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Chapter 8

A LOPSIDED REFLATION

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Except among ardent scholars of literary surrealism, Tommaso Landolfi's (1963) short story, *Gogol's Wife*, has been largely consigned to the dusty corners of university library shelves. Given its offbeat narrative, this is hardly surprising. Briefly, the tale presents itself as a chapter derived from a long-lost biography of the enigmatic Nineteenth Century Russian author, Nikolai Vassilevitch Gogol, as recounted by his Boswell-like biographer, Foma Paskalovitch. After stating at the outset that he possesses previously unknown details concerning Gogol's mysterious private life, Paskalovitch reveals how he learnt that Gogol's 'wife' was actually a life-size rubber balloon named Caracas, who exhibited the physical profile of a woman. Claiming to be the only person besides Gogol to have seen Caracas, Paskalovitch chronicles how the latter developed her own personality, spoke when asking to use the toilet, and even inexplicably contracted syphilis. The account concludes by describing the disturbing events of the couple's silver anniversary, during which Gogol becomes enraged, inserts a bicycle pump into Caracas, and inflates her until she explodes, before throwing the rubber remains into the fire.

With its Kafkaesque narrative, Gogol's Wife often makes for unnerving reading and, indeed, is sometimes just downright weird. Particularly striking in Paskalovitch's exposition, though, is his befuddlement over Caracas' physical transformations alongside her seemingly consistent disposition: 'I cast some doubt on the propriety of considering Caracas as a unitary personality; nonetheless I myself could not quite [...] free myself of the impression that [...] this was fundamentally the same woman' (Landolfi 1963: 9). Depending on the level of air pressure filling out her anatomy, Caracas could be fashioned into vastly different feminine appearances – each unique, since she could not revert to prior shapes once deflated. Gogol also ornaments Caracas with different wigs and shades of makeup according to his desires. Periodically, Gogol falls in love with a particular form and preserves it until his affection fades. He then deflates the balloon and begins anew. According to Paskalovitch, these efforts to modify Caracas reflect Gogol's anxious endeavor to obscure common personality traits across her different forms that increasingly infuriate him and, thus, make the balloon more superficially appealing. Thus, he ruminates 'how can I have stated above that it was Nikolai Vassilevitch's will which ruled that woman? In a certain sense, yes, it is true; but it is equally certain that she became no longer his slave but his tyrant' (Landolfi 1963: 3).

This chapter contends that Gogol's interminable rejuvenation of Caracas' appearance is comparable to attempts by behavioral economists (BE)¹ to revitalize the seemingly limp and lifeless foundations of neoclassical economics (NCE) – in this case, when applied to questions of health.² Focusing on BE scholarship addressing the drivers of burgeoning global obesity, the chapter demonstrates that the tradition selectively incorporates acumen from psychology primarily to refashion NCE. That is, rather than deploying such interdisciplinary insights to cast the rancid corpse of neoclassicism into the fire *holus bolus*, BE introduces them to lopsidedly 'reflate' the latter via superficial modifications to its problematic conceptual and normative core – particularly its account of individual decision-making as axiomatically hyper-rational. Through this symbiotic relationship with NCE, BE reproduces – albeit, in novel forms – many of its inadequacies, while also engendering pertinent new limitations, which function to reduce the complex social determinants of obesity to narrow economic problems of 'irrational' individual choice. Accordingly, *pace* self-representations of the tradition as iconoclastically 'misbehaving' (Thaler 2015) within the economics discipline, the chapter concludes that behavioralism fails to provide the basis for more a more capacious critical political economy of obesity.

This case is developed across four sections. First, the chapter briefly introduces the contours of contemporary global obesity, and outlines neoclassical efforts to conceptualize its causes and offer ameliorative policy recommendations. Second, it overviews BE reflections on obesity, which explicitly posit themselves against the conceptual and normative limitations of such neoclassical formations. Third, while recognizing the advancements of BE on the latter, the analysis critically reflects on its limitations for informing a critical political economy of obesity. It does so along three primary axes, noting its (i) continuities with NCE; (ii) deterministic formulation of individual agency; and (iii) constricted social ontology. The chapter concludes by reflecting on the need to articulate a more holistic political economy of global obesity than that offered by BE, with particular attention accorded to transcending the individualizing orientation of the tradition when articulating political measures to redress this issue.

Global obesity and neoclassical economics

According to the World Health Organization (WHO 2021), obesity constitutes the accumulation of abnormal or excessive levels of fat that engenders substantial health risks. Specifically, an individual with a body mass index (BMI) exceeding 25 is categorized as 'overweight', while a BMI over 30 leads one to be deemed 'obese'.³ Utilizing this definition, it has become axiomatic within mainstream public health scholarship and political discourse, since at least the mid-1990s, that the global political economy is confronting a burgeoning obesity 'epidemic' (James 2008).⁴ Indeed, the contemporary evidence that international obesity rates have reached crisis levels is damning. According to the latest WHO (2021) estimates, the proportion of the global population classified as obese has nearly tripled since 1975, with over 1.9 billion adults now overweight (39 percent of the global population over 18 years of age), including 650 million deemed obese (13 percent). Moreover, with the exception of those in sub-Saharan Africa and Asia, the majority of the world's population now resides in countries where health problems associated with excess weight and obesity lead to more deaths than complications arising from being underweight. Finally, 340 million children and adolescents between 5 and 19 years of age, and 39 million children under five years old, are overweight or obese. In this respect, obesity now constitutes a substantial public health challenge in both the Global South and North (WHO 2000, 2021). Such trends are associated with an increased risk of chronic conditions such as type 2 diabetes, hypertension, and coronary artery

disease (Kopelman 2007), thereby engendering a considerable loss of wellbeing and an increased burden on public health systems (Cawley and Meyerhoefer 2012).

To comprehend the drivers of this global health predicament and help inform appropriate policy responses, neoclassical economists have sought to conceptualize its roots in deliberate increased caloric consumption and reduced physical activity by individuals (see: Cawley 2011; Huckfeldt et al. 2012; Capps et al. 2018). In doing so, these theorists have formulated explanations using microeconomic theory, centered on modeling the 'rational' decision-making processes of individuals in their food consumption and exercise choices. For neoclassicism, all individuals axiomatically approach decision-making in a universally hyper-rational manner⁵ – formalized in the notion of 'constrained optimization', whereby actors seek to maximize (or minimize) an objective according to particular constraints (such as budgets or time). This, in turn, engenders common responses through utility-maximizing behavior (cf. Hollis and Nell 1975; Davis 2011). Within this account, individuals - embodied in the subjective avatar of Homo Economicus, or 'rational economic man' – possess stable, well-defined, coherent preference sets, manifesting in their choices. They are, thereby, not cognitively impeded in assessing given alternatives, nor hindered by problems of self-control that would impair the identification and pursuit of optimal choices. These attributes equip individuals to pursue their self-interest and realize subjective preferences through market interactions - which, in turn, provide information and incentives to bolster choices, thereby maximizing individual utility and social welfare (the sum of individual utilities) (cf. Sen 1977).

Utilizing this conceptual framework, neoclassical theorists have explained rising obesity levels by modeling the consumption decisions of utility-maximizing individuals (see: Finkelstein and Hoerger 2010; Huckfeldt *et al.* 2012; Capps *et al.* 2018). Specifically, obesity is grasped as an outcome of hyper-rational choices, reflecting individuals' readiness to compromise – given proper incentives – their future health for present gratification associated with uninhibited food consumption and less exercise.⁶ For instance, assuming that food consumption decisions are motivated by (i) maximizing immediate utility from eating, at the lowest time and pecuniary costs, and (ii) eating in a manner likely to preserve their health capital, individuals weigh immediate pleasures and costs against future rewards and pain through a discount factor, such that their behavior is time-consistent. For any given individual, the optimal amount of food consumption, physical activity, and other diet-related behaviors transpire when the marginal benefit of the last unit consumed (such as the last bite of food taken) equals its marginal cost. Thus, certain individuals will favor unhealthy foods over healthy alternatives, up to the point where the marginal satisfaction derived from consuming the former corresponds to the discounted marginal dissatisfaction of declining future health or bulkier bodily dimensions (Etilé 2019).

Given the difficulties experienced by many individuals in maintaining a healthy weight, NCE holds that the optimal decision for many individuals may be to engage in a lifestyle that leads to excess weight. Put differently, rational, utility-maximizing individuals – having balanced all relevant costs and benefits – believe it is simply too economically costly to weigh less. In turn, they purposively choose a lifestyle that leads to accumulating excess weight (Philipson and Posner 2003; Lakdawalla and Philipson 2009). Thus, many neoclassical accounts posit that technological developments have led to relative price changes since the 1970s – especially falling food prices and declining time costs associated with food production due to the increasingly pervasive adoption of microwaves and food processors. These have, in turn, incentivized rational decisions favoring greater food consumption and weight gain (Cutler *et al.* 2003; Finkelstein and Zuckerman 2008; Lakdawalla and Philipson 2009).

This formulation engenders three generic forms of policy response to address obesity. First, for some (e.g. Murphy 2006), obese individuals are obese by choice – having rationally determined

that curtailing food consumption or escalating exercise would not vindicate the benefits of subsequent weight loss. Accordingly, public health policies are unnecessary (Philipson and Posner 2008): obesity and other diet-related diseases are individual concerns such that, *a priori*, the market will efficiently supply remedial health inputs.⁷ For instance, deteriorating individual health stemming from increased junk-food consumption will engender increases in subjective value accorded to weight- and diet-control behavior, thereby raising demand for exercise, functional food, and dieticians (*cf.* Etilé 2019). For others, public policy may be used to endow consumers with superior information and/or modify relative prices (*e.g.* via taxes) to incentivize healthier eating patterns or promote exercise. Therein, the former measure is justifiable even in lieu of externalities (obese individuals detrimentally affecting others), in that providing better information to consumers possessing only imperfect information should bolster their welfare. The latter measure is only warranted in the presence of externalities, as altering prices in their absence will undermine economic welfare (see: Finkelstein and Hoerger 2010; Cawley 2011).

Behavioral economic interventions into obesity

The neoclassical account above is premised on representing individuals as hyper-rational economic subjects. In this formulation, individuals do not make systematic errors in their decisionmaking, imperfect self-control does not impede their ability to realize their preferences, and they inexorably act in their own self-interest. Conversely, BE has sought to utilize insights from cognitive psychology to rebuff the presupposition that individuals always make decisions in a manner analogous to *Homo Economicus*. Instead, the tradition seeks to 'increase the explanatory and predictive power of economic theory by providing it with more psychologically plausible foundations' (Angner and Loewenstein 2012: 642; *cf.* Heidl 2016).

Specifically, behavioralism advances empirical evidence derived from economic experiments to conceptualize more interdisciplinary, realistic accounts of actual economic behavior as deviating from hyper-rational precepts due to myriad psychological and contextual considerations beyond the explanatory scope of NCE (Earl 2022: Chapter 1; Foster and Frijters 2023). While sharing with the latter the assumption that individuals formulate optimal choices based on their preferences between available options (Laibson and List 2015), BE does not present a logico-deductive theory of choice engendering Homo Economicus. Instead, real-life economic decision-making is inexorably defined by its boundedly rational character (Thaler 2015: 23-4): instrumental in its orientation toward constrained optimization, yet refracted through psychological dynamics and elements in their social milieu that would be immaterial to the neoclassical subject (Camerer and Loewenstein 2004). In turn, these considerations – cynically labeled by Thaler (2015: 9) as 'supposedly irrelevant factors' - engender systemic sub-optimal behavioral outcomes, or 'anomalies' (Thaler 1987), diverging from Homo Economicus. Thus, individual decision-makers do not consistently order preferences, poorly judge probabilities, fail to address risk 'rationally', regularly commit multiple reasoning errors and, more generally, make decisions guided by cognitive biases, heuristic shortcuts, habits, and social context (Bickley and Torgler 2023).

In articulating this explanation, BE frequently posits that the human brain comprises 'dual systems' of thought – 'automatic' (System 1) and 'reflective' (System 2) – the properties of which shape real-world decision-making (Kahneman 2003; Thaler and Sunstein 2008). Within this framework, decision-making is theorized as a process in which each system concentrates on addressing differing cognitive and deliberative tasks. System 1 is formulated as rapid, instinctual, and emotional and, thus, capable of managing straightforward precepts and stimulation beyond contemplation. In contrast, System 2 is deemed better at handling concepts and deliberative behaviors

considered rule-bound, deductive, and logical, as it is described as controlled, effortful, and neutral (Kahneman and Frederick 2002). While neoclassicism assumes that individuals possess complete access to, and utilize, the latter, BE draws on empirical evidence to theorize that the former underpins decision-making in practice. Individuals depend on the automatic system because they are boundedly rational: possessing limited capacity to attend to, process, and recall the contextual information necessary to make a 'rational' choice. Thus, rather than processing complete information in System 2 in a manner corresponding to *Homo Economicus*, individuals have recourse to biases and heuristics, while choices are also shaped by the form in which information is presented (framing effects) (Roberto and Kawachi 2016). Such factors operate in System 1 to simplify and distort information, thereby leading actors to seemingly expedient – albeit not always prudent – choices based on this imperfect information (Kahneman 2003).⁸

BE extends this conceptual framework to identify and theorize why, despite recognizing the adverse health effects of poor diets, smoking, weight gain, and lack of exercise, obese individuals continue to engage in these behaviors (*e.g.* Epstein and Saelens 2000; Downs and Loewenstein 2011; Bragg and Elbel 2017). While acknowledging other factors hindering adoption of optimal health choices – such as insufficient time, financial resources, or personal motivation – BE prioritizes conceptualizing processes operating *beyond* individuals' conscious awareness that engender sub-optimal choices deviating from *Homo Economicus* (Pastore *et al.* 2020). Following Chance *et al.* (2016), at least five such factors may be identified as leading to obesity, in spite individuals' instrumental orientation toward constrained optimization.

First, *individuals are cognitively geared toward impulsive choices* (Chapman and Elstein 1995). As noted above, BE conceptualizes decision-making as arising from interactions between 'dual processes' within the brain. When determining whether to eat ice-cream, for instance, System 1 engenders an approving automatic impulse because it operates rapidly in response to salient emotional stimuli. Conversely, deliberating on the sugar and calorie content of the ice-cream relative to its potential gratification necessitates engaging System 2. Because healthy choices such as eating broccoli or regularly running are often less intuitively appealing than eating ice-cream, System 1 tends to favor the latter unhealthy option. While System 2 esteems healthy choices benefiting individuals in the long-run, it requires effort to be engaged and, thus, is often not utilized for apparently trivial, quotidian decisions such as those relating to food or exercise (Pfeffer and Strobach 2022). Accordingly, System 1 is privileged, thereby leading to impulsive decisions (Cobb-Clark *et al.* 2022).

Second, *individuals are often too preoccupied to reach rational choices*. When actors undertake multiple tasks simultaneously, or are distracted by concerns such as material impoverishment, the limited cognitive processing power of the brain is overwhelmed by competing influences (Mani *et al.* 2013). This, in turn, begets a form of 'cognitive overload', such that the brain is unable to engage System 2 to regulate the more impulsive preferences favored by System 1 (Mullainathan and Shafir 2013). When placed under stress or confused, individuals are consequently more likely to engage in less reasoned, impulsive behavior – such as eating pre-packaged biscuits rather than preparing fruit salad while editing a book – without considering the potential longer-term consequences of doing so (Ward and Mann 2000).

Third, due to the cognitive drain on finite cognitive resources associated with making System 2 decisions, *individuals are often marked by limited willpower* (Hagger *et al.* 2010). Once their limited pool of mental faculties – or self-control – has been temporarily depleted, individuals may revert to simpler, System 1 decision-making processes. Constantly resisting the impulse to eat easily accessible sweets at work while dieting, for instance, diminishes individuals' capacity to resist the next impulse, such as eating cake at a later birthday party (Baumeister *et al.* 1998; Hofmann *et al.* 2012). Due to the plethora of food choices confronting individuals when already cognitively

depleted by hunger or fatigue, short-term desire and external influences – such as the framing effects of food advertisements – easily overwhelm efforts at self-control and leads to sub-optimal food and exercise choices (de Haan and van Veldhuizen 2015).

Fourth, *individuals exhibit present-biased preferences*. That is, individual thinking tends to overemphasize immediate costs while discounting long-term benefits – a process known as 'hyperbolic discounting' (Laibson 1997; O'Donoghue and Rabin 2000). Such preferences can create difficulties when attempting to diet and exercise, or even lead individuals to refrain from these pursuits altogether, by exaggerating their immediate costs relative to their future benefits. For example, spending time preparing a fruit salad over eating a bag of chips is costly now, while the potential future benefit (avoiding health problems associated with excess consumption of trans-fats and salt) lies in the future, such that individuals may tend toward the unhealthy option (Richards and Hamilton 2012). Furthermore, individuals expect that they will adopt healthier decisions in the future; albeit, when the future arrives, unhealthy decisions are again made by their present-biased orientation. For instance, in one experiment, employees who had just eaten lunch were asked to nominate which snack they wished to receive the following week: fruit or junk-food. Most chose the fruit. Yet, upon delivery, the record of the planned choices was 'lost', and employees were again asked to choose their snack, leading to only 20 percent preferring the fruit (Read and van Leeuwen 1998).

Fifth, *individuals often make decisions automatically*, particularly in response to contextual influences. Contrary to the NCE assumption that individuals inexorably choose food options to maximize their utility, regardless of how the options are presented, BE demonstrates that presentation of options influences decision-making. Individuals often stick with extant or default options, even when superior, healthier alternatives are available – known as the 'status quo bias' (Kahneman 2003). For instance, restaurant meals often come with a 'default' setting, such as side dish, unless it is deliberately unselected when ordering. By functioning as an external cue influencing how much consumers eat and when to cease, such default larger portion sizes encourage increased caloric intake (Wansink 2004). Similarly, repeated cues over time can trigger consistent behavior that solidifies into habits that are hard to break. For example, especially when experiencing cognitive overload from activities such as working or watching television, individuals may mindlessly repeat learned unhealthy behaviors such as finishing the food on one's plate, or snack during commercial breaks (Wansink 2016).

Such BE reflections on obesity evidently challenge the hyper-rational axioms of NCE theory, and present an alternative conception of the subject to that represented in *Homo Economicus*. This is encapsulated by Thaler and Sunstein's (2008: 24) dichotomy between the 'Econs' of neoclassicism and the 'Humans' inhabiting reality. While the former constitute hyper-rational utility maximizers replete with a given utility function, the latter are more shambolic in their decision-making – more akin to the Homer Simpson 'lurking somewhere in each of us' than to *Homo Economicus*. Even when strategic and purposeful, humans make repeated miscalculations in pursuing their health objectives, and are influenced by external factors. Accordingly, *Homo Sapiens* are cognitively incapable of approximating *Homo Economicus*. As discussed in the concluding section, this conclusion also has pertinent implications for formulating novel policy measures to redress obesity.

The shortcomings of behavioral economics for the political economy of obesity

Nevertheless, the tradition offers only limited acumen for formulating a more capacious political economy of obesity in three primary respects.

Continuities with neoclassical economics

BE scholarship on obesity frequently juxtaposes its own conceptual research on the topic with the problematic presuppositions informing neoclassical accounts (*e.g.* Chance *et al.* 2016; Bragg and Elbel 2017). Behavioralism is held to engender greater 'realism': analyzing the psychological underpinnings of decision-making by real-world individuals, and examining how this diverges from the axiomatically hyper-rational *Homo Economicus*. Concomitantly, contra the monist and deductively derived methodology of neoclassicism, BE fuses interdisciplinary insights from psychology with economic analysis to nourish a more complex account of food and exercise choices (Bickley and Torgler 2023).

However, beyond the confines of the orthodoxy, such 'innovations' appear less groundbreaking. In practice, BE remains constrained by its continued subsumption within neoclassicism: deploying psychology to *buttress* the orthodoxy rather than nourish interdisciplinary, non-neoclassical accounts of health decision-making (Tzotzes and Milonakis 2021). This is explicable by considering BE as constitutive of a broader epistemological trend within economics: that of 'reverse economics imperialism' (see: Fine and Milonakis 2009). This entails NCE bolstering itself and expanding its scope via importing tools sequestered from disciplines such as psychology, sociology, and politics, and then incorporating them within its conceptual contours (Crespo 2017). Framed in this way, BE has participated in such imperialistic practices through selectively utilizing psychology to revise and augment, rather than transcend, neoclassicism (Davis 2013, 2018). This, in turn, engenders two primary shortcomings.

The first is *limited increases in descriptive realism*. Amalgamating psychology within neoclassicism undermines BE's posited objective of explaining empirical evidence deviating from hyperrationality. Rather than necessitating 'wholesale rejection' of NCE 'based on utility maximization, equilibrium, and efficiency' (Camerer and Loewenstein 2004: 3), behavioral anomalies discovered through experiments 'are used as inspiration to create alternative theories that *generalize existing models*' (Camerer and Loewenstein 2004: 7, emphasis added). That is, BE holds that bolstering its psychological foundations will improve neoclassicism *on its own terms* through enabling increasingly sophisticated theory, superior predictions, and more comprehensive policy recommendations (Rabin 2002).

The result is an incongruous methodology. Behavioralism holds that psychological experimental results will advance economic analysis when filtered through models allowing for phenomena diverging from hyper-rationality. Yet, 'domesticating' (Davis 2008: 363) psychological insights within neoclassicism does not engender greater realism. Instead, BE generalizes the axiom that all behavior is oriented around constrained optimization, while incorporating slight modifications to account for biases, dysfunctions, and heuristics that lead to unhealthy food and exercise choices (White 2017) – what Tzotzes and Milonakis (2021: 179) term 'rationalizing irrationality'. For example, in explaining obesity as arising from a present bias informing individuals' decisionmaking, Richards and Hamilton (2012) and Courtemanche et al. (2015) affix hyperbolic discount functions - disproportionately weighting individuals' concern for short-term gratification over long-term health costs arising from overeating - to an otherwise-neoclassical utility function. Similarly, to account for individuals' decisions to participate in physical activity, Humphreys et al. (2015) incorporate habit formation, time-inconsistent preferences, naivety, and projection bias into an orthodox model of individual choice. In such cases, introducing novel psychological parameters merely produces more complex optimization problems to solve. Thus, rather than conceptualizing actual decision-making processes, such BE accounts remain dependent on Friedman's (1953) instrumentalist 'as-if' defense to justify increasingly unrealistic formulations. To produce

sophisticated behavioral obesity models, individuals are assumed to behave *as if* solving more elaborate constrained optimization problems (Berg and Gigerenzer 2010).

A second, related limitation entails BE deploying interdisciplinary insights to *normatively buttress Homo Economicus as the ideal economic subject*. While the tradition rejects this representation as capturing the cognitive capacities of actual human beings, it endures as the archetype for 'rational' cognition and healthy choices, and a potentially realizable subject to be procured through policy (Infante *et al.* 2016). As Thaler (2015: 251) remarks, '[w]ithout the [NCE] rational framework, there are no anomalies from which we can detect misbehavior', such that 'the real point of behavioral economics is to highlight behaviors that are in conflict with the standard rational model' (Thaler 2015: 261). In turn, rather than discarding *Homo Economicus holus bolus*, BE remains symbiotically linked to this hyper-rational subjectivity: 'I mostly advocate for thinking like an Econ' (Thaler 2015: 72).

Specifically, BE retains Homo Economicus as a normative model of economic subjectivity because it remains within the foundational *theoretical humanist problematic* of neoclassicism. That is, the tradition investigates the institutional conditions of possibility for securing a marketbased social order to reconcile the competing interests of instrumentally rational, self-interested subjects – in this case, given these subjects are characterized by cognitive limitations (Primrose 2017). For neoclassicism, behavior approximating Homo Economicus provides the subjective microfoundation for markets to reconcile individual and aggregate rationality in a Pareto-efficient manner (see: Madra 2017). BE explains such predictions of functioning markets as faltering due to psychological factors hindering individuals' cognitive capacities relative to Homo Economicus, which thereby engender 'irrational' behavior. Accordingly, it bestows central ontological status to the hyper-rational subject in determining the economy as a whole, in that deviations are responsible for market imperfections. For instance, Camerer and Fehr (2006: 47) contend that behavior deviating from hyper-rationality occludes welfare-maximizing outcomes, while sufficient subjects approximating Homo Economicus 'may cause aggregate outcomes to be close to the predictions of a [neoclassical] model that assumes that everyone is rational and self-regarding'. Remedial policies fostering more hyper-rational individual choices are, therefore, required to ensure that markets function effectively (as discussed below).

Hence, contrary to the NCE formulation of efficient markets – presupposing individuals as capable of hyper-rationally pursuing health decisions to maximize their long-term utility – BE comprehends obesity as a market failure correlating with sub-optimal, 'irrational' dietary and exercise choices by individual consumers (Karnani *et al.* 2016). As Thaler and Sunstein (2008: 7) posit, '[w]e do not claim that everyone who is overweight is necessarily failing to act rationally, but we do reject the claim that all or almost all Americans are choosing their diet optimally'. Individual 'cognitive failures' – psychologically determined decision-making 'deviations' from *Homo Economicus* that hinder individuals from effectively comprehending and responding to economic incentives – prompt instrumental, yet boundedly rational, choices that may satiate myopic actors' short-term utility, though fail to satisfy their longer-term health interests (Downs and Loewenstein 2011). Such behavior, in turn, is held as responsible for markets failing to secure Pareto-efficient outcomes: begetting both negative 'externalities' (such as increased public health expenditures to redress proliferating obesity; see: Karnani *et al.* 2016) and 'internalities' (such as detrimentally affecting individuals' future health; see: Herrnstein *et al.* 1993; O'Donoghue and Rabin 2006).

Thus, while dismissing hyper-rationality 'as a positive or descriptive theory' (Angner and Loewenstein 2012: 668) of economic decision-making because real individuals do not resemble *Homo Economicus*, BE pathologizes the former as 'anomalous' to, or 'deviating' from, this norm (Mehta 2013). The implicitly phallogocentric character of the 'dual processes' ontology discussed

above exemplifies this pathologization (Primrose 2017). Challenging the universalist presumptions of hyper-rationality, and explicitly theorizing emotional processes previously denigrated as 'feminine' or 'soft', appears to address calls by feminist political economists to transcend the modernist reason-emotion dualism (Hewitson 1999). Rather than examining emotion and intuition to articulate a more holistic account of decision-making, however, these are denigrated relative to 'rational' qualities (Clouser 2016). Reliance on System 1 when making food and exercise consumption decisions leads to 'irrational' behavior, as biases and heuristics engender 'faulty' perceptions about choice effects, preferences detrimental in the long-term, or choosing damaging options despite 'rationally' preferring otherwise.

In short, such psychological dynamics alienate obese individuals from their latent hyper-rational preferences, leading to sub-optimal health choices (Infante *et al.* 2016). BE, consequently, frequently deploys psychological labels to substantiate negative value assessments about the *moral* character of boundedly rational individuals, and articulate it as subordinate to the normative ideal of *Homo Economicus* (Mehta 2013). For instance, behavioralism juxtaposes 'hot' (emotional, impulsive) to 'cold' (self-controlled, reflexive) systems in processing external sensory cues (Metcalfe and Mischel 1999), with poor food and exercise decisions arising when the former overwhelms the latter (*e.g.* Gilbert et al. 2002; Nordgren *et al.* 2009). Analogously, the tradition distinguishes between those aware of their self-control problems – such as a tendency to overeat – as 'sophisticated individuals', and those who are not as 'naïve individuals' (*e.g.* O'Donoghue and Rabin 2006; Ruhm 2012). This reasoning, conceptualizing observed deviations from hyper-rationality as resulting from psychological deficiencies, effectively presupposes *Homo Economicus* as normatively correct.

Deterministic conceptions of individual agency

BE reflections on obesity also offer *biologically deterministic* accounts of individual subjects, through under-theorizing social phenomena and their contribution to configuring behavior. Instead, the tradition proceeds by recourse to universal psychological characteristics deemed *intrinsic to human beings as individuals*: explaining 'irrational', unhealthy behavior as due to psychology. This generates impoverished conceptions of agency arising from biologically derived cognitive limitations.

Behavioral accounts of pervasive 'irrationality' undoubtedly better represent real health behavior than *Homo Economicus*. To contest the descriptive realism of hyper-rationality, behavioralism employs insights from cognitive psychology – examining the functioning of the cognitive apparatus informing all human beings (Angner and Loewenstein 2012; for a survey, see Petracca 2017). In turn, it analyses common mistakes made by individuals *as members of the same species* when theorizing systemic 'irrationality' (Frerichs 2019). That is, humans are deemed irrational and fallible *by nature*: '[t]hey are not *homo economicus [sic]*; they are *homo sapiens*' (Thaler and Sunstein 2008: 7, emphases added). Thus, 'irrational' dietary and exercise choices are molded by *psychologically determined 'processing errors*': being prone to biases and judgmental 'faults', human cognitive processing capabilities are limited relative to *Homo Economicus*, thereby engendering 'poor' decisions and sub-optimal behavior (Pedwell 2017).

Yet, this formulation is not linked to a more holistic account of the psycho-social complexity of decision-making. Accepting cognitive 'limitations' as *a priori* hard-wired in humans, behavioralism downplays the institutionally embedded character of so-called 'irrational' qualities themselves (Streeck 2010). For instance, as noted above, the tradition frequently attributes causal primacy for obesity to individuals' biases toward 'hyperbolic discounting' when making food consumption

decisions – exaggerating the short-term costs of healthy alternatives while discounting their long-term advantages, such that they eat excessively processed and calorific foods (*e.g.* Scharff 2009). Nevertheless, BE underplays how such 'reckless' food choices are institutionalized within broader socio-cultural processes, and why individuals internalize them over time (Fine *et al.* 2002; Mahoney 2015). To illustrate, individuals' observed tendency to prioritize short-term food consumption preferences is, arguably, constitutive of the dynamics of subject formation promulgated by neoliberal governmentality: appealing to the passions of individuals as citizenconsumers, able to contribute to society via purchasing and consuming the products (including food) of global capitalism (Guthman 2009). In lieu of such considerations, behavioralism exhibits a 'naturalist bias': focusing on supposedly universal qualities of human nature, while leaving unexplored the historically contingent foundations of consumption behavior in contemporary capitalism (Frerichs 2019).

Circumscribed conceptions of the 'social'

Finally, the BE of obesity articulates only limited insights into the broader social context of individual decision-making. In particular, the tradition *adopts a thin social ontology*. Proponents claim to complicate, or even transcend, the abstract methodological individualism of neoclassicism by conceptualizing the 'messy' sociality of individual health decisions (*e.g.* Foster and Frijters 2023). Behavioralists have promulgated 'socially embedded' accounts of individuals (Davis 2015), whereby 'the degree of rationality bestowed to the agents depends on the context being studied' (Thaler 2000: 134). That is, strong external influences configure actors' behavior, as the factors that affect intuitive decisions are highly dependent on the environment in which behavior occurs. For instance, framing effects and reference dependence inform individual decision-making *viz.* food consumption, reflecting the anchoring of choice in particular circumstances, thereby engendering hyperbolic time discounting (individuals tend to undervalue the future) (Richards and Hamilton 2012).

The corresponding notion of the 'social' here is significantly circumscribed, however. BE focuses on investigating decision-making processes from the perspective of individuals, while largely disregarding the need to conceptualize the complex social context within which such decisions are made. Accordingly, first, the tradition renders a limited conception of *environment*, defined as individuals' immediate physical space. Put differently, individual behavior 'is not guided by what they are able to compute, but by what they happen to see at any given moment' (Kahneman 2003: 1469). Second, there is a restricted conception of *social norms*, conceptualized quantitatively as how the majority of agents operate in a given context (Davis 2013). This examines norms as given, rather than theorizing their social construction (Pedwell 2017). The result is a thin social ontology and instrumental treatment of social phenomena – dealing with the latter only to the extent that they affect individual capacity to process information (Frerichs 2019). In turn, assuming economic conduct corresponds to essentialized conceptions of human nature – as largely psychologically determined – leaves subjectivity and preferences themselves largely unexplored (Davis 2011; White 2017).

The BE of obesity, thereby, excludes three rudimentary insights recognized in other critical social sciences (Leggett 2014). First, agents are not conceptualized as unevenly distributed within extant social structures *prior* to decision-making (Frerichs 2019). Yet, myriad studies demonstrate how obesity is determined by political-economic factors beyond individuals' immediate choice environment, such as capitalist systems of food production and distribution (Fine 1998; Bayliss and Fine 2020: Chapter 5). These include, for instance, production structures that beget high profit

margins from processed foods, considerable political power wielded by the food and drinks industry, sizable marketing of highly processed and calorific commodities, inequalities in accessing healthy food options and exercising opportunities, and evolving contemporary practices of mobility (Winson 2013; Clapp 2020). Indeed, even where some recognition is accorded to the impact of factors such as poverty in augmenting the 'cognitive load' of impoverished individuals – thereby engendering sub-optimal food choices and leaving them more susceptible to junk-food marketing (*e.g.* Zimmerman and Shimoga 2014) – these social drivers themselves remain occluded from consideration. Rather than critically examining the structural reasons for impoverished communities being afflicted with disproportionate levels of obesity and diet-related disease (Otero 2018), analytical primacy centers on explaining – and rectifying – the psychological drivers of boundedly rational, unhealthy individual decision-making *within* their given destitute context. The perpetuation of poverty-induced obesity is, thus, naturalized in psychological deficiencies promulgating 'irrational' behavior.

Second, and relatedly, while highlighting interfaces between subjects and their immediate environment, BE disregards the contingency of the latter on historical decisions, contestation, and power relations (Strauss 2009). Guthman (2011), for instance, contextualizes growing obesity within the broader exercise of political-economic power by capital, in conjunction with state-implemented neoliberal reforms, in restructuring the global agri-food system in recent decades as a means to overcome limits to accumulation. Hence:

Fast and convenient food has been a triply good fix for American capitalism. It entails the super-exploitation of the labor force in its production, it provides cheap food to support the low wages of the food and other industries by feeding their low-wage workers, and it absorbs the surpluses of the agricultural economy, soaking up [...] the excesses of overproduction to keep the farm sector marginally viable

(Guthman 2011: 177).

Accordingly, purchasing inexpensive, calorie-rich food cannot be reduced to an 'irrational' individual choice, as this disregards how the 'current policy environment is a result of political choices, not consumption choices' (Guthman 2011: 194).

Third, BE fails to develop an ontologically thick account of social norms, with the latter conceptualized merely as the aggregation of individual choices (*e.g.* McFerran 2016). It consequently underplays how ideational structures prefigure and influence norms, such as those manifest as ideological messages or traditional values (Žižek 2012 [1994]; Pedwell 2017). Extending on the case of hyperbolic discounting and neoliberalism discussed above, for example, BE deems public health messages on the health risks associated with overeating and a sedentary lifestyle to have been disregarded by obese individuals due to their present bias, in conjunction with factors such as low willpower (*e.g.* Hunter *et al.* 2018). Nevertheless, this focus on restrained food consumption fundamentally conflicts with pervasive, entrenched socio-cultural injunctions in contemporary capitalism – manifest in platforms ranging from corporate advertising to governmental injunctions – impelling consumption as the locus of neoliberal citizenship (Guthman 2009; Cargill 2015).

In disregarding such reflections, BE ignores the broader systemic features and psycho-social dynamics of capitalism when comprehending the complex drivers of obesity. In turn, it posits *reductionist accounts* of this phenomenon. Echoing NCE, behavioralism remains underpinned by methodological individualism (Dold *forthcoming*): confining the study of complex political-economic phenomena to formulating naturalistic explanations of individual decision-making processes through psychological reductionism (Frerichs 2019). In particular, obesity is narrowly

conceived as an *economic problem* of individual 'irrational behavior' engendered by actors' limited capacity to comprehend and respond to economic incentives in markets. As noted above, myopic individuals are presumed to prioritize short-term pleasure derived from consuming junk-food and maintaining a sedentary lifestyle over the long-term benefits of a balanced diet. Individual cognition is, thereby, pathologized as responsible for undesirable 'internalities' and 'externalities', while naturalizing structural determinants of ill-health in global capitalism associated with class, inequality, and corporate power (Holt-Giménez 2017: esp. Chapter 5; Clapp 2020).

Wink, wink, nudge, nudge - do no more?

Behavioral reflections on obesity usefully highlight the narrowness and deficiencies of neoclassical accounts of the phenomenon centered on presumptions of hyper-rationality. Contrary to the latter, BE introduces insights from psychology to demonstrate that choices about food and exercise are not undertaken by atomistic subjects akin to Homo Economicus - 'lightning calculator[s] of pleasures and pains' (Veblen 1898: 398-9). Rather, such decisions are made by boundedly rational individuals influenced by external factors, and who may repeatedly miscalculate in pursuing their health objectives. Nevertheless, as articulated above, the potential of BE to contribute to comprehending the political economy of obesity remains circumscribed by its enduring subsumption within NCE and axiomatic focus on individual hyper-rationality. Accordingly, the tradition is unable to provide more holistic understandings of health decision-making, nor the broader social forces beyond individuals' immediate choice environment that determine health. Returning to the outré tale of Gogol's Wife, BE reflections on obesity thereby offer less fundamentally novel economic accounts of obesity, than another effort to postpone discarding neoclassicism (see: Madra 2017): introducing marginal psychological modifications to adorn it with a more palatable outward appearance, while remaining within the bounds of mainstream epistemological 'respectability'. Such efforts to reflate neoclassicism lopsidedly, rather than abandoning its remains to the fire, ultimately contribute little to a critical political economy of obesity.

Yet, this reading of BE also points to its shortcomings as a foundation for informing political measures to help redress obesity.⁹ As outlined above, contrary to its hypostatization in NCE, BE recognizes that the hyper-rationality of Homo Economicus does not represent real individual decision-making. Accordingly, policy measures depending on channeling individuals toward healthier choices via incentives within competitive markets will be limited in effectiveness (Chance *et al.* 2016). In turn, BE transcends the limited remedial role for the state within NCE; instead, advocating that this institution adopt a more explicit public health function in correcting for pervasive market failures that produce poor health outcomes (Karnani et al. 2016; cf. Leggett 2014). The policy should ameliorate - or circumvent - the cognitive limitations and pernicious social influences engendering individuals' 'irrational' food and exercise consumption choices within markets. This is especially so given the latter 'not only provide us with what we want, as long as we can pay for it', but 'also tempt us into buying things that are bad for us, whatever the costs' (Akerlof and Shiller 2015: n.p.). The most prominent policy rationale elaborating this case is that of 'libertarian-paternalism' (LP): promulgating minor amendments to the immediate institutional environment (the 'choice architecture') wherein individuals instrumentally pursue their interests, to 'nudge' their behavior in more 'rational', welfare-enhancing directions, albeit without curtailing their freedom to choose (Thaler and Sunstein 2008).

In acknowledging the systemic character of boundedly rational individual decision-making, prompting pervasive anomalous behavior deviating from individuals' own self-interest, BE thereby advocates that such 'anomalies' be harnessed to 'nudge' subjects toward healthier choices. In doing

so, the tradition continues to position *Homo Economicus* as the normative *ideal* for decision-making, as well as a subjective condition *potentially realizable* through policy (Primrose 2017). Grounded in the logic of what Hausman (2012: 102) labels 'preference purification', BE seeks to reconstruct the preferences that *would* have informed the decision-making of hyper-rational individuals had their cognition not been 'obstructed' by psychological factors, while establishing realization of such reconstructed preferences as a normative benchmark for policy-making (Infante *et al.* 2016). That is, commencing from the pathologization of bounded rationality (as outlined above), BE initiatives attempt to recreate the preferences of *Homo Economicus* through isolating this norm from distorting psychological influences. In turn, the tradition designs policies to enable boundedly rational individuals to make decisions in accordance with these preferences *as if* they were *Homo Economicus* by circumventing 'any factor that significantly alters the behavior of [real] Humans, even though it would be ignored by [hyper-rational] Econs' (Thaler and Sunstein 2008: 8).

This epistemological foundation begets a circumscribed policy agenda to tackle obesity, centered on the unhealthy *individual* as an 'irrational' subject requiring correction, while retaining an asocial and ahistorical conception of this subject as neither enabled nor constrained by social structures beyond their immediate choice environment (Strauss 2009; Pedwell 2017).¹⁰ More specifically, BE abstracts obesity from the 'messiness' of its multiple political-economic determinants. Instead, as noted above, it is depoliticized as a primarily *economic problem* of individuals' inexorably limited capacity to comprehend and respond to economic incentives which, in turn, begets 'poor', unhealthy choices within markets (Thaler and Sunstein 2008: 8). Consequently, the objective of policy is less redressing obesity *per se*, than correcting for decision-making 'anomalies' held to precipitate this problem: proposing measures augmenting individuals' capacity to 'rationally' respond to economic incentives in markets in a manner akin to *Homo Economicus* (Primrose 2017).

The potential role of the state in redressing obesity is, correspondingly, reduced to yet another factor among a plurality that influences individual health behavior (Leggett 2014). By isolating 'irrational' decision-making by individual citizen-consumers as driving obesity, the locus of state responsibility shifts from implementing holistic public health initiatives, toward developing micropolitical interventions to steer individuals toward more 'rational' self-government within a given context (Fox and Klein 2020). Smith and Toprakkiran (2019), for instance, demonstrate that the plethora of nudge policies instigated to address obesity in the United Kingdom has buttressed extant neoliberal governance regimes by framing this complex socio-ecological problem as one of individual 'responsibilization'. However, in lieu of more capacious public health measures transforming the psycho-social and broader political-economic drivers of obesity existing *prior to* and *following* the event space of a particular nudge, amendments to individuals' proximate choice environment often fail to secure healthy habits that endure beyond this particular context (Pedwell 2017)

Finally, the behavioralist pathologization of individual bounded rationality occludes consideration of policy measures to remedy individual and social dysfunction through redressing the overlapping material sources of poor health. Rather, as noted above, the BE of obesity naturalizes the structural determinants of obesity in contemporary capitalism associated with the prevailing global corporate agri-food regime, class, inequality, and corporate power (Guthman 2011; Winson 2013; Otero 2018). Absent historically specific considerations of the latter, the politics of obesity is framed as a *technical* matter: requiring mobilization of micro-level strategies to bolster individuals' capacity to make 'better choices' (Thaler and Sunstein 2008: 8), and realize their presumed latent (hyper-)rational preferences for healthier options *within* their extant political-economic conditions (Santos and Rodrigues 2014; Mahoney 2015). These measures range, for instance, from shifting the position of sweets at supermarket checkouts below eye level, to introducing innovations to

restructure individuals' relations with food such as tray-less cafeterias and advanced ordering of meals (Downs and Loewenstein 2011; Chance *et al.* 2016). By framing such nudge initiatives as universal, 'catch-all' solutions to 'society's major problems' (Thaler and Sunstein 2008: 9) that do not necessitate 'changing the existing social and political structures' (Banerjee and Duflo 2011: 271), BE steers clear of contesting and reconfiguring the historically specific structural roots of poor nutrition or lack of exercise in the dynamics of capitalism. Rather, it fosters a largely decontextualized, economistic emphasis on buttressing individuals' rational consumption behavior via marginally amending their proximate choice environment (Fine *et al.* 2016).

As a means to both comprehend and attempt to alleviate global obesity, BE evidently follows its neoclassical forerunner in remaining markedly deficient. Political economists seeking to grasp this phenomenon would be better served by re-engaging with, and extending, other critical traditions discussed within this volume, while casting out behavioralism to join Caracas and neoclassicism amidst the proverbial flames.

Notes

- 1 Behavioralism encompasses both 'old' and 'new' strands (Sent 2004). The former, pioneered by Simon (e.g. 1955) and developed within the 'frugal heuristics' approach (e.g. Gigerenzer 2015), supplants atomistic hyper-rationality with holistic, evolutionary accounts of rationality and individuality. The 'new' school arising from Tversky and Kahneman (1973, 1974) retains the atomistic neoclassical conception of individuals, albeit revised to embed agents within an ahistorical and non-developmental social ontology. This newer iteration constitutes the mainstream of behavioral research (Heukelom 2014), and is the most politically influential manifest in the institutionalization of governmental 'nudge' research units around the world (Whitehead *et al.* 2017). Accordingly, this chapter focuses on the latter strand to assess the extent to which this tradition marks a genuine break with neoclassicism (see: Madra 2017).
- 2 The arguments in this chapter are developed in relation to the behavioral tradition more broadly in Primrose (2017, 2022).
- 3 It is beyond the scope of this chapter to engage in debates over the appropriate means to measure obesity. However, for pertinent critical reflections on this theme, see: Guthman (2011) and Otero (2018).
- 4 While not germane to the present discussion, see Schorb (2022) for a useful account of why it is problematic to refer to burgeoning global obesity levels as an 'epidemic'.
- 5 In order to distinguish it from the philosophical principle of 'rationality' holding that actions and opinions should be grounded in reason this chapter designates the NCE conception of rationality as 'hyper-rationality' (Shaikh 2016: 78). This step circumvents the neoclassical practice of juxtaposing the latter as 'perfect' and real-world cognition as 'imperfect', as well as similar practices within BE scholarship (as discussed below).
- 6 This explanation echoes the earlier, unsettling account of Becker and Murphy (1988), in which they contend that heroin produces sufficient dopamine that, for some individuals, developing an addiction to the drug constitutes a rational decision in which the utility secured outweighs its immense health and pecuniary costs.
- 7 Indeed, some neoclassical theorists posit that, in spite of its obvious implications for long-term health, rising obesity normatively justifies the 'free-market' processes they attribute to contemporary capitalism. For instance, Cutler *et al.* (2003: 116) posit that '[w]e suspect that most people are better off from the technological advances of mass food preparation, even if their weight has increased'. Similarly, Finkelstein and Zuckerman (2008: 104) assert that 'increasing rates of obesity are a natural response to a changing world' and, thus, 'may be more an indicator of the success, as opposed to a failure, of markets' to supply the goods and services increasingly demanded by consumers.
- 8 This is a necessarily brief and partial overview of BE. For more in-depth considerations of the conceptual intricacies of the tradition and its history, see: Heukelom (2014); and Earl (2022).
- 9 It is not possible to address the plethora of political limitations afflicting BE in this chapter. However, for particularly discerning political-economic reflections on this theme especially in relation to neoliberalism see: Leggett (2014); McMahon (2015); Fine *et al.* (2016); and Pedwell (2017).
- 10 This limitation has recently been recognized in contributions by some prominent BE practitioners themselves, such as that of Chater and Loewenstein (forthcoming).

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A LOPSIDED REFLATION

The limited contribution of behavioral economics to the political economy of obesity

David Primrose

Except among ardent scholars of literary surrealism, Tommaso Landolfi's (1963) short story, *Gogol's Wife*, has been largely consigned to the dusty corners of university library shelves. Given its offbeat narrative, this is hardly surprising. Briefly, the tale presents itself as a chapter derived from a long-lost biography of the enigmatic Nineteenth Century Russian author, Nikolai Vassilevitch Gogol, as recounted by his Boswell-like biographer, Foma Paskalovitch. After stating at the outset that he possesses previously unknown details concerning Gogol's mysterious private life, Paskalovitch reveals how he learnt that Gogol's 'wife' was actually a life-size rubber balloon named Caracas, who exhibited the physical profile of a woman. Claiming to be the only person besides Gogol to have seen Caracas, Paskalovitch chronicles how the latter developed her own personality, spoke when asking to use the toilet, and even inexplicably contracted syphilis. The account concludes by describing the disturbing events of the couple's silver anniversary, during which Gogol becomes enraged, inserts a bicycle pump into Caracas, and inflates her until she explodes, before throwing the rubber remains into the fire.

With its Kafkaesque narrative, Gogol's Wife often makes for unnerving reading and, indeed, is sometimes just downright weird. Particularly striking in Paskalovitch's exposition, though, is his befuddlement over Caracas' physical transformations alongside her seemingly consistent disposition: 'I cast some doubt on the propriety of considering Caracas as a unitary personality; nonetheless I myself could not quite [...] free myself of the impression that [...] this was fundamentally the same woman' (Landolfi 1963: 9). Depending on the level of air pressure filling out her anatomy, Caracas could be fashioned into vastly different feminine appearances – each unique, since she could not revert to prior shapes once deflated. Gogol also ornaments Caracas with different wigs and shades of makeup according to his desires. Periodically, Gogol falls in love with a particular form and preserves it until his affection fades. He then deflates the balloon and begins anew. According to Paskalovitch, these efforts to modify Caracas reflect Gogol's anxious endeavor to obscure common personality traits across her different forms that increasingly infuriate him and, thus, make the balloon more superficially appealing. Thus, he ruminates 'how can I have stated above that it was Nikolai Vassilevitch's will which ruled that woman? In a certain sense, yes, it is true; but it is equally certain that she became no longer his slave but his tyrant' (Landolfi 1963: 3).

This chapter contends that Gogol's interminable rejuvenation of Caracas' appearance is comparable to attempts by behavioral economists (BE)¹ to revitalize the seemingly limp and lifeless foundations of neoclassical economics (NCE) – in this case, when applied to questions of health.² Focusing on BE scholarship addressing the drivers of burgeoning global obesity, the chapter demonstrates that the tradition selectively incorporates acumen from psychology primarily to refashion NCE. That is, rather than deploying such interdisciplinary insights to cast the rancid corpse of neoclassicism into the fire *holus bolus*, BE introduces them to lopsidedly 'reflate' the latter via superficial modifications to its problematic conceptual and normative core – particularly its account of individual decision-making as axiomatically hyper-rational. Through this symbiotic relationship with NCE, BE reproduces – albeit, in novel forms – many of its inadequacies, while also engendering pertinent new limitations, which function to reduce the complex social determinants of obesity to narrow economic problems of 'irrational' individual choice. Accordingly, *pace* self-representations of the tradition as iconoclastically 'misbehaving' (Thaler 2015) within the economics discipline, the chapter concludes that behavioralism fails to provide the basis for more a more capacious critical political economy of obesity.

This case is developed across four sections. First, the chapter briefly introduces the contours of contemporary global obesity, and outlines neoclassical efforts to conceptualize its causes and offer ameliorative policy recommendations. Second, it overviews BE reflections on obesity, which explicitly posit themselves against the conceptual and normative limitations of such neoclassical formations. Third, while recognizing the advancements of BE on the latter, the analysis critically reflects on its limitations for informing a critical political economy of obesity. It does so along three primary axes, noting its (i) continuities with NCE; (ii) deterministic formulation of individual agency; and (iii) constricted social ontology. The chapter concludes by reflecting on the need to articulate a more holistic political economy of global obesity than that offered by BE, with particular attention accorded to transcending the individualizing orientation of the tradition when articulating political measures to redress this issue.

Global obesity and neoclassical economics

According to the World Health Organization (WHO 2021), obesity constitutes the accumulation of abnormal or excessive levels of fat that engenders substantial health risks. Specifically, an individual with a body mass index (BMI) exceeding 25 is categorized as 'overweight', while a BMI over 30 leads one to be deemed 'obese'.³ Utilizing this definition, it has become axiomatic within mainstream public health scholarship and political discourse, since at least the mid-1990s, that the global political economy is confronting a burgeoning obesity 'epidemic' (James 2008).⁴ Indeed, the contemporary evidence that international obesity rates have reached crisis levels is damning. According to the latest WHO (2021) estimates, the proportion of the global population classified as obese has nearly tripled since 1975, with over 1.9 billion adults now overweight (39 percent of the global population over 18 years of age), including 650 million deemed obese (13 percent). Moreover, with the exception of those in sub-Saharan Africa and Asia, the majority of the world's population now resides in countries where health problems associated with excess weight and obesity lead to more deaths than complications arising from being underweight. Finally, 340 million children and adolescents between 5 and 19 years of age, and 39 million children under five years old, are overweight or obese. In this respect, obesity now constitutes a substantial public health challenge in both the Global South and North (WHO 2000, 2021). Such trends are associated with an increased risk of chronic conditions such as type 2 diabetes, hypertension, and coronary artery

disease (Kopelman 2007), thereby engendering a considerable loss of wellbeing and an increased burden on public health systems (Cawley and Meyerhoefer 2012).

To comprehend the drivers of this global health predicament and help inform appropriate policy responses, neoclassical economists have sought to conceptualize its roots in deliberate increased caloric consumption and reduced physical activity by individuals (see: Cawley 2011; Huckfeldt et al. 2012; Capps et al. 2018). In doing so, these theorists have formulated explanations using microeconomic theory, centered on modeling the 'rational' decision-making processes of individuals in their food consumption and exercise choices. For neoclassicism, all individuals axiomatically approach decision-making in a universally hyper-rational manner⁵ – formalized in the notion of 'constrained optimization', whereby actors seek to maximize (or minimize) an objective according to particular constraints (such as budgets or time). This, in turn, engenders common responses through utility-maximizing behavior (cf. Hollis and Nell 1975; Davis 2011). Within this account, individuals - embodied in the subjective avatar of Homo Economicus, or 'rational economic man' – possess stable, well-defined, coherent preference sets, manifesting in their choices. They are, thereby, not cognitively impeded in assessing given alternatives, nor hindered by problems of self-control that would impair the identification and pursuit of optimal choices. These attributes equip individuals to pursue their self-interest and realize subjective preferences through market interactions - which, in turn, provide information and incentives to bolster choices, thereby maximizing individual utility and social welfare (the sum of individual utilities) (cf. Sen 1977).

Utilizing this conceptual framework, neoclassical theorists have explained rising obesity levels by modeling the consumption decisions of utility-maximizing individuals (see: Finkelstein and Hoerger 2010; Huckfeldt *et al.* 2012; Capps *et al.* 2018). Specifically, obesity is grasped as an outcome of hyper-rational choices, reflecting individuals' readiness to compromise – given proper incentives – their future health for present gratification associated with uninhibited food consumption and less exercise.⁶ For instance, assuming that food consumption decisions are motivated by (i) maximizing immediate utility from eating, at the lowest time and pecuniary costs, and (ii) eating in a manner likely to preserve their health capital, individuals weigh immediate pleasures and costs against future rewards and pain through a discount factor, such that their behavior is time-consistent. For any given individual, the optimal amount of food consumption, physical activity, and other diet-related behaviors transpire when the marginal benefit of the last unit consumed (such as the last bite of food taken) equals its marginal cost. Thus, certain individuals will favor unhealthy foods over healthy alternatives, up to the point where the marginal satisfaction derived from consuming the former corresponds to the discounted marginal dissatisfaction of declining future health or bulkier bodily dimensions (Etilé 2019).

Given the difficulties experienced by many individuals in maintaining a healthy weight, NCE holds that the optimal decision for many individuals may be to engage in a lifestyle that leads to excess weight. Put differently, rational, utility-maximizing individuals – having balanced all relevant costs and benefits – believe it is simply too economically costly to weigh less. In turn, they purposively choose a lifestyle that leads to accumulating excess weight (Philipson and Posner 2003; Lakdawalla and Philipson 2009). Thus, many neoclassical accounts posit that technological developments have led to relative price changes since the 1970s – especially falling food prices and declining time costs associated with food production due to the increasingly pervasive adoption of microwaves and food processors. These have, in turn, incentivized rational decisions favoring greater food consumption and weight gain (Cutler *et al.* 2003; Finkelstein and Zuckerman 2008; Lakdawalla and Philipson 2009).

This formulation engenders three generic forms of policy response to address obesity. First, for some (e.g. Murphy 2006), obese individuals are obese by choice – having rationally determined

that curtailing food consumption or escalating exercise would not vindicate the benefits of subsequent weight loss. Accordingly, public health policies are unnecessary (Philipson and Posner 2008): obesity and other diet-related diseases are individual concerns such that, *a priori*, the market will efficiently supply remedial health inputs.⁷ For instance, deteriorating individual health stemming from increased junk-food consumption will engender increases in subjective value accorded to weight- and diet-control behavior, thereby raising demand for exercise, functional food, and dieticians (*cf.* Etilé 2019). For others, public policy may be used to endow consumers with superior information and/or modify relative prices (*e.g.* via taxes) to incentivize healthier eating patterns or promote exercise. Therein, the former measure is justifiable even in lieu of externalities (obese individuals detrimentally affecting others), in that providing better information to consumers possessing only imperfect information should bolster their welfare. The latter measure is only warranted in the presence of externalities, as altering prices in their absence will undermine economic welfare (see: Finkelstein and Hoerger 2010; Cawley 2011).

Behavioral economic interventions into obesity

The neoclassical account above is premised on representing individuals as hyper-rational economic subjects. In this formulation, individuals do not make systematic errors in their decisionmaking, imperfect self-control does not impede their ability to realize their preferences, and they inexorably act in their own self-interest. Conversely, BE has sought to utilize insights from cognitive psychology to rebuff the presupposition that individuals always make decisions in a manner analogous to *Homo Economicus*. Instead, the tradition seeks to 'increase the explanatory and predictive power of economic theory by providing it with more psychologically plausible foundations' (Angner and Loewenstein 2012: 642; *cf.* Heidl 2016).

Specifically, behavioralism advances empirical evidence derived from economic experiments to conceptualize more interdisciplinary, realistic accounts of actual economic behavior as deviating from hyper-rational precepts due to myriad psychological and contextual considerations beyond the explanatory scope of NCE (Earl 2022: Chapter 1; Foster and Frijters 2023). While sharing with the latter the assumption that individuals formulate optimal choices based on their preferences between available options (Laibson and List 2015), BE does not present a logico-deductive theory of choice engendering Homo Economicus. Instead, real-life economic decision-making is inexorably defined by its boundedly rational character (Thaler 2015: 23-4): instrumental in its orientation toward constrained optimization, yet refracted through psychological dynamics and elements in their social milieu that would be immaterial to the neoclassical subject (Camerer and Loewenstein 2004). In turn, these considerations – cynically labeled by Thaler (2015: 9) as 'supposedly irrelevant factors' - engender systemic sub-optimal behavioral outcomes, or 'anomalies' (Thaler 1987), diverging from Homo Economicus. Thus, individual decision-makers do not consistently order preferences, poorly judge probabilities, fail to address risk 'rationally', regularly commit multiple reasoning errors and, more generally, make decisions guided by cognitive biases, heuristic shortcuts, habits, and social context (Bickley and Torgler 2023).

In articulating this explanation, BE frequently posits that the human brain comprises 'dual systems' of thought – 'automatic' (System 1) and 'reflective' (System 2) – the properties of which shape real-world decision-making (Kahneman 2003; Thaler and Sunstein 2008). Within this framework, decision-making is theorized as a process in which each system concentrates on addressing differing cognitive and deliberative tasks. System 1 is formulated as rapid, instinctual, and emotional and, thus, capable of managing straightforward precepts and stimulation beyond contemplation. In contrast, System 2 is deemed better at handling concepts and deliberative behaviors

considered rule-bound, deductive, and logical, as it is described as controlled, effortful, and neutral (Kahneman and Frederick 2002). While neoclassicism assumes that individuals possess complete access to, and utilize, the latter, BE draws on empirical evidence to theorize that the former underpins decision-making in practice. Individuals depend on the automatic system because they are boundedly rational: possessing limited capacity to attend to, process, and recall the contextual information necessary to make a 'rational' choice. Thus, rather than processing complete information in System 2 in a manner corresponding to *Homo Economicus*, individuals have recourse to biases and heuristics, while choices are also shaped by the form in which information is presented (framing effects) (Roberto and Kawachi 2016). Such factors operate in System 1 to simplify and distort information, thereby leading actors to seemingly expedient – albeit not always prudent – choices based on this imperfect information (Kahneman 2003).⁸

BE extends this conceptual framework to identify and theorize why, despite recognizing the adverse health effects of poor diets, smoking, weight gain, and lack of exercise, obese individuals continue to engage in these behaviors (*e.g.* Epstein and Saelens 2000; Downs and Loewenstein 2011; Bragg and Elbel 2017). While acknowledging other factors hindering adoption of optimal health choices – such as insufficient time, financial resources, or personal motivation – BE prioritizes conceptualizing processes operating *beyond* individuals' conscious awareness that engender sub-optimal choices deviating from *Homo Economicus* (Pastore *et al.* 2020). Following Chance *et al.* (2016), at least five such factors may be identified as leading to obesity, in spite individuals' instrumental orientation toward constrained optimization.

First, *individuals are cognitively geared toward impulsive choices* (Chapman and Elstein 1995). As noted above, BE conceptualizes decision-making as arising from interactions between 'dual processes' within the brain. When determining whether to eat ice-cream, for instance, System 1 engenders an approving automatic impulse because it operates rapidly in response to salient emotional stimuli. Conversely, deliberating on the sugar and calorie content of the ice-cream relative to its potential gratification necessitates engaging System 2. Because healthy choices such as eating broccoli or regularly running are often less intuitively appealing than eating ice-cream, System 1 tends to favor the latter unhealthy option. While System 2 esteems healthy choices benefiting individuals in the long-run, it requires effort to be engaged and, thus, is often not utilized for apparently trivial, quotidian decisions such as those relating to food or exercise (Pfeffer and Strobach 2022). Accordingly, System 1 is privileged, thereby leading to impulsive decisions (Cobb-Clark *et al.* 2022).

Second, *individuals are often too preoccupied to reach rational choices*. When actors undertake multiple tasks simultaneously, or are distracted by concerns such as material impoverishment, the limited cognitive processing power of the brain is overwhelmed by competing influences (Mani *et al.* 2013). This, in turn, begets a form of 'cognitive overload', such that the brain is unable to engage System 2 to regulate the more impulsive preferences favored by System 1 (Mullainathan and Shafir 2013). When placed under stress or confused, individuals are consequently more likely to engage in less reasoned, impulsive behavior – such as eating pre-packaged biscuits rather than preparing fruit salad while editing a book – without considering the potential longer-term consequences of doing so (Ward and Mann 2000).

Third, due to the cognitive drain on finite cognitive resources associated with making System 2 decisions, *individuals are often marked by limited willpower* (Hagger *et al.* 2010). Once their limited pool of mental faculties – or self-control – has been temporarily depleted, individuals may revert to simpler, System 1 decision-making processes. Constantly resisting the impulse to eat easily accessible sweets at work while dieting, for instance, diminishes individuals' capacity to resist the next impulse, such as eating cake at a later birthday party (Baumeister *et al.* 1998; Hofmann *et al.* 2012). Due to the plethora of food choices confronting individuals when already cognitively

depleted by hunger or fatigue, short-term desire and external influences – such as the framing effects of food advertisements – easily overwhelm efforts at self-control and leads to sub-optimal food and exercise choices (de Haan and van Veldhuizen 2015).

Fourth, *individuals exhibit present-biased preferences*. That is, individual thinking tends to overemphasize immediate costs while discounting long-term benefits – a process known as 'hyperbolic discounting' (Laibson 1997; O'Donoghue and Rabin 2000). Such preferences can create difficulties when attempting to diet and exercise, or even lead individuals to refrain from these pursuits altogether, by exaggerating their immediate costs relative to their future benefits. For example, spending time preparing a fruit salad over eating a bag of chips is costly now, while the potential future benefit (avoiding health problems associated with excess consumption of trans-fats and salt) lies in the future, such that individuals may tend toward the unhealthy option (Richards and Hamilton 2012). Furthermore, individuals expect that they will adopt healthier decisions in the future; albeit, when the future arrives, unhealthy decisions are again made by their present-biased orientation. For instance, in one experiment, employees who had just eaten lunch were asked to nominate which snack they wished to receive the following week: fruit or junk-food. Most chose the fruit. Yet, upon delivery, the record of the planned choices was 'lost', and employees were again asked to choose their snack, leading to only 20 percent preferring the fruit (Read and van Leeuwen 1998).

Fifth, *individuals often make decisions automatically*, particularly in response to contextual influences. Contrary to the NCE assumption that individuals inexorably choose food options to maximize their utility, regardless of how the options are presented, BE demonstrates that presentation of options influences decision-making. Individuals often stick with extant or default options, even when superior, healthier alternatives are available – known as the 'status quo bias' (Kahneman 2003). For instance, restaurant meals often come with a 'default' setting, such as side dish, unless it is deliberately unselected when ordering. By functioning as an external cue influencing how much consumers eat and when to cease, such default larger portion sizes encourage increased caloric intake (Wansink 2004). Similarly, repeated cues over time can trigger consistent behavior that solidifies into habits that are hard to break. For example, especially when experiencing cognitive overload from activities such as working or watching television, individuals may mindlessly repeat learned unhealthy behaviors such as finishing the food on one's plate, or snack during commercial breaks (Wansink 2016).

Such BE reflections on obesity evidently challenge the hyper-rational axioms of NCE theory, and present an alternative conception of the subject to that represented in *Homo Economicus*. This is encapsulated by Thaler and Sunstein's (2008: 24) dichotomy between the 'Econs' of neoclassicism and the 'Humans' inhabiting reality. While the former constitute hyper-rational utility maximizers replete with a given utility function, the latter are more shambolic in their decision-making – more akin to the Homer Simpson 'lurking somewhere in each of us' than to *Homo Economicus*. Even when strategic and purposeful, humans make repeated miscalculations in pursuing their health objectives, and are influenced by external factors. Accordingly, *Homo Sapiens* are cognitively incapable of approximating *Homo Economicus*. As discussed in the concluding section, this conclusion also has pertinent implications for formulating novel policy measures to redress obesity.

The shortcomings of behavioral economics for the political economy of obesity

Nevertheless, the tradition offers only limited acumen for formulating a more capacious political economy of obesity in three primary respects.

Continuities with neoclassical economics

BE scholarship on obesity frequently juxtaposes its own conceptual research on the topic with the problematic presuppositions informing neoclassical accounts (*e.g.* Chance *et al.* 2016; Bragg and Elbel 2017). Behavioralism is held to engender greater 'realism': analyzing the psychological underpinnings of decision-making by real-world individuals, and examining how this diverges from the axiomatically hyper-rational *Homo Economicus*. Concomitantly, contra the monist and deductively derived methodology of neoclassicism, BE fuses interdisciplinary insights from psychology with economic analysis to nourish a more complex account of food and exercise choices (Bickley and Torgler 2023).

However, beyond the confines of the orthodoxy, such 'innovations' appear less groundbreaking. In practice, BE remains constrained by its continued subsumption within neoclassicism: deploying psychology to *buttress* the orthodoxy rather than nourish interdisciplinary, non-neoclassical accounts of health decision-making (Tzotzes and Milonakis 2021). This is explicable by considering BE as constitutive of a broader epistemological trend within economics: that of 'reverse economics imperialism' (see: Fine and Milonakis 2009). This entails NCE bolstering itself and expanding its scope via importing tools sequestered from disciplines such as psychology, sociology, and politics, and then incorporating them within its conceptual contours (Crespo 2017). Framed in this way, BE has participated in such imperialistic practices through selectively utilizing psychology to revise and augment, rather than transcend, neoclassicism (Davis 2013, 2018). This, in turn, engenders two primary shortcomings.

The first is *limited increases in descriptive realism*. Amalgamating psychology within neoclassicism undermines BE's posited objective of explaining empirical evidence deviating from hyperrationality. Rather than necessitating 'wholesale rejection' of NCE 'based on utility maximization, equilibrium, and efficiency' (Camerer and Loewenstein 2004: 3), behavioral anomalies discovered through experiments 'are used as inspiration to create alternative theories that *generalize existing models*' (Camerer and Loewenstein 2004: 7, emphasis added). That is, BE holds that bolstering its psychological foundations will improve neoclassicism *on its own terms* through enabling increasingly sophisticated theory, superior predictions, and more comprehensive policy recommendations (Rabin 2002).

The result is an incongruous methodology. Behavioralism holds that psychological experimental results will advance economic analysis when filtered through models allowing for phenomena diverging from hyper-rationality. Yet, 'domesticating' (Davis 2008: 363) psychological insights within neoclassicism does not engender greater realism. Instead, BE generalizes the axiom that all behavior is oriented around constrained optimization, while incorporating slight modifications to account for biases, dysfunctions, and heuristics that lead to unhealthy food and exercise choices (White 2017) – what Tzotzes and Milonakis (2021: 179) term 'rationalizing irrationality'. For example, in explaining obesity as arising from a present bias informing individuals' decisionmaking, Richards and Hamilton (2012) and Courtemanche et al. (2015) affix hyperbolic discount functions - disproportionately weighting individuals' concern for short-term gratification over long-term health costs arising from overeating - to an otherwise-neoclassical utility function. Similarly, to account for individuals' decisions to participate in physical activity, Humphreys et al. (2015) incorporate habit formation, time-inconsistent preferences, naivety, and projection bias into an orthodox model of individual choice. In such cases, introducing novel psychological parameters merely produces more complex optimization problems to solve. Thus, rather than conceptualizing actual decision-making processes, such BE accounts remain dependent on Friedman's (1953) instrumentalist 'as-if' defense to justify increasingly unrealistic formulations. To produce

sophisticated behavioral obesity models, individuals are assumed to behave *as if* solving more elaborate constrained optimization problems (Berg and Gigerenzer 2010).

A second, related limitation entails BE deploying interdisciplinary insights to *normatively buttress Homo Economicus as the ideal economic subject*. While the tradition rejects this representation as capturing the cognitive capacities of actual human beings, it endures as the archetype for 'rational' cognition and healthy choices, and a potentially realizable subject to be procured through policy (Infante *et al.* 2016). As Thaler (2015: 251) remarks, '[w]ithout the [NCE] rational framework, there are no anomalies from which we can detect misbehavior', such that 'the real point of behavioral economics is to highlight behaviors that are in conflict with the standard rational model' (Thaler 2015: 261). In turn, rather than discarding *Homo Economicus holus bolus*, BE remains symbiotically linked to this hyper-rational subjectivity: 'I mostly advocate for thinking like an Econ' (Thaler 2015: 72).

Specifically, BE retains Homo Economicus as a normative model of economic subjectivity because it remains within the foundational *theoretical humanist problematic* of neoclassicism. That is, the tradition investigates the institutional conditions of possibility for securing a marketbased social order to reconcile the competing interests of instrumentally rational, self-interested subjects – in this case, given these subjects are characterized by cognitive limitations (Primrose 2017). For neoclassicism, behavior approximating Homo Economicus provides the subjective microfoundation for markets to reconcile individual and aggregate rationality in a Pareto-efficient manner (see: Madra 2017). BE explains such predictions of functioning markets as faltering due to psychological factors hindering individuals' cognitive capacities relative to Homo Economicus, which thereby engender 'irrational' behavior. Accordingly, it bestows central ontological status to the hyper-rational subject in determining the economy as a whole, in that deviations are responsible for market imperfections. For instance, Camerer and Fehr (2006: 47) contend that behavior deviating from hyper-rationality occludes welfare-maximizing outcomes, while sufficient subjects approximating Homo Economicus 'may cause aggregate outcomes to be close to the predictions of a [neoclassical] model that assumes that everyone is rational and self-regarding'. Remedial policies fostering more hyper-rational individual choices are, therefore, required to ensure that markets function effectively (as discussed below).

Hence, contrary to the NCE formulation of efficient markets – presupposing individuals as capable of hyper-rationally pursuing health decisions to maximize their long-term utility – BE comprehends obesity as a market failure correlating with sub-optimal, 'irrational' dietary and exercise choices by individual consumers (Karnani *et al.* 2016). As Thaler and Sunstein (2008: 7) posit, '[w]e do not claim that everyone who is overweight is necessarily failing to act rationally, but we do reject the claim that all or almost all Americans are choosing their diet optimally'. Individual 'cognitive failures' – psychologically determined decision-making 'deviations' from *Homo Economicus* that hinder individuals from effectively comprehending and responding to economic incentives – prompt instrumental, yet boundedly rational, choices that may satiate myopic actors' short-term utility, though fail to satisfy their longer-term health interests (Downs and Loewenstein 2011). Such behavior, in turn, is held as responsible for markets failing to secure Pareto-efficient outcomes: begetting both negative 'externalities' (such as increased public health expenditures to redress proliferating obesity; see: Karnani *et al.* 2016) and 'internalities' (such as detrimentally affecting individuals' future health; see: Herrnstein *et al.* 1993; O'Donoghue and Rabin 2006).

Thus, while dismissing hyper-rationality 'as a positive or descriptive theory' (Angner and Loewenstein 2012: 668) of economic decision-making because real individuals do not resemble *Homo Economicus*, BE pathologizes the former as 'anomalous' to, or 'deviating' from, this norm (Mehta 2013). The implicitly phallogocentric character of the 'dual processes' ontology discussed

above exemplifies this pathologization (Primrose 2017). Challenging the universalist presumptions of hyper-rationality, and explicitly theorizing emotional processes previously denigrated as 'feminine' or 'soft', appears to address calls by feminist political economists to transcend the modernist reason-emotion dualism (Hewitson 1999). Rather than examining emotion and intuition to articulate a more holistic account of decision-making, however, these are denigrated relative to 'rational' qualities (Clouser 2016). Reliance on System 1 when making food and exercise consumption decisions leads to 'irrational' behavior, as biases and heuristics engender 'faulty' perceptions about choice effects, preferences detrimental in the long-term, or choosing damaging options despite 'rationally' preferring otherwise.

In short, such psychological dynamics alienate obese individuals from their latent hyper-rational preferences, leading to sub-optimal health choices (Infante *et al.* 2016). BE, consequently, frequently deploys psychological labels to substantiate negative value assessments about the *moral* character of boundedly rational individuals, and articulate it as subordinate to the normative ideal of *Homo Economicus* (Mehta 2013). For instance, behavioralism juxtaposes 'hot' (emotional, impulsive) to 'cold' (self-controlled, reflexive) systems in processing external sensory cues (Metcalfe and Mischel 1999), with poor food and exercise decisions arising when the former overwhelms the latter (*e.g.* Gilbert et al. 2002; Nordgren *et al.* 2009). Analogously, the tradition distinguishes between those aware of their self-control problems – such as a tendency to overeat – as 'sophisticated individuals', and those who are not as 'naïve individuals' (*e.g.* O'Donoghue and Rabin 2006; Ruhm 2012). This reasoning, conceptualizing observed deviations from hyper-rationality as resulting from psychological deficiencies, effectively presupposes *Homo Economicus* as normatively correct.

Deterministic conceptions of individual agency

BE reflections on obesity also offer *biologically deterministic* accounts of individual subjects, through under-theorizing social phenomena and their contribution to configuring behavior. Instead, the tradition proceeds by recourse to universal psychological characteristics deemed *intrinsic to human beings as individuals*: explaining 'irrational', unhealthy behavior as due to psychology. This generates impoverished conceptions of agency arising from biologically derived cognitive limitations.

Behavioral accounts of pervasive 'irrationality' undoubtedly better represent real health behavior than *Homo Economicus*. To contest the descriptive realism of hyper-rationality, behavioralism employs insights from cognitive psychology – examining the functioning of the cognitive apparatus informing all human beings (Angner and Loewenstein 2012; for a survey, see Petracca 2017). In turn, it analyses common mistakes made by individuals *as members of the same species* when theorizing systemic 'irrationality' (Frerichs 2019). That is, humans are deemed irrational and fallible *by nature*: '[t]hey are not *homo economicus [sic]*; they are *homo sapiens*' (Thaler and Sunstein 2008: 7, emphases added). Thus, 'irrational' dietary and exercise choices are molded by *psychologically determined 'processing errors*': being prone to biases and judgmental 'faults', human cognitive processing capabilities are limited relative to *Homo Economicus*, thereby engendering 'poor' decisions and sub-optimal behavior (Pedwell 2017).

Yet, this formulation is not linked to a more holistic account of the psycho-social complexity of decision-making. Accepting cognitive 'limitations' as *a priori* hard-wired in humans, behavioralism downplays the institutionally embedded character of so-called 'irrational' qualities themselves (Streeck 2010). For instance, as noted above, the tradition frequently attributes causal primacy for obesity to individuals' biases toward 'hyperbolic discounting' when making food consumption

decisions – exaggerating the short-term costs of healthy alternatives while discounting their long-term advantages, such that they eat excessively processed and calorific foods (*e.g.* Scharff 2009). Nevertheless, BE underplays how such 'reckless' food choices are institutionalized within broader socio-cultural processes, and why individuals internalize them over time (Fine *et al.* 2002; Mahoney 2015). To illustrate, individuals' observed tendency to prioritize short-term food consumption preferences is, arguably, constitutive of the dynamics of subject formation promulgated by neoliberal governmentality: appealing to the passions of individuals as citizenconsumers, able to contribute to society via purchasing and consuming the products (including food) of global capitalism (Guthman 2009). In lieu of such considerations, behavioralism exhibits a 'naturalist bias': focusing on supposedly universal qualities of human nature, while leaving unexplored the historically contingent foundations of consumption behavior in contemporary capitalism (Frerichs 2019).

Circumscribed conceptions of the 'social'

Finally, the BE of obesity articulates only limited insights into the broader social context of individual decision-making. In particular, the tradition *adopts a thin social ontology*. Proponents claim to complicate, or even transcend, the abstract methodological individualism of neoclassicism by conceptualizing the 'messy' sociality of individual health decisions (*e.g.* Foster and Frijters 2023). Behavioralists have promulgated 'socially embedded' accounts of individuals (Davis 2015), whereby 'the degree of rationality bestowed to the agents depends on the context being studied' (Thaler 2000: 134). That is, strong external influences configure actors' behavior, as the factors that affect intuitive decisions are highly dependent on the environment in which behavior occurs. For instance, framing effects and reference dependence inform individual decision-making *viz.* food consumption, reflecting the anchoring of choice in particular circumstances, thereby engendering hyperbolic time discounting (individuals tend to undervalue the future) (Richards and Hamilton 2012).

The corresponding notion of the 'social' here is significantly circumscribed, however. BE focuses on investigating decision-making processes from the perspective of individuals, while largely disregarding the need to conceptualize the complex social context within which such decisions are made. Accordingly, first, the tradition renders a limited conception of *environment*, defined as individuals' immediate physical space. Put differently, individual behavior 'is not guided by what they are able to compute, but by what they happen to see at any given moment' (Kahneman 2003: 1469). Second, there is a restricted conception of *social norms*, conceptualized quantitatively as how the majority of agents operate in a given context (Davis 2013). This examines norms as given, rather than theorizing their social construction (Pedwell 2017). The result is a thin social ontology and instrumental treatment of social phenomena – dealing with the latter only to the extent that they affect individual capacity to process information (Frerichs 2019). In turn, assuming economic conduct corresponds to essentialized conceptions of human nature – as largely psychologically determined – leaves subjectivity and preferences themselves largely unexplored (Davis 2011; White 2017).

The BE of obesity, thereby, excludes three rudimentary insights recognized in other critical social sciences (Leggett 2014). First, agents are not conceptualized as unevenly distributed within extant social structures *prior* to decision-making (Frerichs 2019). Yet, myriad studies demonstrate how obesity is determined by political-economic factors beyond individuals' immediate choice environment, such as capitalist systems of food production and distribution (Fine 1998; Bayliss and Fine 2020: Chapter 5). These include, for instance, production structures that beget high profit

margins from processed foods, considerable political power wielded by the food and drinks industry, sizable marketing of highly processed and calorific commodities, inequalities in accessing healthy food options and exercising opportunities, and evolving contemporary practices of mobility (Winson 2013; Clapp 2020). Indeed, even where some recognition is accorded to the impact of factors such as poverty in augmenting the 'cognitive load' of impoverished individuals – thereby engendering sub-optimal food choices and leaving them more susceptible to junk-food marketing (*e.g.* Zimmerman and Shimoga 2014) – these social drivers themselves remain occluded from consideration. Rather than critically examining the structural reasons for impoverished communities being afflicted with disproportionate levels of obesity and diet-related disease (Otero 2018), analytical primacy centers on explaining – and rectifying – the psychological drivers of boundedly rational, unhealthy individual decision-making *within* their given destitute context. The perpetuation of poverty-induced obesity is, thus, naturalized in psychological deficiencies promulgating 'irrational' behavior.

Second, and relatedly, while highlighting interfaces between subjects and their immediate environment, BE disregards the contingency of the latter on historical decisions, contestation, and power relations (Strauss 2009). Guthman (2011), for instance, contextualizes growing obesity within the broader exercise of political-economic power by capital, in conjunction with state-implemented neoliberal reforms, in restructuring the global agri-food system in recent decades as a means to overcome limits to accumulation. Hence:

Fast and convenient food has been a triply good fix for American capitalism. It entails the super-exploitation of the labor force in its production, it provides cheap food to support the low wages of the food and other industries by feeding their low-wage workers, and it absorbs the surpluses of the agricultural economy, soaking up [...] the excesses of overproduction to keep the farm sector marginally viable

(Guthman 2011: 177).

Accordingly, purchasing inexpensive, calorie-rich food cannot be reduced to an 'irrational' individual choice, as this disregards how the 'current policy environment is a result of political choices, not consumption choices' (Guthman 2011: 194).

Third, BE fails to develop an ontologically thick account of social norms, with the latter conceptualized merely as the aggregation of individual choices (*e.g.* McFerran 2016). It consequently underplays how ideational structures prefigure and influence norms, such as those manifest as ideological messages or traditional values (Žižek 2012 [1994]; Pedwell 2017). Extending on the case of hyperbolic discounting and neoliberalism discussed above, for example, BE deems public health messages on the health risks associated with overeating and a sedentary lifestyle to have been disregarded by obese individuals due to their present bias, in conjunction with factors such as low willpower (*e.g.* Hunter *et al.* 2018). Nevertheless, this focus on restrained food consumption fundamentally conflicts with pervasive, entrenched socio-cultural injunctions in contemporary capitalism – manifest in platforms ranging from corporate advertising to governmental injunctions – impelling consumption as the locus of neoliberal citizenship (Guthman 2009; Cargill 2015).

In disregarding such reflections, BE ignores the broader systemic features and psycho-social dynamics of capitalism when comprehending the complex drivers of obesity. In turn, it posits *reductionist accounts* of this phenomenon. Echoing NCE, behavioralism remains underpinned by methodological individualism (Dold *forthcoming*): confining the study of complex political-economic phenomena to formulating naturalistic explanations of individual decision-making processes through psychological reductionism (Frerichs 2019). In particular, obesity is narrowly

conceived as an *economic problem* of individual 'irrational behavior' engendered by actors' limited capacity to comprehend and respond to economic incentives in markets. As noted above, myopic individuals are presumed to prioritize short-term pleasure derived from consuming junk-food and maintaining a sedentary lifestyle over the long-term benefits of a balanced diet. Individual cognition is, thereby, pathologized as responsible for undesirable 'internalities' and 'externalities', while naturalizing structural determinants of ill-health in global capitalism associated with class, inequality, and corporate power (Holt-Giménez 2017: esp. Chapter 5; Clapp 2020).

Wink, wink, nudge, nudge - do no more?

Behavioral reflections on obesity usefully highlight the narrowness and deficiencies of neoclassical accounts of the phenomenon centered on presumptions of hyper-rationality. Contrary to the latter, BE introduces insights from psychology to demonstrate that choices about food and exercise are not undertaken by atomistic subjects akin to Homo Economicus - 'lightning calculator[s] of pleasures and pains' (Veblen 1898: 398-9). Rather, such decisions are made by boundedly rational individuals influenced by external factors, and who may repeatedly miscalculate in pursuing their health objectives. Nevertheless, as articulated above, the potential of BE to contribute to comprehending the political economy of obesity remains circumscribed by its enduring subsumption within NCE and axiomatic focus on individual hyper-rationality. Accordingly, the tradition is unable to provide more holistic understandings of health decision-making, nor the broader social forces beyond individuals' immediate choice environment that determine health. Returning to the outré tale of Gogol's Wife, BE reflections on obesity thereby offer less fundamentally novel economic accounts of obesity, than another effort to postpone discarding neoclassicism (see: Madra 2017): introducing marginal psychological modifications to adorn it with a more palatable outward appearance, while remaining within the bounds of mainstream epistemological 'respectability'. Such efforts to reflate neoclassicism lopsidedly, rather than abandoning its remains to the fire, ultimately contribute little to a critical political economy of obesity.

Yet, this reading of BE also points to its shortcomings as a foundation for informing political measures to help redress obesity.⁹ As outlined above, contrary to its hypostatization in NCE, BE recognizes that the hyper-rationality of Homo Economicus does not represent real individual decision-making. Accordingly, policy measures depending on channeling individuals toward healthier choices via incentives within competitive markets will be limited in effectiveness (Chance *et al.* 2016). In turn, BE transcends the limited remedial role for the state within NCE; instead, advocating that this institution adopt a more explicit public health function in correcting for pervasive market failures that produce poor health outcomes (Karnani et al. 2016; cf. Leggett 2014). The policy should ameliorate - or circumvent - the cognitive limitations and pernicious social influences engendering individuals' 'irrational' food and exercise consumption choices within markets. This is especially so given the latter 'not only provide us with what we want, as long as we can pay for it', but 'also tempt us into buying things that are bad for us, whatever the costs' (Akerlof and Shiller 2015: n.p.). The most prominent policy rationale elaborating this case is that of 'libertarian-paternalism' (LP): promulgating minor amendments to the immediate institutional environment (the 'choice architecture') wherein individuals instrumentally pursue their interests, to 'nudge' their behavior in more 'rational', welfare-enhancing directions, albeit without curtailing their freedom to choose (Thaler and Sunstein 2008).

In acknowledging the systemic character of boundedly rational individual decision-making, prompting pervasive anomalous behavior deviating from individuals' own self-interest, BE thereby advocates that such 'anomalies' be harnessed to 'nudge' subjects toward healthier choices. In doing

so, the tradition continues to position *Homo Economicus* as the normative *ideal* for decision-making, as well as a subjective condition *potentially realizable* through policy (Primrose 2017). Grounded in the logic of what Hausman (2012: 102) labels 'preference purification', BE seeks to reconstruct the preferences that *would* have informed the decision-making of hyper-rational individuals had their cognition not been 'obstructed' by psychological factors, while establishing realization of such reconstructed preferences as a normative benchmark for policy-making (Infante *et al.* 2016). That is, commencing from the pathologization of bounded rationality (as outlined above), BE initiatives attempt to recreate the preferences of *Homo Economicus* through isolating this norm from distorting psychological influences. In turn, the tradition designs policies to enable boundedly rational individuals to make decisions in accordance with these preferences *as if* they were *Homo Economicus* by circumventing 'any factor that significantly alters the behavior of [real] Humans, even though it would be ignored by [hyper-rational] Econs' (Thaler and Sunstein 2008: 8).

This epistemological foundation begets a circumscribed policy agenda to tackle obesity, centered on the unhealthy *individual* as an 'irrational' subject requiring correction, while retaining an asocial and ahistorical conception of this subject as neither enabled nor constrained by social structures beyond their immediate choice environment (Strauss 2009; Pedwell 2017).¹⁰ More specifically, BE abstracts obesity from the 'messiness' of its multiple political-economic determinants. Instead, as noted above, it is depoliticized as a primarily *economic problem* of individuals' inexorably limited capacity to comprehend and respond to economic incentives which, in turn, begets 'poor', unhealthy choices within markets (Thaler and Sunstein 2008: 8). Consequently, the objective of policy is less redressing obesity *per se*, than correcting for decision-making 'anomalies' held to precipitate this problem: proposing measures augmenting individuals' capacity to 'rationally' respond to economic incentives in markets in a manner akin to *Homo Economicus* (Primrose 2017).

The potential role of the state in redressing obesity is, correspondingly, reduced to yet another factor among a plurality that influences individual health behavior (Leggett 2014). By isolating 'irrational' decision-making by individual citizen-consumers as driving obesity, the locus of state responsibility shifts from implementing holistic public health initiatives, toward developing micropolitical interventions to steer individuals toward more 'rational' self-government within a given context (Fox and Klein 2020). Smith and Toprakkiran (2019), for instance, demonstrate that the plethora of nudge policies instigated to address obesity in the United Kingdom has buttressed extant neoliberal governance regimes by framing this complex socio-ecological problem as one of individual 'responsibilization'. However, in lieu of more capacious public health measures transforming the psycho-social and broader political-economic drivers of obesity existing *prior to* and *following* the event space of a particular nudge, amendments to individuals' proximate choice environment often fail to secure healthy habits that endure beyond this particular context (Pedwell 2017)

Finally, the behavioralist pathologization of individual bounded rationality occludes consideration of policy measures to remedy individual and social dysfunction through redressing the overlapping material sources of poor health. Rather, as noted above, the BE of obesity naturalizes the structural determinants of obesity in contemporary capitalism associated with the prevailing global corporate agri-food regime, class, inequality, and corporate power (Guthman 2011; Winson 2013; Otero 2018). Absent historically specific considerations of the latter, the politics of obesity is framed as a *technical* matter: requiring mobilization of micro-level strategies to bolster individuals' capacity to make 'better choices' (Thaler and Sunstein 2008: 8), and realize their presumed latent (hyper-)rational preferences for healthier options *within* their extant political-economic conditions (Santos and Rodrigues 2014; Mahoney 2015). These measures range, for instance, from shifting the position of sweets at supermarket checkouts below eye level, to introducing innovations to

restructure individuals' relations with food such as tray-less cafeterias and advanced ordering of meals (Downs and Loewenstein 2011; Chance *et al.* 2016). By framing such nudge initiatives as universal, 'catch-all' solutions to 'society's major problems' (Thaler and Sunstein 2008: 9) that do not necessitate 'changing the existing social and political structures' (Banerjee and Duflo 2011: 271), BE steers clear of contesting and reconfiguring the historically specific structural roots of poor nutrition or lack of exercise in the dynamics of capitalism. Rather, it fosters a largely decontextualized, economistic emphasis on buttressing individuals' rational consumption behavior via marginally amending their proximate choice environment (Fine *et al.* 2016).

As a means to both comprehend and attempt to alleviate global obesity, BE evidently follows its neoclassical forerunner in remaining markedly deficient. Political economists seeking to grasp this phenomenon would be better served by re-engaging with, and extending, other critical traditions discussed within this volume, while casting out behavioralism to join Caracas and neoclassicism amidst the proverbial flames.

Notes

- 1 Behavioralism encompasses both 'old' and 'new' strands (Sent 2004). The former, pioneered by Simon (e.g. 1955) and developed within the 'frugal heuristics' approach (e.g. Gigerenzer 2015), supplants atomistic hyper-rationality with holistic, evolutionary accounts of rationality and individuality. The 'new' school arising from Tversky and Kahneman (1973, 1974) retains the atomistic neoclassical conception of individuals, albeit revised to embed agents within an ahistorical and non-developmental social ontology. This newer iteration constitutes the mainstream of behavioral research (Heukelom 2014), and is the most politically influential manifest in the institutionalization of governmental 'nudge' research units around the world (Whitehead *et al.* 2017). Accordingly, this chapter focuses on the latter strand to assess the extent to which this tradition marks a genuine break with neoclassicism (see: Madra 2017).
- 2 The arguments in this chapter are developed in relation to the behavioral tradition more broadly in Primrose (2017, 2022).
- 3 It is beyond the scope of this chapter to engage in debates over the appropriate means to measure obesity. However, for pertinent critical reflections on this theme, see: Guthman (2011) and Otero (2018).
- 4 While not germane to the present discussion, see Schorb (2022) for a useful account of why it is problematic to refer to burgeoning global obesity levels as an 'epidemic'.
- 5 In order to distinguish it from the philosophical principle of 'rationality' holding that actions and opinions should be grounded in reason – this chapter designates the NCE conception of rationality as 'hyperrationality' (Shaikh 2016: 78). This step circumvents the neoclassical practice of juxtaposing the latter as 'perfect' and real-world cognition as 'imperfect', as well as similar practices within BE scholarship (as discussed below).
- 6 This explanation echoes the earlier, unsettling account of Becker and Murphy (1988), in which they contend that heroin produces sufficient dopamine that, for some individuals, developing an addiction to the drug constitutes a rational decision in which the utility secured outweighs its immense health and pecuniary costs.
- 7 Indeed, some neoclassical theorists posit that, in spite of its obvious implications for long-term health, rising obesity normatively justifies the 'free-market' processes they attribute to contemporary capitalism. For instance, Cutler *et al.* (2003: 116) posit that '[w]e suspect that most people are better off from the technological advances of mass food preparation, even if their weight has increased'. Similarly, Finkelstein and Zuckerman (2008: 104) assert that 'increasing rates of obesity are a natural response to a changing world' and, thus, 'may be more an indicator of the success, as opposed to a failure, of markets' to supply the goods and services increasingly demanded by consumers.
- 8 This is a necessarily brief and partial overview of BE. For more in-depth considerations of the conceptual intricacies of the tradition and its history, see: Heukelom (2014); and Earl (2022).
- 9 It is not possible to address the plethora of political limitations afflicting BE in this chapter. However, for particularly discerning political-economic reflections on this theme especially in relation to neoliberalism see: Leggett (2014); McMahon (2015); Fine *et al.* (2016); and Pedwell (2017).
- 10 This limitation has recently been recognized in contributions by some prominent BE practitioners themselves, such as that of Chater and Loewenstein (forthcoming).

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