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## Neuroliberalism and Beyond

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Neuroliberalism and Beyond
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## Abstract

This paper evaluates the healthy lifestyle promotion corporation known as Blue Zones by focusing on their approach to behavioral modification. The analysis relies on popular theories of governmentality such as neoliberalism, libertarian paternalism, and neuroliberalism that seek to explain how personal forms of knowledge intersect with mechanisms of social control to influence the creation of policy. Through a content-analysis of the organization's foundational text, I argue that Blue Zones is best understood as a form of neuroliberalism because it grants individuals the autonomy to be their own choice architects.

## Introduction

Abuela Panchita is the picture of health. Residing in Nicoya, Costa Rica, she has led a hard but rewarding life. Taking care of her parents, subsisting on family-grown food, and relying on walking as the only form of transportation in a roadless town characterized her youth. After raising a family by herself, she survived the death of one of her sons thanks to God. Now, she is a beloved community icon, and her neighbors take care to check in on her daily and help her with anything she needs. She also stays connected to her son, who bikes several miles each day to see her. Small portions of fresh produce, fruits, cheese, and eggs prepared on a traditional fogòn without any processed or packaged additives give her the energy she needs to keep up with her housework. After her morning chores of chopping wood and using a machete to clear the brush surrounding her small, pole wall, tin-roof dwelling, she takes time to thank God for everything with which he has blessed her. This includes the 100 years that she has been alive.

Who would not want to be like Panchita? She is relentlessly upbeat, surrounded by loving family and friends, has dodged common ailments and diseases that plague many other individuals of her age, enjoys a balanced diet, lives by the traditions of her ancestors, trusts in a higher power, and retains an impressive level of independence in her daily routine. Living a happy, healthy, and long life like hers is a goal for which many strive. As another centenarian asked rhetorically, "Live as long as we can is the aim with all of us, isn't it?" (Withington 2017, 70).

The question of how to accomplish this feat, however, has proven a difficult one to answer. It is not for lack of trying. Longevity strategies ranging from pills, to diets, exercise regimens, surgeries, flossing, and sex have had their time in the limelight for decades. Despite these efforts, the number of individuals who surpass the century mark remains relatively small.

This elite group must be doing something right. At least that was the conclusion journalist and explorer Dan Buettner came to after learning about regions throughout the world containing proportionally high concentrations of centenarians.

Surely, he thought, they must all have something in common that Americans have been missing for all these years. To figure out what it could be, Dan led expeditions to Sardinia, Italy; Okinawa, Japan; Loma Linda, California; Nicoya, Costa Rica; and Ikaria, Greece. Armed with a team of statisticians, nutritionists, anthropologists, and medical doctors, he compiled data from participant observation, historical documentation, physical tests, and interviews. In the end, he concluded that the answer was in their lifestyles. There was not just one key, though, as had previously been suggested. Instead, there were several that worked concurrently and could be found in each of the regions.

Packaging these into the "Power 9," Dan embarked on a mission to implement his findings in the small American town of Albert Lea, Minnesota. He coined this the Blue Zones Project (BZP) after the color of marker used by original discoverer, Gianni Pes, to circle the first recorded "longevity hotspot" on a map. It was an extraordinary success. Nearly three years were added to the average lifespan, millions of dollars were saved in healthcare costs, and tobacco use plummeted ("Blue Zones Results," 2019). Inspired by these results, Dan has continued to expand BZP to more than a dozen American communities spanning from the west coast to the east. To spread the word, he has since published multiple books that consist of both the team's findings and guidelines to help readers create their own personal Blue Zones. While more recent books stray from longevity towards the study of happiness, the original text has remained exceedingly influential, and will be the primary source for the following analysis.

Published first in 2008 and later revised in 2012, *The Blue Zones: 9 Lessons for Living Longer from the People Who've Lived the Longest* chronicles the team's adventures and revelations punctuated by engaging narratives from each of the five blue zones. It is prefaced by expert testimonies that explain the biological limitations of human aging. From there, each of the nine guidelines is elaborated on and advice on various ways to follow them is provided. The text emphasizes the influence of lifestyle on well-being and uses this to declare that the only way to sustain health improvements for life is to alter one's context in a way that makes healthy choices the default.

Context and lifestyle, of course, are ambiguous terminology. For clarification, it is useful to compare Buettner's own language with a more technical definition offered by English researchers Whitehead et al. in their work "Neuroliberalism: Cognition, context, and the geographical bounding of rationality" (2018). They write that one's context embodies one's "social context (and in particular peer pressure and herd instincts), material environment, decision-making frames, and the general push of the world around them" (Whitehead et al. 2018, 639). Even though Buettner does not explicitly offer a definition as concise as this one, he has no qualms with it.

In fact, he addresses each of these facets as "lifestyle components" that can contribute toward longevity. Whitehead et al.'s "social context," for instance, is Buettner's "tribe" of family, friends, and peers. Furthermore, "peer pressure and herd instincts" are put forth as the rationale for Buettner's assertion that one should surround oneself with people who are making healthy decisions so that one does so too. This is most clearly illustrated in his reflection on his time in the Ikarian blue zone:

"Your community makes sure you'll always have something to eat, but they'll also peerpressure you into contributing something too. You're going to grow a garden, because
that's what your parents did, and that's what your neighbors are doing. You're less likely
to be a victim of crime because everyone's at once a busybody and feels like they're
being watched" (Buettner 2012, 255).

Regardless of how it is defined, the people one associates oneself with are understood as an alterable sphere of influence on one's behavior.

Additional observations from this same excursion shed light on the other ways in which the Blue Zones concept of lifestyle components aligns with Whitehead et al.'s idea of context. The notion that "you cannot get through a day in Ikaria without walking up 20 hills" conveys the impact of the material environment (Buettner 2012, 255). Less obviously perhaps is the representation of the influence of decision-making frames in the sentiment that "the cheapest, most accessible foods are also the healthiest –and your ancestors have spent centuries developing recipes to make them taste good" (Buettner 2012, 255). Consistent with the approach's behavioral economic underpinnings, the implication here is that people will naturally choose the cheaper, more convenient, and more pleasurable option when given the chance. While all of these could be considered part of the "general push of the world," the contention that "you'll share a cup of the seasonal herbal tea with your neighbor because that's what he's serving" depicts the almost occult force of one's circumstances on one's actions. No matter whether these elements are categorized as context or lifestyle components, they are portrayed as malleable conditions that affect the behaviors of those who partake in them. By this logic, the term lifestyle can then be understood as the collective force created from the combined effects of each of these that is exerted on individuals, thereby shaping their actions and decisions.

As with any health-oriented enterprise, Blue Zones has been evaluated and criticized by academics concerned with modes of governance and ethicality, particularly in terms of its neoliberal, and neuroliberal, leanings. While these critiques are supported by convincing evidence, this is done under the inaccurate presumption that Blue Zones acts as one singular method, rather than the two that will be proposed here.

These two methods can be distinguished from each other based on the division created between domains of individual freedom of choice. One can exercise this autonomy in one's existing context or in the construction of a new one to obtain the desired goal of longevity. Granting individuals this opportunity to take charge of one's own destiny critiques rather than aligns with the narrowness of strict libertarian paternalism in which a person's fate is subject to the will of a governing force that constructs their context for them. The analytical nature of this approach can be understood as the critical framework component, thereby completing Blue Zones classification as neuroliberal seeing as the organization already fulfills the scientific and practical aspects. Furthermore, this promotion of choice of context is supported by two key insights regarding the dangers of modernity and the importance of variety garnered from the centenarian narratives it draws upon.

## Blue Zones as Neuroliberalism

Traditionally, critics and scholars have referenced Blue Zones in discussions of behavior-oriented governmentality. In other words, the focus has been on the methods and ideologies that Blue Zones uses to influence people's health-related behaviors towards the commonly accepted

<sup>&</sup>lt;sup>1</sup> Governmentality is a concept developed by Michel Foucault that combines government and rationality such that predictable tendencies and mentalities could be used to govern subjects (Rose et al. 2009). Whitehead et al. note that Foucault's expansion on this concept essentially predicted the creation of neuroliberalism several years before it occurred (2009, 647, n. 4).

goal of improved well-being. Earlier works propose that BZP is neoliberalist, while later ones argue that it is libertarian paternalist. Neoliberalism portrays humans as rational beings that strategically make personally beneficial decisions, yet libertarian paternalism acknowledges that humans act irrationally in ways that are frequently disadvantageous, or even harmful, to themselves. Accordingly, neoliberalism says we should be free to make our own choices, but libertarian paternalism says we cannot always be trusted to make the best ones. Consequentially, the government's role is not to directly restrict or control individuals' choices, but to subliminally influence them for the better.

Most recently, however, scholars like Whitehead et al. have argued that Blue Zones represents a new model, known as neuroliberalism, that both castigates neoliberal ideologies of rationality and offers practical resolutions to its disadvantageous consequences (2018, 636). Adapted from the original definition produced by creator Engin Isin, neuroliberalism as explained by Whitehead et al. has three basic components. As they write, this form of governmentality relies on the "mobilization of novel cognitive strategies, emotions, and precognitive affects as a way of securing preferred forms of social conduct while ostensibly supporting liberal orthodoxies of freedom" (2018, 633). In other words, understandings of human irrationality are utilized, society is coerced towards one common goal, and individual autonomy is upheld.

Interestingly, the number of people in question is a thread that ties each of these facets together. Irrationality is based on humanity as a whole, thereby encompassing every individual on the planet. Social conduct breaks this down one step further by referring to groups or populations. While freedom can be assessed in this dimension, it is often understood in terms of the individual. As such, the definition of neuroliberalism accounts for human conduct from the

broadest to the most specific levels of organization. This allows neuroliberalist authorities greater flexibility to operate on multiple scales and in various formats as will soon be demonstrated through the example of Blue Zones.

Another similarity amongst all three components is that they assume that the power for creating change is in the hands of the governing body or external agency. Whitehead et al. perceive this as a shortcoming in writing that "neuroliberalism often operates in denial of the opportunity that individuals have to shape their own behavioural destiny in creative and empowering ways" (2018, 638). Even if individuals are given power through this strategy, this must be granted from a larger force such as the government or private institutions. What differentiates them is that this power takes different forms. When accounting for irrationality, the government makes adjustments based on information they possess. The individuals affected by this body's actions may have alternative opinions, beliefs, and knowledge, but these are more or less irrelevant given their lack of ability to use them to influence the trajectory of the course in question. Likewise, individuals are not the ones determining what the "preferred forms of social conduct" are on a large scale. They might have some minor form of influence such as participation on local boards and in advocacy organizations, but the ultimate power to determine what a society should or should not be striving for is up to their superiors. As noted, freedom does give individuals a degree of autonomy, yet this degree is generally ascertained without their consensus or input.

Just as Whitehead et al. suggest, Blue Zones exemplifies each of these tenets in their guidance towards creating your own personal blue zone. Informed by the burgeoning field of behavioral economics, their approach accounts for the various circumstances and mechanisms by which humans generally fail to make the most beneficial decisions. By compensating for these

mishaps with subtle adjustments, the individual can override their innate tendencies in order to optimize their lifestyle in pursuit of longevity. Habit formation is one such area. Enlisting an accountability buddy, avoiding a rigid timeline, taking on small and easy tasks first, and celebrating the small victories are all strategies advocated for by Dr. Lytle, who has a doctoral degree in health behavior (2012, 265-266). These actions are touted as conducive to long-term behavioral change because of the way that they account for our tendencies to be easily discouraged when trying new things that are not immediately successful, accountable to others more than ourselves, motivated by incentives, and overwhelmed by drastic changes, which are all discoveries within the science of behavioral economics.

On the topic of habits, Buettner holds one particular cognitive strategy in high esteem. Responding to the fact that attempts to change specific routines or actions fail more often than not, he reflects that "the big aha for me is how the agents of longevity reinforce one another for the long term... There's no silver bullet. The power lies in the mutually reinforcing relationship between lots of little bullets. The secret is silver buckshot" (2012, 257). Yes, it is difficult to convert to a plant-based diet, but it becomes much easier when all your friends are doing it and you have access to a grocery store filled with fresh produce. Not only do observations of centenarian lifestyles support this, but so too does science. Specifically, the science of behavioral economics which says that humans are naturally more likely to achieve big changes by pursuing several smaller ones simultaneously.

The most notable "mind-hack," however, is to restructure the context so that potentially harmful decisions are substantially harder to make. Mechanisms to achieve this effect without eliminating any options were coined "nudges" by Richard H. Thaler and Cass R. Sunstein in their influential work titled *Nudge: Improving Decisions About Health, Wealth, and Happiness* 

(2009, 6). This text has become critical in discussions of libertarian paternalism, which Thaler and Sunstein depict as the theoretical component to the practical application of nudges. The theory suggests that people need prescribed degrees of both freedom and restriction to thrive without feeling as though they are merely pawns of a looming force that controls their every move; nudges are functional strategies like manipulation of defaults, heuristics, and salience that fulfill this objective. By contrast, Whitehead et al. argue that libertarian paternalism is the "practical expression of neuroliberal government," thereby reversing libertarian paternalism's role from theory to application (2018, 636).

Teasing out this apparent contradiction necessitates a closer inspection of Whitehead et al.'s elaboration of neuroliberalism. They claim that it has three distinct, yet closely related manifestations (Whitehead et al. 2018, 634). The first is the objective to rebuke traditional neoliberalism through the scientific basis of behavioral economics. The second is the practical implementation of libertarian paternalism. The third is a critical framework for analyzing the burgeoning processes of behavioral government. In simplified terms, neuroliberalism encompasses the science, practice, and theory of behavioral government. The authors further isolate libertarian paternalism to one component by outlining all the ways in which it could not be defined as the theoretical facet. Rather than offering the interdisciplinary viewpoint, "abstract orientation," and "focus on how things could be different" that neuroliberalism as an ideological framework does, libertarian paternalism is characterized instead by its restriction to the "technocratic and positivist zones of the psychological and design sciences," "narrow empiricism," and limited acknowledgement of the potential for "malleability of the present" (Whitehead et al. 2018, 637-638). For Whitehead et al., libertarian paternalism is the practical

counterpart to the science and theory that collectively constitute the concept of neuroliberalism, whereas Thaler and Sunstein portray it as the theory behind the functional application of nudges.

Finding evidence in the Blue Zones approach of implementing said nudges takes little time or effort. External cues to encourage healthy behavior can be utilized in everything from eating to socialization and physical activity. To avoid overeating, for instance, readers are urged to fill their plates before bringing them to the table, make their food appear bigger than it really is, use smaller plates and narrow glasses, hide junk food, and buy smaller packages of food items (2012, 273-274). Limiting accessibility makes it much harder to overindulge because one would have to go out of one's way to do so. If you want a second helping, you must leave the table and go back out to the kitchen, so it is less convenient and therefore less likely. Similarly, you are more likely to regularly interact with your family members if it is more difficult to find space in your home to isolate yourself (Buettner 2012, 293). For this reason, Blue Zones recommends living in a smaller house. When it comes to physical activity, removing many of the conveniences of modern technology makes increased exertion the only option. Getting rid of your snowblower forces you to shovel, just as hiding the TV remote requires a trip for each channel change. Blue Zones's instruction to manipulate one's environment is precisely the libertarian paternalism that characterizes neuroliberal governmentality.

The significance of these efforts comes from the common goal to which they are all directed. Increasing the prevalence of behaviors that contribute to health, well-being, and longevity is ostensibly Blue Zones's primary aspiration. Avoiding disease and illness and maintaining independence as well as cognitive and physical functionality into late life should not be obtained in just any manner though. It is made very clear that the preferred method is lifestyle reform via adherence to the Power 9. Despite the prevalence of its appeal, searching for a

magical fountain of youth like quick-fix pills or surgeries is portrayed as a "boneheaded quest" (Buettner 2012, 3). Instead, readers are urged to move naturally, reduce caloric intake by 20%, follow a plant-based diet, consume moderate amounts of red wine, find their purpose, intentionally relieve stress, engage with a spiritual community, prioritize time with family, and surround themselves with similarly health-minded friends. Blue Zones would probably consider their mission accomplished if everyone followed these guidelines.

Even though Blue Zones accounts for unconscious human "error" and encourages the favorable approach to wellness, simultaneously maintaining individual freedom is crucial to its classification as neuroliberal. It may first appear as though the directive to follow nine principles leaves little room for personal autonomy. Delving deeper, however, it is apparent that opportunities for choices are abundant. The reader, for instance, is prompted to choose not only which of the longevity lessons they want to pursue, but how many of them as well. This "a la carte" approach allows individuals to follow advice that speaks to them personally. If joining a spiritual community seems like too big of a leap at first, one can opt for something that better suits one's inclinations like incorporating plants into one's diet or spending more time with loved ones. Additionally, adopting all the tactics at once is discouraged, so readers are advised to start with only a few or even just one. If attempting several at once feels overwhelming, one can always choose to cut back based on one's own assessment of one's well-being.

Not only can one decide which tactics and how many are right for them, but one also has a say in how one goes about pursuing the ones of interest. In other words, personal autonomy is viable even within the guidelines. In choosing to engage with a spiritually-oriented group, for example, there is not a singular religion or practice that is more or less acceptable for the purpose of longevity. In fact, Buettner makes a variety of suggestions like Unitarian Universalism,

Buddhism, and the American Ethical Union for people who are deterred by religions based on strict doctrines (2012, 290). Similarly, intentional stress reduction, or downshifting, can be achieved by reducing technology such as TVs and radios in the home, arriving to appointments early, meditating, or any other practice that enables the individual to slow down the hurried pace of everyday life (Buettner 2012, 286-287).

This wide array of choices, however, is not inherently beneficial. Psychologist and founder of the "paradox of choice" principle, Barry Schwartz, would even argue that this abundance of options has a negative impact on readers' psyches and well-being, despite being portrayed so positively in popular culture. While having options is not inherently bad, when there are too many "choice no longer liberates, but debilitates" by overloading the consumer with stress and anxiety regarding the potential risks and benefits of their decisions (Schwartz 2014, 1). Although Buettner does not address this more problematic aspect of choice, he does hint at it in writing that "our strategies will put you in the way of pro-longevity practices so that if you make the effort now, you won't have to think about it later" (2012, 265). Essentially, he is acknowledging that choices can be burdensome, but the pressure is supposedly lessened by the fact that they only need to be made once.

Despite the emphasis on the plethora of options available for creating one's own Blue Zone, this menu of choices is somewhat curtailed. After all, individuals are restricted to utilizing the components of the Power 9. While these span across several facets of life and provide ample opportunities for personalization, they do not condone all possible behaviors and modifications. Smoking, for example, is to be avoided considering it is framed as the "biggest threat to improving our lifestyles" (Buettner 2012, 16). So too, is the multitude of quick-fixes and mystical cures such as those mentioned previously. According to one physician Dan interviewed,

these are "mostly hucksterism and charlatanism. They will cost you a lot of money, and these things do not work and, in some instances, can be bad for you. So stay away from it" (Buettner 2012, 20). While smoking and pills are off the table, other options are constrained less obviously through Blue Zones's advice to pursue them in moderation. Wine can be on the menu, but only a few glasses a day. Nuts are a great daily snack, but two handfuls are the limit. Even "antilongevity" foods like meat and highly processed snack items are permitted so long as they are consumed sparingly.

The promotion of individual choice in the construction of a personal blue zone is heard loud and clear, yet further investigation reveals the complexities of potentially negative side effects and various restrictions. Even so, this dimension of freedom is what many critics have used to argue that health intervention programs like Blue Zones exemplify neoliberal governmentality, considering an individual's actions are not entirely dictated by a governing entity. It is Whitehead et al.'s contention, however, that neuroliberalism is an "adapted form of neoliberal governmentality" as opposed to a complete replacement of it (2018, 638). As they state, neuroliberalism retains the imperative to govern and the use of personal freedom characteristic of neoliberalism but differs in that it questions the latter's assumptions of rationality (Whitehead et al. 2018, 638). To this end, it is reasonable to conclude that Blue Zones is not neoliberal, but neuroliberal.

## **Expansion on Neuroliberalism Classification**

There is, however, one key problem with stopping here. By defining Blue Zones as neuroliberal on the grounds that it is not neoliberal, but rather operates as the practical libertarian paternalist application, the critical framework component remains unacknowledged. Addressing this is essential for more accurately classifying Blue Zones's individual approach as truly and wholly

neuroliberal in a way that its counterpart is not. Before doing so, it is essential to distinguish these two methods from each other and to understand how individuals can enact their freedom of choice when it comes to the creation of the context itself and within a given context.

As previously established, this inability for individuals to nudge themselves has been criticized by Whitehead et al. Support for this appraisal comes from the fact that nudge authors Thaler and Sunstein clearly delineate the types of agents who do have this power. To do so, they create the concept of a "choice architect" to describe whoever (or whatever) possesses this ability to shape the context in which decisions are being made (Thaler & Sunstein 2009, 3). These authors elaborate that they are arguing for "self-conscious efforts, by institutions in the private sector and also by government, to steer people's choices in directions that will improve their lives" (Thaler & Sunstein 2009, 5). This exclusive power of the government and private sector is further supported by the examples they provide in which employers can shape retirement and health care plans, private corporations can reduce atmospheric pollution, and the government can mitigate the impact of natural disasters, all by nudging individuals towards certain decisions through shaping the context in which they decide. When applied to Blue Zones, it can be concluded that they, as the organization, are the choice architect in the community approach. What makes them unique, however, is that their individualized approach grants people the ability to be their own choice architects.

To better understand this nuance, it is first essential to discern what separates these two techniques. The Blue Zone Project (BZP) is a community-based health intervention enterprise. Communities can apply to partner with the organization and their team of health and urban planning professionals. If selected, the region in question will be assessed in terms of the degree to which it currently facilitates healthy living, and then the experts will work with local leaders

to construct an individualized plan to improve this rating. Focus is placed on the physical environment using the logic that people live 90% of their lives in a select few locations close to home and so changes in this domain are likely to have a more significant impact ("MAKE" 2021). Streets may be widened to accommodate bike lanes, grocery stores may be remodeled so that healthier items are more visible, community gardens may be planted, and restaurant menus might offer more low-calorie options like salads instead of fries. While some residents of these selected communities can potentially take part in the planning and restructuring process as liaisons or part-time volunteers, the majority are completely absent from any discussion of the changes being made.

This disconnect between individuals and the external forces shaping their behaviors only allows for the use of personal freedoms within the given context since they do not generally have the ability to exert control over the restructuring process itself. Following the grocery store example, one can still choose to seek out and purchase the junk food even if it takes more effort because it has been hidden in the back of store. They do not, however, have a hand in altering the layout of the store itself. Similarly, a resident can decide to bypass the newly designated bike lanes by continuing to drive to work, but they cannot change the fact that they were implemented in the first place. Essentially, BZP and similarly organized place-based health intervention programs do in fact cultivate personal autonomy, but only within the provided context.

As mentioned, the counterpart to BZP is Blue Zones's guidelines for creating "Your Personal Blue Zone," which can be found in Dan Buettner's first book, on their social media pages, and on their website. The nine aforementioned keys to longevity are supported in these mediums by extensive scientific and anecdotal evidence. Consistently, context is showcased as the most influential force on health outcomes. Considering the targeted audience is 21st century

Americans, there is a great discrepancy between the contexts in which the observed centenarians have achieved their long lives, and the ones in which readers hope to do the same. Accordingly, individuals are encouraged to take responsibility for restructuring whatever aspects of their context that they do have control over. Some suggestions include spaces within the home like the kitchen, bedroom, or living room whereas others extend into the workplace. While the implications of this approach will be expanded on shortly, it is important to note that it is distinct from the BZP, in which individuals' environments are primarily being shaped by external actors.

This alternative dimension in which individual freedoms can be exercised comes with choice of context. Unlike the BZP, this method grants people the liberty to choose which "nudges" they want to incorporate into their lives and daily routines. They might not be able to change the landscape of their city, but they can alter the layout of their kitchen and the arrangement of the food in it. They might not have a gym nearby, but they can get in extra steps by parking farther away from the entrance or adopting a dog requiring frequent walks. This is not to say that choice of context negates choice within context. If, for instance, someone chooses to nudge themselves by buying more plant-based food products, they still have autonomy over which ones to purchase. Just because one chooses to give up meat does not mean that they can only replace it with tofu. Although Blue Zones makes suggestions for what types of nudges to commit to, the question of how many, which ones, and in what ways are ultimately up to the individual.

This distinction between these uses of choice is not one that has been clearly drawn in scholarly literature thus far. The fact that Blue Zones serves as the ideal case study to accomplish exactly this is contingent upon the outlined separation of approach styles. For this reason, previous author's failure to address this feature has likely prevented such a discussion from

occurring. Difficulty also comes from the fact that these two methods are not mutually exclusive. One component of Blue Zones Project is advertisement to create your own longevity hotspot while the community is in the process of being restructured. The opposite, however, does not hold up. Residents of regions devoid of any official Blue Zones influence can still follow their own guided path to longevity. These complexities make it challenging to clearly separate the two Blue Zone approaches, which makes analyzing their differences all the more difficult.

Eric Carter's work exemplifies this trend, as well as the general focus on the project aspect of Blue Zones specifically. He addresses both the implications of individual adoption of the Power 9 as well as the implementation of them on a community-wide scale. Even so, it is all covered under the umbrella of Blue Zones. Furthermore, the majority of the analysis is spent on considerations stemming from the project itself. Carter elaborates on the ways in which the public-private partnership model, competition among communities, delegating governance to the community level, depoliticizing responsibility for individual health, and the corporate advertisement of public projects demonstrate the tenets of neoliberalism (2015, 378). All of which are referred to as consequences of the project rather than the underlying ideologies of Blue Zones, or their individually-oriented approach. By drawing exclusively on Carter's analysis, Whitehead et al. refer solely to the BZP as it functions within designated American communities.

Setting aside this lack of separation between approaches for the time being, it is necessary to turn back to the question of individual freedom. In doing so, it is apparent that while scholars clearly reference the general value of the latter as essential to the forms of governance relevant here, they do not distinguish between the two observable contexts in which this power is being employed. Both Carter and Whitehead et al. state that some maintenance of individual choice is crucial to the classification of Blue Zones as neoliberal (Carter) or neuroliberal

(Whitehead et al.), but this "freedom" is a blanket concept with no further elaboration. In doing exactly this, Whitehead et al. suggest that neuroliberalism is "libertarian to the extent that it seeks to ensure that an individual's freedom (usually expressed in their right to choose) is not undermined by behavioral government" (2018, 636). Here, freedom means the choices made in everyday life and particularly the ones that are widely known to affect health, wealth, and happiness, such as what food to eat, what products or services to buy, and with whom to spend time. Perhaps going just one step further in the following section, they write that it is liberal because it "seeks to govern (at both an individual and population level) in and through systems of personal freedom" (Whitehead et al. 2018, 638). Despite acknowledging that these two levels exist and can be assessed separately, there is no explanation as to how these "systems" differ from one context to the other. In other words, the option to alter one's diet is viewed the same way regardless of whether it is prompted by the individual, or by the governing body.

## The Blue Zones Difference

This extension of choice architect power to the individual in one regard while retaining it in another is uniquely revealed by Blue Zones because of the data on which they rely. Other community-health intervention programs have traditionally relied solely on western scientific knowledge to inform their methods of behavior change. From this perspective, smoking should be prohibited because of the damage it does to the lungs and its correlation to the development of various cancers. While Blue Zones utilizes this form of understanding as well, they also incorporate ethnographic data from centenarians in each of the world's five "longevity hotspots." There would be no disagreement that smoking is bad because of its physiological effects, but this conclusion would also be supported by the fact that none of the centenarians the team encountered had a smoking habit. This nuanced integration of sources could be used in a

multitude of intellectual discussions ranging from methodology to ethicality. When applied to this particular analysis, however, it contributes toward a greater understanding of the necessity of multiple arenas of personal choice for the achievement of Blue Zones's goals of improved health and longevity. More specifically, the ethnographic component supports the establishment of choice of context.

The obvious assumption is that the centenarians in question have more control over their environment, so Americans trying to live longer should too. Interestingly, this is not the case. In fact, these populations actually have had comparatively less power to alter their environment than Buettner's audience. This is primarily because the regions they reside in have been largely excluded from the modernization and technological innovation that has swept over the rest of the developing world in recent years. Because of this, many of the longevity keys identified by Buettner were not intentional practices, but automatic defaults. Kamada from Okinawa did not eat sweet potatoes for breakfast, lunch, and dinner for 50 years because she wanted to, but because that was the only option (Buettner 2012, 84). Panchita from Nicoya did not make the 18mile trek to town for salt and sugar to benefit her endurance, but because there was no other available transportation (Buettner 2012, 206). Tonino Tola and his family did not eat bread, cheese, and vegetables for the pleasure of taste, but because that is all they could produce from their land in Sardinia. They were not vegetarians for ethical reasons or to conform to a popular fad, but rather because meat was a rare luxury considering the animals that they raised could not be butchered for consumption but had to be sold to purchase staple grains (Buettner 2012, 48). Despite having minimal potential to exercise personal choice in shaping their environment, centenarians still thrived because the given context of their societies were conducive to their well-being according to Blue Zones.

Of course, time has not forgotten these regions altogether. Buettner clarifies the trend towards modernization that is creeping into even these most remote locations. While inhabitants on the small Japanese island of Okinawa used to subsist primarily on sweet potatoes because it was one of the only crops that could survive the area's typhoons, monsoons, and poor soil conditions, the end of World War II brought a new wave of development as the victorious United States established a base there. Now, residents are faced with more fast-food restaurants per capita than anywhere else in Japan (Buettner 2012, 83). Similarly, Nicoya's beachy coastline increasingly attracts young families on winter vacation and backpackers seeking cheap rooms and dependable surfing conditions.

These changes, however, are not without consequence. Buettner writes that "along with the tourist dollars have come development and an influence on younger people. As with many of the Blue Zones, Nicoya's longevity culture is a disappearing phenomenon" (2012, 213). This observation led Buettner to correlate modernity with mortality. Consequently, many of the technological advancements and conveniences that permeate our everyday lives are portrayed as direct causes of poor health behaviors and outcomes. According to Buettner, mass transportation and electric appliances have replaced opportunities for physical activity, while preservatives and additives further distance us from the fresh, local diets on which we once depended. Gradual behavior modifications like these have resulted in objective declines in measurable well-being such as the rise in diabetes, obesity, and premature death from cardiovascular disease recorded in Okinawa (Buettner 2012, 117). This trend is exacerbated by the fact fewer young people are concerned with preserving familial and societal traditions due to the influence of social media and television messaging that emphasizes new cultural norms of individuality and departure from historic customs (Buettner 2012, 58). Essentially, the antiquated conditions that have supposedly

facilitated the incredible longevity of today's centenarians are being replaced by modern ones that are actually counterproductive to healthy living.

According to this line of reasoning, America does not provide an environment conducive to longevity. Not only does the average American lead an increasingly hectic life to meet growing demands for wealth and productivity by working over 40 hours per week, but "few cultural institutions exist to encourage us to slow down, unwind, and de-stress" (Buettner 2012, 286). Put most succinctly, "If you live the average American lifestyle, you may never reach your potential maximum lifespan" (Buettner 2012, 263). Like countless initiatives before them, Blue Zones uses this foundation to argue that since citizens cannot trust the state (partially because of its infinite quest for advancement) to care for them, they must take on this responsibility themselves. This does not, however, explain why Blue Zones chose to develop two variations of their approach. More specifically, it does not explain why they advocate for individuals to exercise their freedom to choose their own context as opposed to using it strictly to choose within a healthy context chose on their behalf, as traditional programs have in the past. To answer this question, it is necessary to turn back to their sources of information.

If the personal liberty to manipulate the environment to facilitate longevity was not an option for these centenarians, then how could it be essential to American longevity? The answer lies in a theme common to the narratives of centenarians. There is no one route to reaching 100-years of age. Not only are there differences amongst individuals within the same region, but there is even greater diversity across blue zones. The area-specific longevity lessons that conclude each chapter emphasize this quite clearly. From these, the reader learns that Sardinians drink Cannonau wine and goat's milk each day while Okinawans drink tea made of mugwort, turmeric, or ginger. Adventists in Loma Linda relieve stress by observing the Sabbath each week

while Ikarians take daily naps. As Dr. Hirose answered when asked if there is one true answer to the longevity puzzle, "The only common factor we could find is the heterogeneity of centenarians" (Buettner 2012, 112). Since these narratives contradict the notion of a one-size-fits-all solution, they do not provide a neat template from which a new environment could be constructed on a scale as large as the United States.

Having established that the highly modernized American environment needs to be revamped because it is maladaptive to Blue Zones's longevity aims, but that there is no one way to do so Blue Zones sought a solution that solves this paradox. To this end, Blue Zones has proposed that individuals capitalize on their autonomy to shape their personal environment in ways that resemble the lifestyles led by the featured longevity all-stars. In doing so, they can dodge the downfalls of modern society while taking comfort in the dependability of tactics that have clearly been proven successful. It matters less that America probably will not make any foreseeable attempt to reverse the scientific progress they have made because individuals can do this for themselves on a much smaller yet effective scale. Likewise, the implausibility that the American government will reform the existing healthcare system on that of a blue zone is less consequential if individuals can choose their own blue zone to imitate. Although Blue Zones does always not make these connections explicit, they are nonetheless evident.

## The Power 9 Problem

At this point, it is essential to contend with the Power 9 and the potential contradiction it brings forth. Having described how Blue Zones's characteristic enforcement of choice of context was influenced by the observed lack of consistency in centenarian narratives, the possibility that there is actually a discernible coherence can now be entertained. Doing so will provide additional

insight into the complexities and discrepancies in this group's lived realities and reported wisdom, and what this means for Blue Zones's approach.

Before this is possible, it is first necessary to understand the basis and history of the Power 9. In Buettner's own words it is a "cross-cultural distillation of the world's best practices in longevity" (2012, xxiii). After collecting extensive quantitative and qualitative data from each of the five regions about the lifestyles, habits, and health status of centenarians, their families, and their fellow community members, the team began noticing a few prominent trends. The select few factors that continually resurfaced were granted the "Power 9" label after some slight alterations to "fit the Western lifestyle" (Buettner 2012, 265). These were first introduced publicly to readers through the text in question as the keys to increasing your odds of living longer. As the Blue Zones enterprise expanded, the Power 9 became the foundation of their community partnership program. The walking school busses, cooking demonstrations, and public parks found in "American Blue Zones" were all inspired by the simple lessons to move naturally, eat mostly plants, and socialize frequently amongst others. The logic is that since these practices are so ubiquitously successful, they will surely work for anyone who commits to trying them.

It would be easy to take this as evidence that there is not, in fact, very much variability amongst centenarian lifestyles. To do so, however, would be to disregard much of the available evidence to the contrary. While centenarians collectively may share some of the same habits, individually their lifestyles often display an extraordinary degree of diversity. Loma Lindan Marge Jetton, for instance, starts out her day with an eight-mile stationary bike ride, some weightlifting, a powerwalk, and a hearty bowl of oatmeal before running errands for the several community-service groups that she participates in. Okinawan Kamada Nakazato, on the other hand, begins her daily routine with a pot of jasmine tea, a breakfast of miso and vegetable soup,

and prayers for her loved ones before harvesting herbs from her backyard garden for lunch and fulfilling her obligations as the community's spiritual advisor. Yes, both women are attuned to their sense of purpose, eating plant-based diets, and maintaining social engagements, but they are doing so in remarkably different ways.

This cannot just be chalked up to cultural differences either since there is substantial variability even amongst centenarians of the same region. Residents of the Okinawan blue zone serve as a particularly impressive example of this. Where one woman reports that her secret to longevity is to "eat eel every day, work in a place where you can socialize, and if anyone ever gives you something and tells you its healthy, don't eat it!," (Buettner 2012, 111) another centenarian claims that the ticket to living for a century is to "eat your vegetables, have a positive outlook, be kind to people, and smile" (Buettner 2012, 85). Not only do these sentiments address different components of life, but the diet-related parts blatantly contradict each other. What's more, one man asserts that his secret is eating lots of his homemade candy. Not to mention the Okinawan longevity experts who play the lute, tend to their garden, or do yoga. Clearly, individual differences cannot be accounted for by cultural explanations alone.

The variability extends beyond the personal level as well to encompass the centenarians as a group more broadly. From this perspective, it is clear that each of the blue zones adheres to the Power 9 to varying degrees. Some of the guidelines are even absent from one or more region's customs. While Ikarians and Sardinians certainly drink their wine at 5, this is unheard of in Okinawa and Nicoya, and expressly prohibited in the Californian Adventist community. Similarly, intentionally reducing caloric intake by 20% is only done by centenarians in the Japanese blue zone. It would be challenging to find an individual, let alone a blue zone, that follows all nine of the recommended tips and tricks.

Whether it be on the individual or population level, variability amongst the longevity practices of centenarians is undeniable. Illustrating these particularities demonstrates that even if the Power 9 theoretically represented one pathway, it could not possibly be the only one. Following every single one of these guidelines to a tee does not guarantee that an individual, let alone every aspiring American, will survive to celebrate their 100th birthday because no one that has achieved this feat has done so with this method. In reality, the Power 9 functions not as an rigid trajectory but rather as a loose and adaptable framework in reality. To this end, it is still reasonable to conclude that these data have informed Blue Zones's unique choice of context approach given the exposed difficulty that would result from constructing a single context in which individuals could exercise their freedom of choice.

## Conclusion

Blue Zones's use of centenarian wisdom informs their approach, which simultaneously allows for individuals and the Blue Zones corporation to be choice architects in the construction of healthier contexts —a nuance that sets it apart from the manner in which it has traditionally been framed as neuroliberalism. The new analysis presented here is reliant on literature regarding modes of governance such as neoliberalism, libertarian paternalism, and neuroliberalism that seeks to explain the efficacy and attractiveness of various models of influence. While Blue Zones has convincingly been classified as the latter, the criteria used to do so were incomplete seeing as they only accredited the approach with adhering to two out of three of the ideology's tenets. Further delineating the two methodologies employed by Blue Zones reveals that one of them possesses this third component. Providing individuals with the ability to exercise their personal freedom in the construction of their context does not negate or change Blue Zones's neuroliberal

label, but rather expands the discussion and dimensions of it. Additionally, granting freedom within a given context through the community partnership project demonstrates the multiplicity that is made possible by the notions that modernization leads to poor health and that there are numerous pathways to reaching 100-years-old, as suggested by extensive ethnographic data from the longevity hotspots themselves.

As suggested, however, extracting these data from their native region and translating them to suit a western audience poses additional concerns. One of the more obvious ones pertains to the degree to which such a process may resemble cultural appropriation. Future research into this moral and ethical dimension might include additional interviews with the original Blue Zone inhabitants that elicit their perspectives on the matter. It might also analyze the presentation of the proposed longevity tactics with a focus on the extent to which they represent, honor, and accurately depict the cultures from which they came. The translational process also calls into question the physiological efficacy of adopting "foreign" health practices and the difficulty with measuring their success. If one walks as many miles as a Sardinian shepherd, will they live just as long? If they eat soybeans instead of cheeseburgers, will they achieve the same heart health as an Okinawan? These questions could be answered quantitatively through scientific procedures, but what about less tangible practices? How does one compare the impact of regularly socializing with friends as a native Ikarian participating in a culturally unique ritual, versus that of an American acting out of imitation? It is not unreasonable to question whether the "inorganic" nature of the latter inhibits achievement of the benefits experienced by the original practitioners.

Blue Zones, of course, is not the first to engage in this type of evidence-based policy design that necessitates translation. Countless other health initiatives have similarly relied on

Zones, however, offers a unique case study of the potential consequences of this process of transferring and adapting information from one context to another. Additional research is needed to illuminate the ways in which the embeddedness and social implications of these longevity practices are, or are not, being accounted for, and how this impacts the resulting efficacy of them. If someone decides to adopt the Adventist faith and lifestyle tomorrow after reading about the Blue Zones, will they benefit just as much as someone who was born into it? More extensive ethnographic research is necessary for pursuing answers to these inquiries.

The case of Blue Zones also sheds light on how these similar lifestyle intervention strategies may be assessed and compared. Previous work has done so by judging to what degree individuals maintain their autonomy within these provided contexts, yet it is also important to consider the extent to which they can change the context itself, if at all. Are adherents to these various programs merely being presented with different "menus" and told to follow them as they are, or can they manipulate them or create their own? This examination further distinguishes Blue Zones from these other approaches by highlighting the organization's unique incorporation of international ethnographic material that most others lack.

In addition to these considerations, the claims outlined here prompt a multitude of other avenues for future investigation. Accordingly, it is worth searching for other behavior modification strategies that also distinguish between these contexts of choice. If they exist, one can only wonder how they came to do so without the influence of the narratives employed by Blue Zones. Furthermore, one should ask whether these two contexts are the only ones, or if there are others. If so, are they derived from the sources of data, or from some other source entirely? More generally, further investigation might delve into other ways in which centenarian

narratives contribute to the construction of Blue Zones outside the realm of governance. In other words, how else does this type of data impact other aspects of their approach such as the branding or the content itself? Along these lines, what light might their two-fold tactic shed on these other facets? In short, the scope of this topic could be expanded in a multitude of directions. In the meantime, it suffices to say that Blue Zones is uniquely suited to the expansion of the current understanding of neuroliberalism as it pertains to the implementation of health-behavior modification tactics.

## References

- "Blue Zones Results: Albert Lea, MN." Blue Zones, January 8, 2019.

  https://www.bluezones.com/blue-zones-results-albert-lea-mn/#section-2.
- Blue Zones Project. (2020). "Spring is just around the corner." Facebook. March 12, 2020. https://m.facebook.com/BlueZonesProject/photos/a.364153177036540/27386158229235 85/?type=3&\_rdr.
- Buettner, Dan. *The Blue Zones: 9 Lessons for Living Longer from the People Who've Lived the Longest*. 2nd ed. Washington, D.C.: National Geographic, 2012.
- Carter, Eric D. "Making the Blue Zones: Neoliberalism and Nudges in Public Health Promotion." *Social Science & Medicine* 133 (May 2015): 374–82. https://doi.org/10.1016/j.socscimed.2015.01.019.
- Jones, Rhys, Jessica Pykett, and Mark Whitehead. "Governing Temptation: Changing Behaviour in an Age of Libertarian Paternalism." *Progress in Human Geography* 35, no. 4 (2010): 483–501. https://doi.org/10.1177/0309132510385741.
- Rose, Nikolas, O'Malley, Pat, and Valverde, Mariana. "Governmentality." *Annual Review of Law and Social Science*. (2009). 2.10.1146/annurev.lawsocsci.2.081805.105900.
- Schwartz, Barry. (2014). The Paradox of Choice- Why More Is Less [Executive Summary].
- Thaler, Richard H., and Cass R. Sunstein. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New York, NY: Penguin, 2009.

Whitehead, Mark, Rhys Jones, Rachel Lilley, Rachel Howell, and Jessica Pykett.

"Neuroliberalism: Cognition, Context, and the Geographical Bounding of Rationality."

Progress in Human Geography 43, no. 4 (August 2019): 632–49.

https://doi.org/10.1177/0309132518777624.

Withington, John. Secrets of the Centenarians: What Is It like to Live for a Century and Which of Us Will Survive to Find out? London: Reaktion Books, 2017.