

Food, Physicians, and Force: An Ethical Exploration of the “Nudge”

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Introduction

Western science and medicine are in the midst of coming to terms with the fact that lifestyle and health are, indeed, intertwined. An increasing body of literature is appearing that supports the notion that health is heavily reliant upon diet, exercise, sleep, and stress, so much so that the *American Journal of Lifestyle Medicine* was created in 2007. The American Board of Preventive Medicine, a board which is responsible for certifying physicians specializing in preventive medicine, is one of 24 specialty areas in which a physician can specialize. Further, this body of literature on “healthy lifestyles” is coming to a consensus on what humans should eat, how they should move, how they should sleep, and in some cases even how they should behave in order to stay healthy. Today, nutrition, exercise and other lifestyle factors unquestionably influence health.

Often, bioethics transforms itself into an uncontextualized subfield of philosophy, alienated from the lives of the people to which it pertains. This project developed out of the pursuit to recontextualize bioethics, to determine how physicians should act *given a sociohistorical circumstance* in which they find themselves. What follows is an exploration of the specific sociohistorical context of the “consolidation state,” an era of late industrial capitalism identified by Wolfgang Streeck (Streeck 2016, 35). Other thinkers like Eric-Holt Gimenez and Anthony Hatch have connected the processes of this era of late-stage capitalism to food and health. Given this sociohistorical context, how should physicians act? The picture I would like to paint is one of physician warriors; physicians who are people dedicated to maintaining the health of a population; physicians given all the ethical space they need to act in favor of people’s health.

Health Contextualized

Lifestyle, Nutrition, and Health

In 2018, Kim et al. released a paper titled, “Healthy Plant-Based Diets are Associated with Lower Risk of All-Cause Mortality in US Adults.” To open, they write, “Systematic

reviews and meta-analyses have shown multiple health benefits of plant-based diets, including low risk of obesity, hypertension, type 2 diabetes, and ischemic heart disease” (Kim et al. 2018, 624). To complete their analyses, instead of classifying subjects via the type of diet they consume—non-vegetarian, vegetarian, or vegan—the authors scored diets of participants by a plant-based diet index (PDI), which included the sub-indexes healthy PDI (hPDI) and unhealthy PDI (uPDI) (Kim et al. 2018, 625). By placing each diet on a spectrum, they could record not only the type of diet, but the *intensity* of a type of diet, that is associated with lower all-cause mortality (Kim et al. 2018, 629). They found that, “a 10-unit increase in hPDI was associated with a 5% lower risk in all-cause mortality among those with hPDI scores above the median” (Kim et al. 2018, 627). They concluded from these findings that there “may be a minimum level of plant-based diets that needs to be achieved for health benefits to be evident” (Kim et al. 2018, 629).

This article is only one example of the overwhelming scientific evidence that a *healthy* plant-based diet supports a life of overall wellness and longevity. In the introduction alone, Kim et al. cite 12 articles pertaining to the effects of healthy plant-based diets on health (Kim et al. 2018, 624-625). The World Cancer Research Fund and American Institute for Cancer Research (AICR) reported that, “Food and nutrition modify the risk of cancers at a large number of sites” (2007, 30). The AICR concludes by listing ten principal recommendations for persons attempting to limit their risk of being diagnosed with cancer (AICR 2007, 373). Seven out of the ten recommendations are dietary. Recommendation 4 reads “Eat mostly foods of plant origin” (AICR 2007, 373).

There is a fair amount of pushback in the field of nutrition from proponents of the ‘paleo’ diet, or the assumed diet of pre-agricultural humans. Eaton et al. (1996) propose that “Our ancestral dietary pattern has continuing relevance: an understanding of preagricultural nutrition may provide useful insight into the requirements of contemporary humans” (Eaton

et al. 1996, 1732). They report that this diet was comprised of roughly 35% lean animal meat and 65% carbohydrates (Eaton et al. 1996, 1733). These carbohydrates, however, came from almost exclusively fruits and vegetables. Eaton et al. (1996) write, “preagricultural humans generally obtained from 45 to 50% of their daily energy intake from carbohydrate, a proportion similar to that for most contemporary affluent populations” (Eaton et al. 1996, 1734). They also propose that “the animal protein intake of Paleolithic humans was not associated with excessive intake of saturated fat” (Eaton et al. 1996, 1736).

The problem with the consumption of a paleolithic diet today is thus twofold. The nature of the carbohydrates that the paleolithic humans consumed is different. Not all carbohydrates are the same:

“Less than a quarter of the carbohydrate consumed by Americans (Food and Nutrition Board 1989) or Europeans (James et al. 1988) is in the form of fruits and vegetables. The corollary is that preagricultural humans consumed roughly 3 times as much from these food categories as do Westerners today” (Eaton et al. 1996 1735).

The biological mechanism behind the observation that fruits and vegetables, or foods high in dietary fiber containing carbohydrates, is now well documented. ‘Healthy’ carbohydrates are polysaccharides surrounded by fiber, or fibrous tissue that cannot be digested (Gropper et al. 2005, 82). These fibers, such as cellulose, lignin, and pectins, slow down the mechanical movement of food through the GI Tract (Gropper et al. 2005, 78). They also slow down the chemical digestion and breakdown of sugars into small sugar molecules such as dextrans, glucose, or maltose (Gropper et al. 2005, 78). The slowdown of digestion causes a slowdown of release of these smaller sugars that the cell is capable of utilizing for energy through aerobic respiration—glycolysis, the citric acid cycle, and oxidative phosphorylation (Gropper et al. 2005, 83). The slowdown of sugar release from the digestive tract is associated with steadier release of hormones such as insulin and glucagon, and a lower, more sustained spike in blood glucose upon digestion (Gropper et al. 2005, 83).

Secondly, the diet of paleolithic humans specifically stresses the consumption of *lean* animal meat. Eaton et al. (1996) explain that “saturated fatty acids provided only ~6% of average total energy for preagricultural humans,” although they ate a high-protein diet (Eaton et al. 1996, 1735). This leads to the conclusion that much of the meat they ate was “purified, isolated protein” (Eaton et al. 1996, 1736). Research shows that a high intake of total fat, saturated fatty acids, cholesterol, and *trans* fats “show a positive correlation with the risk of cardiovascular disease” (Gropper et al. 2005, 148).

Therefore, if a diet modeled off of the paleolithic humans were to be followed today, it would still have to require access to lots of fruits, vegetables, legumes, nuts, seeds, and other plant-based, healthy foods. Humans co-evolved alongside plant food sources high in fiber and carbohydrates. Although discrepancies on the exact ideal diet exist, the unanimous consensus among scientists is that a diet that is majority whole plant foods is a healthy one. Whether eating almost entirely plant-based or following the preagricultural human model, access to a diet high in fruit/vegetable plant matter is essential for health.

Food Insecurity as a Product of Capitalism

The trouble with the reliance of health on diet and nutrition is that a healthy, plant-based diet and ample nutrition are not equally accessible to all people. In a report to the United States Congress, The United States Department of Agriculture (USDA) claimed that “Area-based measures of access show that 23.5 million people live in low-income areas [...] that are more than 1 mile from a supermarket or large grocery store” (USDA 2009). An interactive tool created by the same group, the Food Access Research Atlas, provides an easily accessible tool to view the exact areas in the United States where these “food deserts” are located (USDA 2017). These food deserts spot the entire country on this interactive map.

Eric Holt-Giménez (2017), an author and food activist, argues that unequal access to healthy food is not a non-negotiable part of a global political, sociocultural system. Rather,

the commodification and privatization of food by a global capitalist regime create the conditions under which unequal access to healthy food is produced (Holt-Giménez, 2017). Many authors have written on the subject of food inequality as it relates to the global political economy, but Eric Holt-Giménez (2017) states the problem the most clearly and concisely: “We need food to live. But the purpose of food companies is not to promote our life, health, or happiness; it is to make money for executives and shareholders” (10). *A Foodie’s Guide to Capitalism* examines how a capitalist economic and political system governs the commodification and exploitation of food for profit. This commodification and exploitation necessarily entails “the concentration of capital in the agribusiness and agrifoods sector” which in turn fuel “multibillion-dollar oligopolies that control credit, farm inputs, services, processing, distribution, and retail” (Holt-Gimenez 2017, 126).

Anthony Hatch (2016) offers a similarly monstrous critique of how capital affects food and health from a different perspective. While Holt-Gimenez (2017) focuses on how a profit-driven system of food production leads to general inequality between people of different genders, races, and socioeconomic statuses, Hatch (2016) focuses on how the capitalist food system in America specifically disadvantages racial minorities (Holt-Gimenez 2017, 144). Hatch begins by classifying “metabolic syndrome”—“a statistical construction consisting of abnormal levels of metabolic biomarkers”—as an endemic rather than an epidemic. For Hatch (2016), an endemic is a “discriminating, widespread, and long-term population-level phenomena,” while an an epidemic is merely, “a viral or bacterial infection from outside the body” (7). Because a profit-driven, exploitative capitalist economics provides a framework for structural racism, the global for-profit food system contains the same tendency towards structural racism. Hatch locates “metabolic syndrome” as a site at which this structural racism manifests: “metabolic syndrome has become a new discursive tool used to produce new meanings of race in the politics of metabolism” (10). Hatch (2016)

goes even further, historically tracing the linkage between the supposedly “genetic” higher risk for metabolic syndrome among racial minorities in America to colonialism, imperialism, and capitalism:

“African Americans occupy a unique position as the producers and consumers of sugar within capitalist food regimes. At the same time, the nutrition sciences that accompany and facilitate agricultural capitalism have focused substantial attention on African Americans as a group because of their risks for metabolic syndrome. These scientific discourses about African Americans’ food cultures often take place absent a contextualized discussion about how technoscientific and economic shifts in the capitalist production of food have impacted human metabolism” (99).

The AICR acknowledges the fact that agricultural capitalism permeates society and unjustly negatively affects the health of racial minorities at the level of population. The report: “*The Panel is aware* that patterns of diet and physical activity as well as the risk of diseases such as cancer, are also crucially influenced by social and environmental factors.” Even in more common discourses, there is recognition that food insecurity and food injustice are produced, systemic, political and economic inequalities.

Most poignantly, Holt-Gimenez writes,

“The production, appropriation and accumulation of value determines the system itself. Unless we change the underlying value of relations of our food system—the contradiction between food as essential for human life and food as a commodity—we will be working on the margins of a system that is structurally designed for profit rather than need, speculation rather than equity, and extraction rather than resilience” (Holt-Gimenez 2017, 69).

Wrapping it all together: The Commodification of Food as Morally Impermissible

Moving forward, nutrition, diet, lifestyle, and health must be viewed as interdependent, if not symbiotic, concepts. The commodification of food, then, which causes unequal distribution and access of healthy plant foods, over-produces cheap, subsidized corn, soy, and meat, and exploits the land and labor of that which supports it, is morally impermissible. Given this sociopolitical context, where do physicians find themselves?

Physicians Contextualized

The Role of Medicine and Health

The role of medicine, the end of medicine, or what medicine “goes in for” have been widely discussed and debated for as long as medicine has been a field. For the Greeks, the debate was centered around “the exercise of medical practice as a consequence of the formation of different medical schools,” (Kleisaris et al. 2014). In recent years, excessive healthcare spending brought to public attention has shifted the debate to whether money should be spent on preventative or reactionary medicine. As early as 1979, Thomas McKeown was questioning the assumption that “the body can be regarded as a machine whose protection from disease and its effects depends primarily on the internal intervention,” which leads medical experts to neglect the easily preventable source of an illness (McKeown 1979, xvi).

Both preventive and reactionary medicine, while through different means, still try to reach the same end: a healthy patient. *Health* seems to be the role of medicine. This leads us to another problem of definition, though: what is health? The World Health Organization defines health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO 1948, 1). Many people raise a problem with this definition, such as Huber et al. (2011) who would like to center the definition around adaptability and self management rather than completeness, and Callahan (1973) who raises a problem of scope, namely that, “one can be healthy without being in a state of complete physical, mental, and social well-being” (Huber et al. 2011; Callahan 1973, 87). Given the ubiquity of the WHO definition and the frequency with which it is used, however, “health” for the purposes of this paper will be defined according to their analysis. Thus, for the purposes of this project the role of medicine will be to attain and preserve the ‘health’ of patients, wherein the WHO definition of ‘health’ is applied.

The Role of Physicians

Given the role of health and the role of medicine, what is the role of a physician in this context? As we have seen, adequate nutrition—and even an adequate lifestyle—is a direct determinant of health; however, adequate nutrition for all people can only be made possible by equal access to healthy food for all people. Where does this leave physicians, as promoters of health?

I argue that physicians, as healthcare providers, are morally obligated to help their patients obtain and maintain good health. This is the primary concern of physicians. In the next section, I explore what happens when this primary concern is lost to the jargon of abstracted academic literature in subfields of bioethics. I argue that physicians must play the role of revolutionaries, who must take every opportunity to revolt against a political system which radically hinders progress in the field of medicine.

Nudges Contextualized

The ‘Nudge’

The 2008 book *Nudge: Improving Decisions About Health, Wealth, and Happiness* was expected by few to have as profound an impact on the field of bioethics as it has. Since Thaler and Sunstein (2008) released the work, “there has been an increased focus” concerning health-promoting nudges and their ethical implications (Engelen 2019, 1). The primary purpose for this book is, however, not bioethics. Thaler and Sunstein write:

“whether or not they have ever studied economics, many people seem at least implicitly committed to the idea of *homo economics*, or economic man—the notion that each of us thinks and chooses unfailingly well, and thus fits within the textbook picture of human beings offered by economists.

“If you look at economics textbooks, you will learn that *homo economicus* can think like Albert Einstein, store as much memory as IBM’s Big Blue, and exercise the willpower of Mahatma Gandhi. Really. But the folks that we know are not like that. Real people have trouble with long division if they don’t have a calculator, sometimes forget their spouse’s birthday, and have a hangover on New Year’s Day. They are not *homo economicus*; they are *homo sapiens*” (6).

Thaler and Sunstein (2008) are thus writing against a common misconception in the field of economics, namely that humans are infallible in decision-making. In Chapter I, they cite a

wealth of psychological data to support their proposition, and attribute the cause of human fallibility in decision-making to an aspect of brain anatomy. “The approach involves a distinction between two kinds of thinking, one that is intuitive and automatic, and another that is reflective and rational” (Thaler and Sunstein 2008, 19). They dub these two systems the “Automatic system” and the “Reflective system” (20).

The argument of the book can be summarized as follows. People have two kinds of thought processes for making decisions, the “Automatic System” which is “uncontrolled, effortless, fast and unconscious” and the “Reflective System” which is “controlled, effortful, slow and self-aware” (Thaler and Sunstein 2008, 20). The Automatic system adopts “heuristics,” or shortcuts which may “lead to systematic biases,” in order to aid in decision-making (22-31). The Automatic System, however, can be subconsciously manipulated by what the authors deem a “choice-architecture,” or “the context in which people make decisions” (3). A “choice-architect” anyone responsible for synthesizing, organizing, or manipulating a choice-architecture, not only may, but *must* influence what people decide, as “choice architecture and its effects cannot be avoided” (72). Thaler and Sunstein give the following formulation:

“The picture that emerges is one of busy people trying to cope in a complex world in which they cannot afford to think deeply about every choice they have to make. People adopt sensible rules of thumb that sometimes lead them astray. Because they are busy and have limited attention, they accept questions as posed rather than trying to determine whether their answers would vary under alternative formulations. The bottom line, from our point of view, is that people are, shall we say, nudge-able” (37).

Thaler and Sunstein (2008), professors of economics and law, respectively, never use explicitly philosophical language in their book; however, the underlying tone of the book certainly contains ethical implications. On multiple occasions, the authors imply that choice-architects are *morally obligated* to construct a choice-architecture which facilitates trust in the Automatic System. The latter third of *Nudge* is dedicated to nudges with respect to health and wellness. They write, “Doctors are crucial choice architects, and with an understanding of

how Humans think, they could do far more to improve people's health and thus to lengthen their lives" (Thaler and Sunstein 2008, 156). Doctors, then, following the language above, seem to be *morally obligated* to subconsciously influence a patient's behavior. In the following sections, I will present the viewpoints the nudges are moral obligations, morally permissible, and morally impermissible, and discuss why each of these viewpoints are wrong. Then, I will offer an alternative, *contextualized* viewpoint.

Nudging: A Moral Obligation, Morally Permissible, or Morally Impermissible Act?

Should physicians be morally obligated to nudge, or should nudges merely be morally permissible, or even morally impermissible? It may seem at first like this question should rank rather low in the hierarchy of importance of bioethical investigations. Upon close analysis, however, it appears that the question of nudges gives rise to the question about the role of the physician in the first place. How much power should a physician have?

Thaler and Sunstein clearly do not give this question much consideration. They write over and over again that avoiding an influence on any choice-architecture is impossible, and also that physicians *should* influence a choice environment to help people live healthier lives (Thaler and Sunstein 2008, 10, 157). The reader is left to infer that physicians are morally obligated to change choice-architecture in order to positively influence people's decision-making environment.

Engelen (2019) cites many three primary objections in regards to the use of health-promoting nudges; objections about ends, objections about means, and objections about agents (5-8). Objections about ends are raised on the grounds that "nudges are said to be disrespectful and even illiberal as they impose a specific conception of the good on nudgees" and whether it is possible that nudgers can "find out who has which goals and take into account plurality at this level" (5, 6). Engelen (2019) refers to these objections about ends as ethical and epistemic, respectively (5). The objection about means states that nudges tap "into

deeply-rooted psychological mechanisms that have an impact behind people's backs and thus [...] threaten people's rationality, autonomy, and liberty" (6, 7). The third objection, concerning agents, argues that, "intentionally treating others as puppets on strings displays an inappropriate attitude towards them" (8). Engelen (2019) addresses these "legitimate points of concern" by crafting ethical criteria by which health-promoting nudges should be both crafted and implemented. In the latter half of the article, Engelen (2019) messily offers a total of eight criteria by which health-promoting nudges can be externally measured (24). These criteria attempt to maneuver the objections—originally raised by White (2013)—to health-promoting nudges. Thus, Engelen (2019) has attempted to set up a system in which nudges can be morally permissible, but only if they meet a set of standards.

Each of the objections that Engelen (2019) responds to are originally raised by White (2013), who views nudging as morally impermissible. He posits that, "policymakers have no information and no justification to do that for us. Let people make their own decisions—within the laws and regulations that rightfully protect them from the wrongful actions of others (and vice versa), but free of any manipulation that is claimed to be on their own interest" (White 2013, xv). Thus, White (2013) is representative of the argument that nudging is morally impermissible on the grounds that nudges violate the bioethical principle of autonomy.

Weaknesses in the Uncontextualized Approach

Nudging as a moral obligation, as morally impermissible, or morally permissible each come from an uncontextualized account of bioethics. Thaler and Sunstein (2008), White (2013), and Engelen (2019) all acknowledge that lifestyle and health are interdependent. Each author also engages with the notion that improved policy around lifestyle could change a person's 'choice-architecture,' and thus nudge them in the direction of health. Each author, however, has differing opinions regarding the moral permissibility of the 'nudge.' The

weaknesses in each argument will be discussed below. Each weakness, however, is undergirded by an even deeper, overarching weakness in the very structure of the debate: a neutral starting point from which a ‘nudge’ is then implemented. The debate over the ‘nudge’ assumes an *all other things being equal* clause. Each patient, citizen, or person who is to be affected by the ‘nudge’ is situated in a ‘choice-architecture’ which begins as neutral, which the ‘nudge’ then makes more fair or less fair. In other words, each is a bioethical position uncontextualized.

Before disassembling the arguments of Engelen (2019) and White (2013), the definitions of some terms must be clarified. Both White (2013) and Engelen (2019) throw around the terms “autonomy” and “rationality.” While the terms may be interchangeable, autonomy and rationality both correspond to the *rational cognitive systems* of the brain, those that are involved in conscious decision making. In the terms of Thaler and Sunstein (2008), this is our “Reflective System.” Beauchamp and Childress (2009), who originally lay the framework for the four major bioethical principles recognized today—autonomy, beneficence, nonmaleficence, and justice—claim, “We analyze autonomous actions in terms of normal choosers who act (1) intentionally, (2) with understanding, and (3) without controlling influences that determine their action” (Beauchamp and Childress 2009, 101). Thus, autonomy as a normative ethical principle has to do with respecting a patient’s *rational* cognitive processes; however, this does not mean that physicians, policy-makers, and other ‘choice-architects’ have free-reign to manipulate people as they please. It only means that nudging and respect for autonomy must be discussed more carefully than any of the authors attempt to discuss the interplay between the two. A ‘nudge’ by definition does not undermine autonomy, as one deals with so-called ‘choice-architecture’ and the Automatic System, and one deals with ‘rationality’ and the reflective system, which Beauchamp and Childress (2009) have carefully linked to autonomy (Thaler and Sunstein 2008).

The view that White (2013) raises, that nudging in all cases is morally impermissible, contains a host of assumptions. The first is that White (2013) feels that ‘choice’ as a cognitive process is much more complicated than behavioral economics makes it out to be, as behavioral economics focuses on “preferences and constraints with limited consideration of principles, judgement, or willpower.” (White 2013, 24). While this may be a correct observation, White (2013) follows with an even more libertarian viewpoint than Thaler and Sunstein (2008), who occasionally call nudging “libertarian paternalism” (4). White (2013) argues that:

“If people realize they’ve made bad choices, they’ll learn from it, and make better decisions in the future. Although behavioral economists can continue to treat people as ‘predictably irrational’ for the purposes of research, policymakers should treat people as ‘presumably rational’ and leave the choosing to us” (White 2013, xv).

While ‘choice’ as a cognitive process may be complicated, White’s (2013) laissez-faire approach is anything but complex. The observation made by White (2013) that choices are complex and involves a multitude of other factors than the automatic system and reflective system of the brain in no way entails what follows in his line of argument: that a nudge implemented by a business is morally permissible while a nudge implemented by a government is morally impermissible (White 2013, 103-107). White (2013) goes so far as imagining “threats to democracy” based on nudges on a voting ballot (80). This extreme view is based on the presumption that the private sector should be completely deregulated, and that the public sphere (i.e. government) should stay out of all business decisions. In other words, entrenched in White’s (2013) view is a defense of neoliberalism which receives no justification.

Secondly, the argument in favor of the ‘nudge’ is to continue letting people make their own choices—that is, to allow people to keep using their rational systems by not limiting any of their possible decisions—as Thaler and Sunstein (2008) explicitly say in the introduction to *Nudge*: “The libertarian aspect of our strategies lies in the straightforward

insistence that, in general, people should be free to do what they like” (5). White (2013) insists that manipulating choice-architecture is a manipulation of choice; however, this is simply not true (40-50). Take, for example, an instance of a nudge which might be implemented based on the forthcoming argument of this paper. This nudge would be a change in healthcare policy that would allocate people in food deserts the time and money to shop at their nearest grocer which sells fresh food. The idea that this nudging strategy is morally impermissible because it “does not leave the choosing to people who live in food deserts” is ridiculous. It follows that White’s (2013) assertion that nudges are morally impermissible in all cases is incorrect.

What Thaler and Sunstein (2008), and perhaps much of the field of psychology, agree on, is that in the very definition of the “automatic system” of the brain is that decisions are made *unintentionally*. Indeed, they go to painstaking lengths to identify the automatic system as one which Engelen (2009) describes as follows:

“A second objection argues that the problem lies not so much with the ends but with the means and thus the behavioral techniques employed (Grüne-Yanoff 2012). Tapping into deeply-rooted psychological mechanisms that have an impact behind people’s back and thus “systematically exploiting non-rational factors that influence human decision-making making” (Huasman and Welch 2010: 136), nudges threaten people’s rationality, autonomy, and liberty” (7).

With new clarification concerning autonomy and rationality, the contradictions in this excerpt become apparent. Engelen (2019) argues that “exploiting non-rational factors” threatens rationality. This is a blatant contradiction. Due to the fact that Engelen’s (2019) argument for ethical criteria for health-promoting nudges develops in response to White’s (2013) objections, which we now can conclude are misguided, it follows that his eight ethical criterion, created in direct response to ‘legitimate objections,’ are superfluous.

Lastly, Thaler and Sunstein (2008) argue implicitly that so-called choice-architects are ‘morally obligated’ to nudge. It is here, however, that a contextualized approach is necessary. Why are physicians morally obligated to nudge? That is, what social, political

system creates the conditions in which nudging people towards a healthier lifestyle is necessary *in the first place?*

A Contextualized Approach

Physicians, as we have already acknowledged, are morally obligated to help their patients obtain and maintain good health. This is a physician's primary concern. The debate over the moral permissibility of the 'nudge,' therefore, must be secondary to the discussion surrounding patients' health. Here, a contextualized approach to the 'nudge' conversation is necessary.

As I have attempted to outline, science is increasingly pointing toward the conclusion that lifestyle and health are deeply intertwined. This not only includes nutrition and dietetics, the main focus of this paper, but also an active lifestyle, a low-stress lifestyle, and mental health (Jaremka et al. 2013, 272; Prins et al. 2015). We live in a world, however, in which commodification of land, food, and time creates conditions in which the choice-architecture of many people is clearly health-impeding. From a standpoint of health, this commodification must be morally impermissible. A contextualized approach of bioethics must begin here.

Are physicians morally obligated to nudge, morally permitted to nudge, or morally obligated to refrain from nudging? With our new contextualized approach, we can zoom out and realize that this is the wrong question in the first place! Physicians are not morally obligated to nudge or not nudge; they are morally obligated, via the role that physicians play in medicine, to preserve the health of their patients. In a capitalist society that, as we have seen, *necessarily* entails the violent exploitation of land and labor, and thus *necessarily* creates the conditions in which patients cannot obtain resources for a healthy lifestyle—such as access and/or money for healthy food or time to exercise—physicians are morally obligated to work to fix the system that are producing unhealthiness in their patients.

Thus, it follows that physicians should be given the ethical space to hold a grudge against the political and economic system in which we live, nudge through policy change, and budge through influencing the rational system, as well. Ethical debates which start from a ‘neutral world’ which contains the underlying assumption that everyone has access to clean water, clean air, and plant-based food can no longer be given merit. The role for physicians that begins to emerge is one of physician revolutionaries, whose role is to advocate for patient health on all fronts.

Nudges, Budges, and Grudges

This abstract theoretical work which reframes the question of the nudge in a sociohistorical context of late-stage capitalism is all well and good, but many bioethicists would follow with the question: now what? Their predisposition towards this response is, I think, a correct one. The abstract must be combined with the concrete, the theory combined with praxis, in order to pave a way forward. Thus, I feel compelled to outline at least a rough set of guidelines on the way forward from the sociohistorical context. Specifically, I aim to give context to some claims I have made in this paper. What does it look like for a physician to hold the health of patients as a primary standard? Where do the major four bioethical principles fit into this theoretical framework? Should physicians be morally obligated to act politically, but also be morally obligated to change their behavior in the clinic, as well? I do not have answers for all of these questions, but based on the new contextualized approach, I hope to offer some preliminary remarks.

Grudges

Private industries based on a profit-driven model have created overwhelmingly negative choice-architectures. Michael Pollan (2007) astutely observes this fact in the popular book *The Omnivore's Dilemma*: “When you can eat just about anything nature has to offer, deciding what you *should* eat will inevitably stir anxiety” (3). He further explains that “there

are some forty-five thousand items in the average American supermarket, and more than a quarter of them now contain corn” (19). Pollan (2007) cleverly acknowledges that most of this corn is processed, or “clever rearrangements of molecules extracted from the same plant” (20). The average supermarket-goer cannot, therefore, claim that they are eating a plant-based diet which is good for them, as Kim et al. (2018) have shown us that it is a *healthy* plant-based diet, one which contains many whole plant foods, that is correlated with health. Thus, Pollan (2007) begins to shed light on the health-impeding, negative, confusing ‘choice-architecture’ which surrounds us.

Where do physicians fall into this picture? It might be that physicians are *morally obligated* to be political advocates for health. If the role of medicine is health, and physicians are an extension of this role, it follows that social activism on the part of the physician is at least morally permissible.

(i) Physicians are morally permitted, if not morally obligated, to be politically active in advocating for patient health.

Physicians must be given the space to hold a grudge against a political system of profit-before-patient which ‘nudges’ toward poor lifestyle choices, and even inhibits the rational capacity to pursue healthy ones. Suggestion (i) does not mean that we should implement state policy that requires everyone to run a marathon every year or make all non-whole plant-foods illegal, as I am sure opponents of this framework will quickly point out. Political activism can manifest in many different forms, but all of them should be aimed at the decommodification of food, and working towards a world in which “social determinants of health” are replaced by “lifestyle determinants of health,” that is, a world where social status does not *necessarily* determine lifestyle as it does today (USDA 2017).

Nudges

In this new contextualized framework of bioethics, the nudge does not simply disappear; it is just shifted away from the center of our ethical attention. The ‘nudge’ may still serve as an important tool which physicians can wield to advocate for patient health in the face of an overwhelmingly health-impeding world:

(ii) Physicians are given the ethical space to ‘nudge’ as much as possible in favor of patient health.

It is this second moral guideline that will likely receive the most scrutiny from the current body of literature on nudges. At face-value, this seems like an absurd claim, one that must be incorrect. Many supporters of the uncontextualized approach, including White (2013) and Engelen (2019), have argued that such a proposition is absurd. When we account for the army of private corporations and profit-fueled economy which physicians are up against, though, it becomes clear that to fight for patient health includes fighting on a level of policy, policy which ‘nudges’ the overall choice-architecture from health-impeding towards neutrality without undermining patient autonomy.

There is, of course, overlap between nudges and grudges. They must both be aimed at improving the lives of individuals through changing the political landscape in which patients are situated. Nudges, that is certain policy changes or manipulations of patients’ ‘choice-architectures,’ are fruitless without the underlying insight that the commodification of food and other lifestyle factors is unethical. What distinguishes suggestion (ii) from Thaler and Sunstein’s (2008) suggestion that physicians may be morally obligated to ‘nudge’ is the consideration of political and social context of health. Suggestion (ii) is coupled with suggestion (i). Thaler and Sunstein (2008) want to hold physicians and other policymakers—accountable for overall population health through nudging without any regard to the predetermined choice—architecture of most people by private corporations and for-profit businesses. The commodification of food, medicine, and other lifestyle (and therefore health)

related factors is what has created the “alienated” situation in which physicians need to nudge in the first place (Marx, 1844). Therefore, while nudges may serve as a useful tool in eliminating socioeconomic disparities in healthcare, nudges alone are not enough. This is where Thaler and Sunstein (2008), who encourage private industries and governments to “design user-friendly environments” without a proper understanding of the exploitative, purposefully unfriendly environments *necessary* under our current economic system, fall short (11).

Lastly, it is worth noting that neither suggestion (*i*) nor (*ii*) contain a firm moral obligation on the part of the physicians. While I would prefer to construct a framework where this were the case, I am hesitant to do so for a few reasons. Firstly, not all physicians may have time to be politically active on the large scale where ‘grudges’ work to disassemble power structures driven by profit and commodification in healthcare, or the small scale where one may write policy changes which ‘nudge’ people towards a healthier lifestyle on the municipal, local, or state level. Wark’s (2015) analysis of Bogdanov’s *tektology* seems apt: “professional philosophers have over time become detached from other kinds of labor and from everyday life” (29). A philosophy which considers the ethics of physicians must not fall into this trap. Many physicians work long hours, are buried in hundreds of thousands of dollars of debt, could be single and raising families, or dealing with a host of other issues. It seems astute to me to return, at this point, to the old Kantian dictum: “ought implies can.” Due to the various nuances surrounding this dictum, I have decided to leave complete moral obligation to begrudgingly nudge out of a physician’s job description. However, if one is capable of suggestion (*i*) and (*ii*), one must act.

Budges

I find suggestion (*iii*) to be the most subject to moral obligation on the part of every practicing physician:

(iii) Physicians are morally obligated to influence patient's reflective system inside the clinic through education and goal-setting in order to improve patient lifestyle and health.

Every practicing physician who sees patients can be held accountable to suggestion (iii). This suggestion finally engages with the definition of autonomy put forward by Beauchamp and Childress (2009), rational and conscious cognitive processes which a patient uses to think through and finalize decisions. A ‘budge’ is a persuasive argument to steer the patient towards making different lifestyle decisions which may improve their health through education, goal-setting, or other *autonomy-respecting* means. In light of the reliance of health on lifestyle, western medicine must recognize what it does well and what it does not. Preventive medicine is a great weakness in a commodified healthcare system. Physicians can combat this by attempting to engage in preventive medicine through educating their patients about the importance of lifestyle decisions.

Conclusion

To conclude, it may be true that the human brain has a rational, reflective system and an unconscious, automatic system for engaging with the world and making decisions in it. What and how we use this information, though, must be undertaken more carefully than it has been in the field of bioethics. First, we must situate it, as with all philosophical arguments, within the sociohistorical context in which we currently live. When we understand that the commodification of food and exploitation of land and labor necessarily creates unequal access to healthy food and thus proper nutrition, we can begin to formulate how this “automatic system” of the brain gets violently attacked and exploited. Health, though, is reliant on the diet, nutrition, and lifestyle which are being unequally distributed. Thus, we are faced with a political system which negatively affects the health of the people involved. In late historical capitalism, the people involved includes everyone.

Physicians are tasked with job to promote, preserve, and protect the health of people. Physicians, it can be said then, must be morally obligated to resist the capitalist system, which negatively affects the health of people, in all ways possible. Whether that be through nudging or budging, we must fight for a world in which all people have the access and knowledge to obtain healthy food and a proper lifestyle.

The starting point from which we embark on a journey into collectively deciphering an ethical code must contain some level of social consciousness, a lesson that must extend beyond the nudge and permeate the whole field of bioethics. Many fields have already turned in this direction. “Social determinants of health” are already recognized by the CDC, WHO, the field of public health, and other major players in healthcare. The journalistic turn in bioethics, which seeks to expose the injustice driven by capitalist logic which underlies healthcare workers wage compression, burn-out, rising drug costs, and most other healthcare issues, has already begun to mark the turn away from an obsession with abstracted philosophical debates and towards a recognition that health and politics are deeply intertwined. The rest of the field must catch on.

Bibliography

- Beauchamp, Tom and Childress, James. 2009. *Principles of Biomedical ethics*. 6th ed. New York: Oxford University Press.
- Callahan, Daniel. 1973. "The WHO Definition of 'Health.'" *The Hastings Center Studies* 1 (3): 77-87.
- Eaton, S. Boyd, Stanley B Eaton, Melvin J. Konner, and Marjorie Shostak. 1996. "An Evolutionary Perspective Enhances Understanding of Human Nutritional Requirements." *The Journal of Nutrition* 126: 1732-1740.
- Elliott, Carl. 2010. *White coat, black hat: adventures on the dark side of medicine*. Boston: Beacon Press.
- Englen, Bart. 2019. "Ethical Criteria for Health-Promoting Nudges: A Case-by-Case Analysis." *American Journal of Bioethics* 19(5): 48–59.
- Marx, Karl. 1932. "Estranged Labor" in *Economic and Political Manuscripts of 1844*. Moscow: Progress Publisher 1959.
- Gropper, Sareen S., Jack L. Smith, James L. Groff. 2005. *Advanced Nutrition and Human Metabolism*. Belmont: Thomson Wadsworth.
- Holt-Giménez, Eric. 2017. *A Foodie's Guide to Capitalism: Understanding the Political Economy of What We Eat*. New York: Monthly Review Press and Food FirstBooks.
- Huber et al. 2011. "How should we define health?" *The British Medical Journal* 2011; 343:d4163.
- Jaremka, Lisa M., Ronald Glaser, Timothy J. Loving, William B. Malarkey, Jeffrey R. Stowell, and Janice K. Kiecolt-Glaser. 2013. "Attachment Anxiety Is Linked to Alterations in Cortisol Production and Cellular Immunity." *Psychological Science* 24, no. 3: 272-79. <http://www.jstor.org/stable/23355116>.
- Kim, Hyunju, Laura E Caulfield, and Casy M Rebholz. 2018. "Healthy Plant-Based Diets are Associated with Lower Risk of All-Cause Mortality in US Adults." *The Journal of Nutrition* 148 (4): 624-631.
- Kleisiaris, C. F., Sfakianakis, C., & Papathanasiou, I. V. 2014. "Health care practices in ancient Greece: The Hippocratic ideal." *Journal of Medical Ethics and History of Medicine* 7 (6).
- McKeown, Thomas. 1979. *The Role of Medicine : Dream, Mirage, or Nemesis?* Princeton, New Jersey: Princeton University Press.

Pollan, Michael. *The Omnivore's Dilemma : a Natural History of Four Meals*. New York: Penguin, 2007.

Prins, S. J., Bates, L. M., Keyes, K. M., & Muntaner, C. 2015. "Anxious? Depressed? You might be suffering from capitalism: contradictory class locations and the prevalence of depression and anxiety in the USA." *Sociology of Health & Illness*, 37 no. 8: 1352–1372. doi:10.1111/1467-9566.12315

Streeck, Wolfgang. 2016. *How Will Capitalism End?: Essays on a Failing System*. London, New York: Verso.

Thaler, Richard H., and Cass R. Sunstein. 2008. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven & London: Yale University Press.

United States Department of Agriculture Economic Research Service. 2009. "Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences." United States Department of Agriculture

United States Department of Agriculture Economic Research Service. 2017. "Food Access Research Atlas." Last updated May 18, 2017. <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>

Wark, MK. (2015) *Molecular Red: Theory for the Anthropocene*. London: Verso.

White, Mark D. 2013. *The Manipulation of Choice: Ethics and Libertarian Paternalism*. New York: Palgrave Macmillan.

World Cancer Research Fund / American Institute for Cancer Research. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective*. Washington, DC: AICR, 2007.

World Health Organization. 1948. "Constitution of the World Health Organization." <http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf?ua=1>