrated, however, this cannot be a project of individual subjects alone – given the ways in which habits are formed and reformed through the interactions of minds, bodies and environments, we need a collective and relational approach that works at the level of 'habit assemblages'. Just how to conceptualise, and intervene in, such complex and shifting sets of relations, however, requires further critical thought and speculative experimentation.

Engaging politically with the repression and ambivalence central to our most pervasive (and invisible) psychic and embodied habits would seem to require a pragmatism informed by critical psycho-social theories and practices. At the same time, approaching human

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subjectivities as contingent components of mind-body-environmental assemblages calls for techniques that appreciate the imbrication of embodied beings with diverse geographies, architectures and infrastructures, including economics and digital ones (Pedwell, 2017a, b). Within such a framework, it is processual relations, interactions and intensities that are the focus, displacing the comparatively bounded organism of behavioural approaches. While this kind of interdisciplinary approach demands specialist knowledge and expertise, an affirmative and inclusive praxis of habit cannot remain the exclusive purview of experts and elites. Rather, if 'progressive' social transformation the aim, thinking, sensing and experimenting through habit must become a shared endeavour, engaged in by diverse collectives across multiple interconnected fronts of social, political, ethical and environmental salience. From this perspective, the potential exists for critical engagement with habit to furnish more affirmative individual-collective practices, wherein 'progress' is defined not as neoliberal disciplining of self-conduct in line with normative politicoeconomic imperatives, but rather as an ongoing process of adding 'fullness and distinctiveness' of 'meaning' to embodied experience (Dewey, [1922]2012: 110).

Endnotes

ⁱ See also Sunstein, 2015; Thaler, 2015; Thaler and Sunstein 2003a, b; 2006.

[&]quot;See also Sunstein, 2015; Thaler and Sunstein, 2003a, b, 2006.

iii See also Burgess, 2012.

iv The 'nudge unit' has now detached from government to become a social purpose company with over 60 employees (Halpern, 2015).

^v For further critical analysis of nudge theory see Bovens, 2008; Dow Shüll, 2016; Hussman and Welch, 2010; John, Smith and Stoker, 2009; Selinger and Whyte, 2008.

vi See also Bennett, 2013, 2015.

vii See, for example, Bennett, 2013, 2015; Bennett et al eds., 2013; Bissell, 2013; Blackman, 2013; Carlisle, 2014; Carlisle and Sinclair, 2008; Dewsbury and Bissell eds., 2015; Fraser et al, 2014; Malabou, 2008; Pedwell, 2017a, b; Shilling, 2008; Sparrow and Hutchinson eds., 2013; Sullivan, 2006; 2015; Weiss, 2008.

viii As I (and others) have discussed elsewhere, the treatment of habit by pragmatists like Dewey resonates with the work of nineteenth-century Continental philosophers such as Felix Ravaisson ([1838]2008), as well as more recent thinkers such as Henri Bergson and Gilles Deleuze (Pedwell, 2017a, b; see also Bennett et al, 2013; Carlisle, 2014; Malabou, 2008).

ix See, for example, Halpern, 2015: 111, 128, 132.

^{*} See also Pedwell, 2017a; Sedgwick, 2003.

xi As Lisa Blackman explores, neovitalist thinkers such as McDougall drew on the work of Gabriel Tarde to develop an account of the role of less-than-conscious processes (including but not limited to habit) in shaping human conduct which 'challenged the increasing mechanization' of behavioural psychology (2013: 191).

xii See also Hausman and Welch, 2010.

xiii See, for example, Bordo, 1993.

xiv See also Bovens, 2008; John, Smith and Stoker, 2009.

xv See Bennett 2013, 2015; Bennett et al, 2013; Pedwell, 2017a.

xvi See also John, Smith and Stoker, 2009.

xvii As the geographer David Bissell explores, the forces propelling change in particular habits (or habit assemblages) can be both material and immaterial, including the 'powers of atmospheres and anticipations, stresses and strains: in short: the nonrepresentational powers of affect that work to bind together bodies and environments' (2013: 121). My thanks go to Greg Siegworth for directing my attention to this point.

xviii See Brown, 2015; Rose, 1989; 1996.

xix See also Bovens, 2008; John, Smith and Stoker, 2009.

xx See Brown, 2015; Rose, 1989; 1996.

xxi Jones et al, 2012 do, however, discuss recent efforts by community groups to appropriate elements of behavioural change thinking to address particular neighbourhood issues (such as speeding) at a grassroots level.

^{&#}x27;Neoliberalism' and 'paternalism', however, should not be seen as mutually exclusive. As Mitchell Dean (2010) argues, neoliberal forms of governance are plural and fragmented and advanced liberal societies have regularly combined neoliberal ideologies and practices with neo-conservative, neo-paternalist and even sovereign coercive technologies.

References

- Bennett, Tony (2013) Habit: Time, Freedom and Governance. Body and Society 19(2&3): 107-135.
- Bennett, Tony (2015) Mind the Gap: Towards a Political History of Habit. *Topics:* Occasional Papers Institute for Culture and Society. Sydney: Western Sydney University.
- Bennett, Tony, Dodsworth, Francis, Noble Greg et al (2013) Habit and Habituation:

 Governance and the Social. Body and Society 19(2&3): 3-29.
- Bissell, David (2013) Habit Displaced: The Disruption of Skilful Performance. Geographical Research 51(1): 120-129.
- Blackman, Lisa (2013) Habit and Affect: Revitalizing a Forgotten History. Body and Society 19(2&3): 186-216.
- Bordo, Susan (1993) Unbearable Weight: Feminism, Western Culture and the Body.

 Berkeley and Los Angeles: University of California Press.
- Bovens, Luc (2008) The Ethics of Nudge. In Grüne-Yanoff, Till and Hansson, Sven Ove (eds)

 Preference Change: Approaches from Philosophy, Economics and Psychology. Berlin and New York: Springer.
- Brown, Wendy (2015) Undoing the Demos: Neoliberalism's Stealth Revolution. Brooklyn: Zone Books.
- Burgess, Adam (2012) 'Nudging' Healthy Lifestyles: The UK Experiments with the

 Behavioural Alternative to Regulation and the Market. European Journal of Risk

xxiii See Sedgwick, 2003.

xxiv See also Massumi, 2015; Wilkie et al, 2017.

Regulation 1:3-16.

- Butler, Judith and Athanasiou, Athena (2013) Dispossession: The Performative in the Political. Cambridge: Polity Press.
- Camic, Charles (1986) The Matter of Habit. American Journal of Sociology 91(5): 1039-1087.

 Carlisle, Clare (2014) On Habit. London and New York: Routledge.
- Carlisle, Clare and Sinclair, Mark (2008) Editors' Introduction. In Carlisle, Clare and Sinclair, Mark (eds) Of Habit ([1838]2008). Author: Felix Ravaisson. Trans. Clare Carlisle and Mark Sinclair. London and New York: Continuum.
- Dean, Mitchell (2010) Governmentality: Power and Rule in Modern Society (Second Edition)

 London: Sage.
- Dewey, John (1896) The Reflex Arc Concept in Psychology. *Psychological Review* 3: 357-370.

 Available at: https://brocku.ca/MeadProject/Dewey/Dewey 1896.html (accessed: 2nd July 2017).
- Dewey, John ([1922]2012) Human Nature and Conduct: An Introduction to Social Psychology. London: Digireads.com.
- Dewey, John ([1927]1954) The Public and its Problems. Athens, OH: Swallow Press.
- Dewey, John ([1939]1976) Creative democracy: The task before us. In Boydston, Jo Ann (ed)

 John Dewey: The later works, 1925-1953, volume 14 Carbondale: Southern Illinois

 University Press, pp. 224-230.
- Dewsbury, John-David and Bissell, David (eds.) (2015) Special section: Habit geographies.

 Cultural Geographies 21.1: 22-146.
- Dow Schüll, Natasha (2016) Data for life: Wearable technology and the design of self-care.

 BioSocieties 11(3): 317–333
- Fesmire, Steven (2015) John Dewey. New York: Routledge.

- Foucault, Michel ([1975]1995) Discipline and Punish: The Birth of the Prison. New York:

 Vintage Books.
- Fraser, Suzanne, Moore, David and Keane, Helen (2014) Habits: Remaking Addiction.

 Basingstoke: Palgrave Macmillan.
- Halpern, David (2015) Inside the Nudge Unit: How Small Changes Can Make a Big Difference.

 London: WH Allen.
- Hausman, Daniel M. and Welch, Bryn (2010) Debate: The Nudge or Not to Nudge. The Journal of Political Philosophy 18(1): 123-136.
- James, William ([1914]2004) Habit. London: Forgotten Books.
- John, Peter, Smith, Graham and Stoker, Gerry (2009) Nudge Nudge, Think Think: Two Strategies for Changing Civic Behavior. The Political Quarterly 80(3): 361-369.
- Jones, Rhys, Pykett, Jessica and Whitehead, Mark (2012) Changing Behaviours: On the Rise of the Psychological State. Cheltenham: Edward Elgar.
- Malabou, Catherine (2008) Addiction and Grace: Preface to Felix Ravaisson's Of Habit. In

 Carlisle, Claire and Sincular, Mark (eds) *Of Habit* ([1838]2008). Author: Felix

 Ravaisson. Trans. Clare Carlisle and Mark Sinclair. London and New York: Continuum.
- Manicas, Peter, T. (2002) John Dewey and American Psychology. Journal for the Theory of Social Behavior 32(3): 267-294.
- Manning, Erin (2016) The Minor Gesture. Durham and London: Duke University Press.
- Massumi, Brian (2015) OntoPower: War, Powers and the State of Perception. Durham and London: Duke University Press.
- Paringer, William (1990) John Dewey and the Paradox of Liberal Reform. Albany: SUNY Press.

- Pedwell, Carolyn (2017a) Transforming Habit: Revolution, Routine and Social Change.

 Cultural Studies 31(1) 93-120.
- Pedwell, Carolyn (2017b) Mediated Habits: Images, Networked Affect and Social Change.

 Subjectivity 10(2): 147-169.
- Ravaisson, Felix. Of Habit ([1838]2008). Eds and trans. Clare Carlisle and Mark Sinclair.

 London and New York: Continuum.
- Rose, Nikolas ([1989]1996) Governing the Soul: Shaping the Private Self (Second Revised Edition) London: Free Association Books.
- Rose, Nikolas ([1996]1998) Inventing our Selves: Psychology, Power, and Personhood.

 Cambridge: Cambridge UP.
- Rutter, Tamsin (2015) The rise of nudge the unit helping politicians fathom human behavior, The Guardian (23 July 2015). Available at:

 https://www.theguardian.com/public-leaders-network/2015/jul/23/rise-nudge-unit-politicians-human-behaviour (accessed: 1st August, 2016).
- Sedgwick, Eve Kosofsky (2003) Touching, Feeling: Affect, Pedagogy, Peformativity. Durham and London: Duke University Press.
- Sent, Esther-Mirjam (2004) Behavioral Economics: How Psychology Made Its (Limited) Way

 Back into Economics. History of Political Economy 36(4): 735-760.
- Shilling, Chris (2008) Changing Bodies: Habit, Crisis and Creativity. London: Sage.
- Skinner, ([1938]1966) The Behavior of Organisms: An Experimental Analysis. New York:

 Appleton-Century-Crofts
- Sparrow, Tom and Hutchinson, Adam (eds) (2013) A History of Habit: From Aristotle to Bourdieu. New York: Lexington Books.

- Sullivan, Shannon (2006) Revealing Whiteness: The unconscious habits of racial privilege.

 Bloomington and Indianapolis: Indiana University Press.
- Sullivan, Shannon (2015) The Physiology and Sexist and Racist Oppression. Oxford: Oxford University Press.
- Sunstein, Cass (2015) Why Nudge: The Politics of Libertarian Paternalism. New Haven and London: Yale University Press.
- Thaler, Richard (2015) Forward. In Halpern, David Inside the Nudge Unit: How Small Changes Can Make a Big Difference. London: WH Allen.
- Thaler, Richard and Sunstein, Cass (2003a) Libertarian paternalism. American Economic Review, 93: 175-9.
- Thaler, Richard and Sunstein, Cass (2003b) Libertarian paternalism is not an oxymoron.

 University of Chicago Law Review 70: 1159-202.
- Thaler, Richard and Sunstein, Cass (2006) Preferences, paternalism and liberty. In Olsaretti,

 Serena (ed) Preferences and Wellbeing. Cambridge: Cambridge University Press.
- Thaler, Richard and Sunstein, Cass (2008) Nudge: Improving Decisions about health, wealth and happiness. New Haven: Yale University Press.
- Tversky, Amos and Kahneman Daniel (1974) Judgment under Uncertainty: Heuristics and Biases. *Science*, New Series 185(4157): 1124-1131.
- Watson, John B. (1913) Psychology as the Behaviorist Views it. First published in

 Psychological Review, 20: 158-177. Available at:

 http://psychclassics.yorku.ca/Watson/views.htm (accessed 2nd July 2017).
- Weiss, Gail (2008) *Refiguring the Ordinary*. Bloomington and Indianapolis: Indiana University Press.

Wilkie, Alex, Savransky, Martin and Rosengarten, Marsha (2017) Speculative Research: The Lure of Possibility. London: Routledge.

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