

# Silicon Valley Stoics?: Life-Hacking, Transhumanism, and Stoic Therapy

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The modern age is thoroughly technological. I mean this not just in the colloquial sense of “saturated with gadgets,” though this is certainly true. Rather, modern life is defined by and consumed with human making. Technology is literally the product of a *techne*, or a craft, and modern humans have multiplied crafts and thereby multiplied the products of those crafts exponentially. Nature is enframed by human artifice, and lives are governed by the things people have made and put to use, for work, for entertainment, for reproduction, and more. What was true when Heidegger wrote his famous inquiry into *The Question Concerning Technology* is, in other words, just as true today, if not more so.<sup>1</sup>

Technology is in no sense new, nor are concerns with it. Technology has, however, made striking advancements in the latter half of the twentieth and first portions of the twenty-first century that make new products of recent scientific advancement worthy of careful consideration. As famed physicist Werner Heisenberg argued, “[S]tarting in the eighteenth and the beginning of the nineteenth centuries, there was developed a technology which rested on the exploitation of mechanical processes. . . . This form of technology was at first merely the development and extension of old handicrafts, and outside-observers could understand it just as they had understood the old handicrafts themselves.”<sup>2</sup> However, in the mid-twentieth century, “a decisive change in the nature of technology did come about with the development of electro-technics. . . . There was no longer a direct connection with the old handicrafts, since natural forces hardly known to man from his immediate

experience of nature were being exploited.”<sup>3</sup> The contemporary relevance of this observation cannot be overstated. Although the iPhone, the laptop computer, streaming services, and apps all saturate our lives, few of us, if any, truly understand their workings; we merely accept their existence.

The genesis of many of these new, varied handicrafts and their products is easy to locate. A named place exists on the West Coast, home to the movers and shakers of the new technological world: Silicon Valley. The executives in this place are keenly attuned to human psychology, always looking for new ways to hook unsuspecting consumers, conquer inconveniences, or increase productivity.<sup>4</sup> Pleasure-seeking is also a favorite pastime of the elites here, as their drug-fueled sex parties have received much press in recent years.<sup>5</sup> Perhaps it is no surprise that in a time in American history that evokes many comparisons to ancient Rome, and in a place whose luxurious extravagance prompts comparisons to fabled Roman indulgence, a philosophy typically associated with the Romans has simultaneously gained a revival in popularity. This is the philosophy of Stoicism, originally a Greek innovation in philosophy that was then adopted, explicated, and expounded by prominent Roman thinkers like Seneca and, most famously, Marcus Aurelius.

These same Silicon Valley executives who fervently seek technological innovations have in recent years also begun invoking Stoic thinkers.<sup>6</sup> This tendency is popular among those interested in what is called “life hacking,” an activity whereby the invocation of certain maxims or truisms or certain “simple” practices can supposedly drastically improve your life.<sup>7</sup> Life hackers seek to maximize their use of time, shortcut normal learning processes, or in the case of reading and quoting the Stoics, stave off the kind of existential panic or deep moral reflection that would impede the march of productivity. This life-hack mindset bleeds easily into the philosophy of transhumanism that also pervades technological spaces in Silicon Valley. This is unsurprising; conquering inconveniences through intentional habit-forming and technical application is not far removed from biological enhancement.

The commentary on this elite fascination with Stoic philosophy is largely popular. Journalists covering this phenomenon will often consult academics who study Stoicism, mainly to derive some sort of concise definition of Stoicism and to obtain a hand-waving condemnation of the way these life hackers and technologists use the Stoics for their own purposes. What is missing is a full and thorough explanation of why Stoicism is appealing to those whose lifestyle is, on its face, so contrary to Stoic principles. This explanation is found, I argue, not in the Stoics themselves, although part of their appeal is evident. Rather, the explanation is found in certain principles, ways of thinking, and approaches to nature that pervade the modern technological mindset that then draws those who accept it to the therapeutic portions of Stoic thought. That is, the therapeutic benefits of certain Stoic practices seem to hold significant appeal, even when divorced from a Stoic metaphysic. The purpose of this paper is to offer an interpretation of the Silicon Valley approach to nature, humanity, and technology that explains the appeal of Stoicism among the ranks of the makers and masters of our new devices. To be clear, I do not seek to advance any novel interpretation of the Stoics here as aids in an anti-technological campaign. Rather, I seek to demonstrate the tensions between well-understood and expounded Stoic teachings and the approaches to life common among the technological elite and to attempt a brief explanation for Stoicism's popularity despite this tension.

I begin by summarizing and analyzing the Silicon Valley approach to nature, humanity, and technology, critically assessing the phenomena of life hacking and transhumanism. I then turn to a selection of Stoic writings to explore how some technological progress might be viewed in a Stoic framework on the basis of Stoic teaching on nature, the divine, and virtue. Finally, I conclude by offering a preliminary explanation for the appeal of the Stoics to these Silicon Valley executives, despite obvious tensions.

### **Silicon Valley and Technology**

Much ink has been spilled over Silicon Valley's cultural practices. Most notably, the culture and the work life of Silicon Valley are high

indistinguishable. It was companies like Google that pioneered the loose, casual environment that encourages the integration of social life with work through flashy amenities and gadgets.<sup>8</sup> Business consultants advocate for “vulnerability” in the workplace as a means for making workers, who increasingly work longer hours and take fewer vacation days, more productive, happy, and healthy.<sup>9</sup> The supposed success of this model has been exported to other corporate businesses with mixed results, and not without plentiful criticism.<sup>10</sup>

In what is perhaps an example of a solution to a self-created problem, Silicon Valley has also pioneered approaches to life designed to compensate for lost time or lost sanity. The phenomenon of “life hacking” has seen much discussion in both popular and academic circles. The most thorough treatment of the hacker mentality is found in Joseph M. Reagle Jr.’s *Hacking Life*, a detailed exploration of the figures, books, blogs, and habits that characterize the life-hacking movement.<sup>11</sup> In Reagle’s analysis, those who are drawn to the hacker mindset share a few key characteristics: “They are rationally inclined individuals fond of systems and experimentation.”<sup>12</sup> Rather than maximizing efficiency, these hackers desire to maximize efficacy, achieving results beyond what a normal human could without specialized application of hacking techniques.<sup>13</sup>

In this description of those who share the hacker ethos as “rationally inclined individuals fond of systems and experimentation,” it is difficult to miss an easy comparison to Francis Bacon’s utopic presentation of the same impulses in his *New Atlantis*. In Bacon’s imagination, the culture of the island of Bensalem is dominated by the scientific experimentation of Salomon’s House, a research institution devoted to “the knowledge of Causes, and secret motions of things; and the enlarging of the bounds of Human Empire, to the effecting of all things possible.”<sup>14</sup> In much the same way, the rationally inclined individuals at the heart of Silicon Valley’s life-hacking movement desire to apply human knowledge and experimentation to the effecting of all things possible with the human brain, body, and lifestyle. That this sort of life hacking easily gives way to biohacking, or attempts to push the

limits of human anatomy and physiology, is also unsurprising, given the apparent overlap between Silicon Valley's efforts and Baconian optimism. It is at the conclusion of *The New Atlantis* that Bacon summarizes the "wonders of nature" (*Magnalia Naturae*) that are useful to human beings, which include "[t]he prolongation of life . . . [and] the increasing of strength and activity. . . . The altering of statures. The altering of features. The increasing and exalting of the intellectual parts."<sup>15</sup> In short, whatever innovations the creative, tech-savvy class suppose they have made via life hacking and biohacking are foreshadowed by Bacon's own optimism about the new frontiers of human efficacy.<sup>16</sup> As Mark T. Mitchell explains, Bacon's scientific project proceeds from a desire to "assert human control over nature"; unlocking the secrets of the natural world serves the purpose of freeing humanity from the demands of sickness, disease, aging, and death.<sup>17</sup>

It is unsurprising that attempts to augment human capacities quickly give way to attempts to modify and overcome persistent limits. It is worth turning, then, to transhumanism, a prominent ideology in Silicon Valley that has gained attention and popularity in recent years that overlaps with the life-hacking phenomenon. Transhumanism is a broad movement that centers on optimism that humans can overcome present limitations through application of hacking techniques, particularly in medical technology. *Transhumanism* is a blanket term, covering a broad variety of ideologies, referring to a general position toward the application of science to exceed current human limits, both physical and psychological. The connection between transhumanism and biohacking is immediately apparent. However, transhumanism also intentionally seeks to transcend Enlightenment humanism because, as Max More argues, "humanism tends to rely exclusively on educational cultural refinement to improve our human nature whereas transhumanists want to apply technology to overcome limits imposed by our biological and genetic heritage."<sup>18</sup> Transhumanist Zoltan Istvan suggests that these attempts to overcome limits are the essential work of fields like "cryonics, cloning, artificial intelligence, bionics, stem cell therapy, robotics, and genetic engineering."<sup>19</sup>

In other words, transhumanism suggests that human life can and should be augmented, improved, and extended. A common theme in transhumanist literature is treating aging as a disease, and death as an enemy to be conquered. In *To Be a Machine*, a group of transhumanists attempt to convince a journalist, Mark O'Connell, that life is not beautiful for its brevity and that it is perfectly reasonable to fear death and seek to avoid it. O'Connell writes, "Transhumanism's influence seemed perceptible in the fanatical dedication of many tech entrepreneurs to the ideal of radical life extension."<sup>20</sup> Such a devotion is common among tech giants. O'Connell notes that Google even started a subsidiary company, Calico, devoted to the development of anti-aging technologies and products.<sup>21</sup> The struggle or the mission of the transhumanist believer as well as those influenced by a transhumanist view of technology is clear: overcome death at all costs. Rather than recognizing the inevitability of death as a natural facet of human existence, contemporary scientists and technological innovators are seeking to stave off the inevitability of death and thus completely change the human condition.<sup>22</sup> Transhumanism is merely one extreme extension of a common theme; such a clear fear of death and attempts to overcome it are not surprising if one understands the development of modern technology, its underlying assumptions, and the trends it has followed since the modernization of industry that Heisenberg described.

One thinker who has undertaken such a theoretical analysis of technology and its implications is George Grant. In his essay "Thinking about Technology," Grant assesses the view that technology is a neutral, non-imposing, amoral instrument. That is, no technology has inherent or determinative value. Instead, the one who holds and uses the tool determines its value. The tool itself is neutral. Grant rejects this assertion, arguing that this belief can be distilled in the exemplary claim that computers do not impose the way they should be used on their users. Against this claim, Grant presents the following argument: Modern technologies developed out of modern science, which in turn developed out of modern philosophy. Modern philosophy has, at its core, a misunderstanding

of justice. Thus, at least some technology is the product of a perversion of justice and is in some sense perverted and contrary to human flourishing—in other words, it is not neutral. While the claim that technology is a neutral tool, like a hammer, is somewhat intuitive, Grant counters that such a view abstracts the piece of technology from the destiny that was required to produce it. Using computers as an example, he argues that “computers can only exist in societies in which there are large corporate institutions. The ways they can be used are limited to those situations.”<sup>23</sup> Far from being neutral, complex technologies like computers or, say, age-defying advancements are “instruments which exclude certain forms of community and permit others.”<sup>24</sup>

Further, one cannot forget that modern technology is created with the intention of serving a purpose. In some sense, the uses to which a particular piece of technology can be applied are limited or determined by the person who creates it. Any effort to determine how computers or other technologies ought to be used rests on certain preconceived notions about justice and the human person. Grant explains, “The instruments and the standards of justice are bound together, both belonging to the same destiny of modern reason.”<sup>25</sup> In the case of anti-aging technologies and other transhumanist dreams, they are created with the assumed value of prolonging human existence by the means of modifying and enhancing the human body and even eventually moving beyond it, if necessary.

Grant attributes the origin of this philosophy primarily to Nietzsche. To defend this, one could contrast the modern value system with an older Platonic or Aristotelian conception of justice, or indeed with a Stoic understanding of nature that I explore later, which shares certain key features with the conceptions of justice Grant outlines. By way of shorthand summary, Grant understands the “older” system as teleological—in other words, there is a fittedness to all things. Justice is right order, each person and each part of the soul doing what it ought to do, being in its proper place. This classical conception, of course, includes as many assumptions about humanity and human nature as the transhumanist. It is

enough to say that Platonic, Aristotelian, and Stoic conceptions of justice all bring with them a concept of duties toward others. A good person is beholden to certain actions for the benefit of the whole. Grant obviously elides important distinctions between various “classical” conceptions of justice that are worth exploration.<sup>26</sup> Nevertheless, his argument is ultimately that though varied, these classical conceptions have some coherent core that allows for meaningful conversation and agreement between them—namely, an emphasis on selfless duty and a normative approach to nature.

Grant contrasts this older conception of justice with the modern. As he writes, “The modern conception of goodness is of our free creating of richness and greatness of life and all that is advantageous thereto. The presently popular phrase in the modern account is ‘quality of life.’”<sup>27</sup> On Grant’s account, the start of Nietzsche’s ethics, as much as they can be described as such, is the affirmation of the fundamentality of quality of the life of the individual over and above all else. For Grant, this has troubling implications when contrasted with the aforementioned classical conception of justice. He writes,

In Nietzsche’s conception of justice there are other human beings to whom nothing is due—other than extermination. The human creating of quality of life beyond the little perspectives of good and evil by a building, rejecting, annihilating way of thought is the statement that politics is the technology of making the human race greater than it has yet been.<sup>28</sup>

To achieve maximal quality of life, man must overcome those who seek to suppress his will, and indeed must triumph over nature itself, whose chaotic forces seem to fight against man’s endeavors. This can be accomplished through politics, seen as “technology,” as Grant suggests, but it can also be accomplished via technology as colloquially understood.

The use of technology to overcome nature itself, as the transhumanists do, rather than to merely overcome inconveniences



presented by humanity's subjection to nature, as the life hackers do, seems at first to be radically different. However, Grant argues that the latter approach cleanly leads to the former. By treating human nature as disposable or malleable, subject to human making in the first place, there remains no reason to treat nature as normative, nor any clear place to find a stopping point at which conquering nature via technology is no longer permissible or preferable. The Silicon Valley approach to technology, particularly insofar as it seems to lead to a transhumanistic mindset, thus seems to bleed easily into this sort of Nietzschean approach.<sup>29</sup>

What Grant offers, then, are the interpretive resources necessary to begin understanding why the Silicon Valley mindset easily bleeds into attempts to "hack" and modify human biology directly, even extending to the extremes of transhumanism. Those with the time and the resources to modify themselves can get ahead, presumably leaving those without the wherewithal to actively climb the ladder of artificial achievement behind at the bottom with the rest of the normal humans. I do not claim to be offering the definitive or final analysis of Silicon Valley here. Rather, this sketch lays the foundation for understanding the appeal of Stoicism to those whose progress-oriented lives seem to be so in conflict with Stoic virtue. Answering this question more fully requires turning directly to the Stoics and their interpreters.

### **Stoicism and Nature**

Although the Stoics are best known for their suppression of irrational emotion, their doctrine of the divine is as significant and as relevant for the topic of technology as that of emotion. According to Charles N. Smiley, the theological and philosophical innovation of Zeno, the founder of the Stoic school of thought, was the simultaneous teachings of the "fatherhood of God and the brotherhood of man."<sup>30</sup> The fatherhood of God implied several things: first, a divine rationality, or the divine mind, which created and oversees creation like a father. Second, it implies a divine benevolence, or care for each part of creation. Third, it implies the existence of a natural order in the universe, an order that can be seen and understood through reason.

The divine mind is crucial to the Stoic treatment of reason in human beings. As John M. Cooper and J. F. Procopé explain, the Stoics saw the universe as

a single living, rational animal. . . . Its body is Zeus's body; its mind, directing its movements from within it and maintaining its internal variety and arrangements, is Zeus's mind, a mind perfectly and completely rational, perfectly fitted to govern that body. Everything that happens in the world of nature is caused by his thought and occurs as it does for a good reason, as a necessary part of the on-going life of the divine animate cosmos.<sup>31</sup>

Because the universe is unified and governed by a holistic rationality, all parts of nature can be seen as fundamentally rational. That is, all things happen for some good reason that is at least potentially knowable and understandable by rational creatures.

The Stoic conception of nature is summarized succinctly by Marcus Aurelius in his reflective work *The Meditations*. He writes,

The works of the gods are full of Providence. The works of Chance are not divorced from Nature or from the spinning and weaving together of those things which are governed by Providence. Thence everything flows. There is also Necessity and what is beneficial to the whole ordered universe of which you are a part. That which is brought by the nature of the Whole, and preserves it, is good for every part. As do changes in the elements, so do changes in their compounds preserve the ordered universe.<sup>32</sup>

This quotation contains, in compact form, many of the relevant Stoic teachings that concern the subject of technology.

First, Aurelius appeals to Providence. This is reflective of the Stoic belief in the divine mind, a transcendent rationality that animates, orders, and sustains the universe as a whole in all its diverse parts. For Aurelius in his *Meditations*, this is a supreme

comfort in the face of many trials. If there is a transcendent, animating mind behind all things, then for any particular occurrence there must be a particular reason for that occurrence. Put another way, in the Stoic view everything quite literally happens for a reason.

Because everything happens for a reason, Aurelius concludes, anything that happens must be to bring about some good. That good may be distant or unknown to the particular subject. For instance, I may suffer greatly and die suddenly. The reason for this is not readily apparent to me. However, if I simply understand the nature of the universe and the rationality that created and upholds it, I would know that this must have happened for some purpose. It is “good for every part.”

This belief leads Aurelius to a rigorous form of self-discipline that many following him have sought to emulate. It is not fitting, for example, to feel unfortunate because some bad thing has happened. Rather, he says, “I am fortunate because I endure what has happened without grief, neither shaken by the present nor afraid of the future.”<sup>33</sup> In every superficially disappointing, painful, or unfortunate occurrence there is an opportunity to contemplate the overarching rationality of the universe and humanity’s place within it. In light of the divine, the paltry sufferings of one individual are nothing more or less than an opportunity for self-improvement.<sup>34</sup> If the Stoic can convince himself that he is not only part of a bigger picture but also an infinitesimally small part of that bigger picture, his sufferings seem much less significant.

A belief in an ordered universe and the goodness of reason, and indeed the goodness of the divine, naturally gives birth to a kind of early scientific reasoning, or at least to an approach to the world that is not at odds with scientific exploration and experimentation. The very concept of scientific categorization and experiment assumes a replicability and order to the thing under observation. The Stoics, then, could approach natural philosophy with some confidence; even if things appeared to be disordered in certain ways, the belief in an ordering divine rationality would lead a Stoic scientist to believe that the problem was with herself and her

observations, or perhaps a flaw in her reasoning, but not to believe that the world is somehow disordered.

One particular manifestation of the belief in natural order was the confidence that some sort of predictive astrological exercise could, if practiced correctly, discern the will of the divine. R. J. Hankinson defends the rationality of a certain kind of astrological prediction through the lens of Stoic teaching, arguing that the Stoic definition of the Greek *techne*, or “craft,” was “a system of co-exercised apprehensions directed to an end useful in life.”<sup>35</sup> The Stoic understanding of divination as a craft had the dual benefit of offering the potential to understand the will of the divine and the ability to claim insufficiency if predictions failed. That is, the Stoics were committed to the possibility of divination on the basis of their theological and metaphysical presuppositions, but the failure of any particular claim of divination could be accepted without issue. If a prediction failed, the problem is with the details of the practice, not the philosophical commitments that underlie it. In either case, Hankinson makes clear, “the Stoics put their trust in results . . . experience or empirical testing.”<sup>36</sup>

There is evidence that the Stoics adopted the same approach to medicine as they did to divination. The human body is a complex mechanism of ordered, predictable processes that can be understood and modified to restore health if they have failed in some way. Seneca, for example, uses the positive analogy of a doctor working on the body to explain how virtue shapes the person dispassionately. He explains,

A doctor, you see, will first, where nothing much is the matter, try a slight modification of daily routine. Imposing a regimen of food, drink, and exercise, he attempts to secure the patient's health by a mere change in his way of life. His immediate recourse is to moderation. If moderation and order do no good, he takes away or cuts back on some parts of the diet. If the patient still makes no response, he takes him off food altogether and relieves the body by starving it. If these gentler methods fail, he opens

a vein and applies force to limbs which would harm and infect the body by remaining on it—no treatment is seen as harsh if the effects are wholesome.<sup>37</sup>

In other words, we see a rational, virtuous doctor unable to diagnose a particular problem and so attempting to solve it calmly and experimentally, first with moderate solutions and then with more extreme remedies as the situation demands. Presumably a good doctor will have prior experience with diagnosing and treating illness, and the best doctors will have expansive knowledge of the workings of the human body and how to put it back in order. This process is analogous to any other rational worker; surrounding this analogy, Seneca uses similar arguments to explain the processes of a woodworker, smith, soldier, or politician.

Importantly for the discussion of Stoics and technology, this speaks to two characteristics of the virtuous practitioner of a craft: first, the aim of the practitioner is to restore order or to improve life, never to harm it. This improvement is qualified and limited by the Stoic conception of virtue; claiming to improve life by giving way to anger or punishment is impermissible.<sup>38</sup> Second, the excellent practitioner of a good craft who is truly seeking to improve himself and those around him will be dispassionate and calm, not given to anger or excess. It is here that we turn to the Stoic teaching on passion and examine its consequences for technology.

### **Stoicism against Unruly Emotion**

The Stoic belief in the origin and order of the universe is, then, the animating principle that gives rise to other doctrines—namely, the goodness of impassability and viewing certain nominally good or valuable things as ultimately indifferent or disposable. First, the Stoics taught that man's goal was to eliminate unreflective and irrational passions and instead embrace rationality. This is primarily a way of participating in the divine rationality that is found in all parts of the universe; like the divine itself, man can be rational. In putting away or suppressing the irrational parts of himself, man can become

good. Second, because of this impassivity, Stoics were to be unconcerned with indifferent, trivial things that might come to pass.

This approach to the passions is seen throughout Seneca's *On Anger*, in which he presents arguments against anger that are broadly applicable to other emotions Stoics sought to eliminate. For Seneca, allowing anger to foment is a failing of the rational agent. Rejecting the notion, advocated by philosophers like Plato, that the "spirited" part of the soul, or the passions broadly, can be enlisted like soldiers in service to reason, Seneca argues instead that "[v]irtue needs no vice to assist it; it suffices for itself. . . . So reason will never enlist the aid of reckless unbridled impulses over which it has no authority, which it can only contain by confronting them with matching and similar impulses—anger with fear, indolence with anger, fear with greed."<sup>39</sup> For Seneca, anger is not a momentary arousal or reaction to some slight or circumstance. This can be the source of anger, for "[a]nger is undoubtedly set in motion by an impression received of a wrong,"<sup>40</sup> but anger, he says, does not have to flow directly from such an impression. Instead, "our view is that it undertakes nothing on its own, but only with the mind's approval."<sup>41</sup>

This polemic against anger illustrates several things: First, anger and unchecked emotion generally are fundamentally vicious, to be stymied and fought against with reason, not embraced and put to some sort of productive use as other thinkers have suggested. Second, an acceptance of anger or other irrational passions leads inevitably to a cycle of vice, overriding the rational virtues that human beings ought to be exercising. Third, giving place to anger or other irrational passions results not in peace or an ordered soul but in internal turmoil and unrest. Aurelius echoes Seneca's warnings against anger throughout his work. Aurelius chides himself, "You will find that not one of those who have made you angry has done anything which will affect your mind for the worse, and your mind is the only place where evil or harm can come to you."<sup>42</sup> Here Aurelius makes clear that anger comes in response only to perceived harms, not to real harms. Those outside the individual cannot truly harm them, not even by death. It is only by willful

assent to the irrational that individuals forsake their own autonomy and independence and become beholden to the thoughts, conduct, and opinions of the vicious masses.

Seneca and Aurelius warn readers against anger, but the argument applies to other passions. As Aurelia Armstrong writes, “[T]he stoic belief that the good life—the life of virtue, freedom, and happiness—is a life free from passion is reflected and expressed in the high value that stoicism places on psychological independence, tranquility of mind, self-control, and self-sufficiency.”<sup>43</sup> Someone who is reliant on emotions can never truly possess independence, tranquility of mind, self-control, or self-sufficiency for precisely the reasons Seneca critiques anger. Certain passions are, in Seneca’s account, nonrational. They are dependent on external stimuli, not internal reflection. They agitate the mind, causing turmoil. They are, when given room to fester, ungovernable by reason. And, perhaps most importantly, they remove the possibility of self-sufficiency. As Nancy Sherman argues, “The angry person reacts to affronts to honor or respect, the grieving person to loss, and the fearful person to danger in a way that the Stoics argue threatens the self-sufficiency necessary for good living.”<sup>44</sup>

The desire for self-sufficiency is seen throughout Aurelius’s *Meditations*, and it is this enforced self-sufficiency that appears to draw many contemporary commentators to Stoicism as a self-help philosophy and gives us a clue to the appeal of these Stoic thinkers for those who share the hacker ethos. If one can persuade himself that he alone, his will, his effort, his thoughts, his reason, is sufficient for happiness and a good life, many of the pressures of competitive work environments or felt insignificance vanish. Successful practitioners of Stoic reflection and self-criticism would never be bothered by the unintelligence of their workers, the unpredictable nature of the market, or public criticism. They would ideally be entirely independent.

This self-critical process is nothing more than bringing internal feelings in line with the Stoic conception of nature, as outlined in the foregoing. As Armstrong argues, Stoic virtue is simply to live in accordance with nature. This requires accepting the order of the

universe and the necessity of (what at least appears to be) chance. It affirms that any harm or pain or suffering, truly conceived, is internal, not external, and is a product of an irrational view of the universe. Thus, emotional pain and suffering, like anger, can be controlled and eliminated. Armstrong writes, “The acceptance of what happens as fated, which is supported by the conception of nature as providentially ordered, brings freedom from the passions that poison the lives of those who remain attached to external things and who therefore desire things to be other than they actually are.”<sup>45</sup> This does not imply complete passivity of action; Brad Inwood turns to the *Enchiridion* of Epictetus to show that it is perfectly reasonable to attempt to preserve a family heirloom or the life of a family member, for such preservation may be the will of the divine. However, if an heirloom is lost or a family member perishes, a truly wise person will remain unaffected, secure in the realization that this event was inevitable, good, and outside his control. Thus, Stoicism is compatible with “determined efforts and actions to achieve one’s proper goals,” for this is wise and good, but not with an overwhelming preoccupation with forcing reality to conform with a preconceived notion of what ought to be.<sup>46</sup>

### **Modern Makers against Stoicism**

The conceptual connection between the creation and use of technology and the relevant portions of Stoic teaching outlined earlier should be somewhat obvious. First, it is clear that Stoicism does not preclude creating, using, and benefiting from technology wholesale. The prominence of rationality and a belief in divine order leads reasonably to a scientific approach to nature. If the divine mind has left us with an ordered world, it is a judicious thing to learn its workings and put that knowledge into practice, in arts as varied as architecture and medicine. This will inevitably lead to the creation of beneficial technologies. It is hard, for instance, to imagine a Stoic objecting to the use of heart monitors, MRI machines, and X-rays. Rather, Stoics would likely perceive in these things wonderful ways to see the created order in nature with clarity. However, this Stoic science is tempered and moderated by the



simultaneous attempt to lead a life independent of or free from the rule of passions. That is, a truly virtuous person, in Stoic terms, would not be inspired to create technology uncritically or to view everything faced in life as a problem to be solved, rather than as an occasion for the development of virtue. A Stoic might warn against using medical technologies to attempt to overcome and override the dictates of nature but positively endorse the use of technology to “perfect nature and to supplement her weaknesses,” as Brad Inwood argues. Inwood explains that the role of medicine in Stoic ethics is to take stock of the weakness and flaws inherent in nature and, as best as the practitioner of the medical craft can manage, to restore to natural balance what has been disrupted by injury or disease.<sup>47</sup>

In light of the foregoing treatment of the Stoics, a single example from Nolen Gertz’s analysis will suffice to show grounds for Stoic criticisms of use of particular technologies. The phenomenon of Netflix “binge-watching” is, for Gertz, a self-aware practice of self-hypnosis. We are quite aware, Gertz thinks, of what our screen-based technologies do to us. They suck us in, demand our time and attention, and are painfully hard to turn off, even before going to sleep. Yet we continue to make, buy, and use them. Gertz concludes, “If anything it would appear that we like screens precisely *because* of their zombifying effects. . . . In other words, we know that to watch TV is to *escape reality*, and that is precisely *why we like it*.”<sup>48</sup> If it is the case that our screens captivate us and “zombify” us, this sort of irrational self-indulgence is clearly condemnable on Stoic grounds.

It is fitting to consider the necessity of reflection itself in light of technology. If Gertz is correct that most technology is employed as a mind-numbing distraction from the world and the pains of existence, there are sufficient grounds to condemn its use in Stoic terms. As Seneca says, “All our senses, in fact, must be trained to endure. They are naturally capable of endurance, once the mind stops corrupting them.”<sup>49</sup> But today it is not just the mind that corrupts the senses and sentiments; the process is aided by diverting technology. Instead of training our senses to endure, people

numb them with diversions. Instead of doing as Seneca suggests and reflecting at the end of each day on their failings and their successes for the purposes of self-improvement, people turn to devices and diversions to avoid the difficulty of self-reflection and contemplation of higher things.

Heisenberg offers a parable in his book *The Physicist's Conception of Nature* that fittingly encapsulates the Stoic view of technology, as I have attempted to define it in outline here. The parable is attributed to an ancient Chinese sage, Chuang-Tzu. He tells of a man traveling through the country who encounters a farmer laboriously raising water by hand from a well and pouring it into a rough irrigation ditch. The work is slow, plodding, and largely ineffective. The man offers the farmer a remedy: technology. He carefully explains to the farmer the concept of a draw-well, with a weighted lever that aids in pumping. The farmer responds in anger:

I have heard my teacher say that whoever uses machines does all his work like a machine. He who does his work like a machine grows a heart like a machine, and he who carries the heart of a machine in his breast loses his simplicity. He who has lost his simplicity becomes unsure of the strivings of his soul. Uncertainty in the strivings of the soul is something which does not agree with honest sense. It is not that I do not know of such things; I am ashamed to use them.<sup>50</sup>

This self-reflective farmer's words could, without much difficulty, be adopted into the journals of Marcus Aurelius. The farmer walks his well-intentioned interlocutor through a process of reasoning, one that assumes certain things about human nature, human goods, and the impact of technology on both. It would be foolish, says the farmer, to sacrifice "certainty in the strivings of the soul" for something as petty as ease of work. In using the machine, the farmer argues, we become like the machine. This is strangely true in both uses of contemporary technology that I have outlined. In seeking to assert human will over and against human nature and

the order of the natural world, the transhumanists truly sacrifice their humanity. They seek to become machines themselves, as the title of Mark O'Connell's journalistic book suggests. Although they attempt to become something greater through the progress of technology, they are simply growing hearts like machines.

If our primary goal is to achieve individual quality of life and to assert our will over and against that which seeks to quell that will, as Grant interprets Nietzsche as suggesting, it seems natural to attribute the fad of life-extending technologies to a similar impulse. Via technology, man is seeking a way to slow aging, dull pain, prevent the degradation of the brain's functions of reason and memory, cure previously unconquerable diseases, extend life, and even, in the extreme, prevent death by uploading consciousness. In a world where man can erect cities in previously uninhabitable deserts and where man has walked on the surface of the moon and seeks to colonize new worlds, what greater triumph of the will remains than to assert will over death? The Christian scriptures assert in 1 Corinthians 15:26 that the last enemy to be destroyed is death. Modern man seeks to conquer death itself via technology. In contrast, the Stoics believed that a rational understanding of the universe would wipe out fear, including the fear of death. Aurelius turns to iconic words from Plato to establish this point: "Do you think that a mind of great nobility which contemplates all time and all existence will consider human life to be a matter of great importance? Impossible, said he. And will he think death a terrible thing? Not in the least."<sup>51</sup> To the extent that transhumanism stokes fear of death in the hearts and minds of people in Silicon Valley and fights against it at all costs, it can be condemned on the very Stoic premises that Silicon Valley executives ostensibly adopt.

But transhumanism is a philosophy for the rich and the privileged, the Silicon Valley elites who can afford to fund experimental research. As C. S. Lewis astutely notes, the modern understanding of "Man's power over Nature" ultimately amounts to "a power exercised by some men over other men with Nature as its instrument."<sup>52</sup> What of the common person who uses the things the ascetic priests of our day create? Gertz's criticisms of the common ways technology is used

today hit home. Our devices are designed to numb, distract, and stupefy; entertainment technology caters to base pleasures and desire for distraction. Although technology has tremendous potential to aid in the advancement of human reason, the tendencies of the technologies themselves pull us away from those uses and toward the self-medicating suppression of reflection. It would seem that a full understanding of Stoic teaching and a full adoption of Stoic ethical principles would lead one to reject the motivations that underlie much technological creation and use; if the goal of Stoicism can be summed up as a type of independence, then addiction to new technologies is definitionally antithetical to any sort of Stoic approach.

Again, Armstrong's analysis is helpful. She writes,

For Nietzsche, the folly of Stoic ethics is in turning a useful strategy for dealing with destructive or debilitating passions into an ideal of human flourishing. It is the Stoic ideal of virtue as freedom from passion, along with the interpretation and evaluation of existence that undergirds this ideal, that Nietzsche calls into question. Nietzsche evaluates this ideal from the perspective of promoting the enhancement and growth of human power.<sup>53</sup>

That is, Nietzsche sees a certain utility in the Stoic self-abasement and view of the passions. It is useful and important, in Nietzsche's view, to recognize that much that we view as suffering is an internal phenomenon and not an external one, that we are often tortured by an improper view of the world and would be saved much pain if we understood it properly. Where Nietzsche thinks the Stoics move to excess is in their effort to be free from the rule of the passions, which seems to ultimately be life-denying, limiting the "enhancement and growth of human power." But the destructive and debilitating passions for the makers of new technology can include feelings of guilt, remorse, and trepidation that might modify their behavior, limiting the growth of human power through technology. This, then, could provide a partial explanation for Stoicism's appeal: it forms a sort of technological strategy for subduing certain

inconvenient passions, a strategy that can be adapted and adopted and practiced even when tensions arise between Stoic teaching and the students of emotionally suppressive techniques.

Attempting to fully explain the appeal of Stoicism to those who hold the reins in Silicon Valley risks stepping into speculative psychological profiling. However, some important things have become clear: The hacker ethos, whether displayed in typical life-hacking attempts or in the extremes of transhumanism, conflicts with Stoic principles. Nevertheless, those who adopt such mindsets persist in referring to Stoic thinkers and teachings and using them for their own purposes. Stoic teaching seems to lead one to avoid doing whatever harm is within one's power, particularly such harms as would drive people away from reason and toward unreflective living or emotional captivity. Nevertheless, new entertainment and social media technologies are self-consciously used to numb and stupefy, along with contributing to political unrest and psychological damage. What could cause someone who claims to adopt or learn from Stoic teachings to pursue harm so blatantly? Among others, two possibilities seem likely: a desire for unimpeded progress, and a lack of guilt or remorse.

Regarding the first: In the Silicon Valley mindset, to pose deep ethical questions, a course of action, or a project of creation prior to undertaking it could be ruinous to the very goals integral to the project itself. The executive, the scientist, and the inventor alike must put aside their forward-looking considerations and live in the moment of creation, lest the potential harms of their making become clear to them and their lifestyle be undermined. In an interview with National Public Radio's *Invisibilia*, for example, a former worker at the MIT Media Lab describes an environment of rampant optimism, unhindered by "critical reflection." But, in her view, this lack of critical reflection was precisely what enabled the rapid progress for which the lab was striving, for "it enabled people to make all kinds of things that they never would have made otherwise."<sup>54</sup> The Stoic impulses that might lead to restraint, in other words, are left out of the equation; the growth of human power is prioritized, at great cost.

Regarding the second: Those who have fled the companies that drive Silicon Valley culture have expressed such remorse and guilt at the readily apparent harms caused, for example, by social-networking websites.<sup>55</sup> While both users and moderators on these websites suffer the harmful political and psychological consequences,<sup>56</sup> the executives who control the machine continue their operations apace, aided apparently by their turn to Stoic philosophy. Those closest to the Silicon Valley makers—namely, their children<sup>57</sup>—are intentionally spared the harmful effects of the devices and apps that they create, while the bulk of humanity is made captive to the addictive tendencies of the same. The difference between those who have left in shame and those who have remained to continue their work seems to be that those who leave hold passions that could be “debilitating” to the march of progress, like understandable guilt, whereas those who remain have stifled or ignored those passions, perhaps with the aid of the aforementioned technologized form of Stoic self-discipline. The utility of Stoic philosophy for the Silicon Valley hacker, then, seems to come from the therapeutic use of Stoic self-examination as a “useful strategy for dealing with destructive or debilitating passions,” and not from its use as a means for true self-improvement.

### Conclusion

So what, precisely, is it that draws Silicon Valley executives to Stoicism, particularly in light of what seems to be a readily apparent tension? For his part, Reagle offers an attempt to explain and reconcile the two: the Stoics, like those who share in the hacker ethos, are rational systematizers, hoping to categorize, understand, and explain the universe in the context of a coherent whole. For Reagle, the overlap between life hackers and Stoics consists of “fondness for experimentation and reliance on reason.”<sup>58</sup> Reagle sees significant commonality between the efforts of Stoics to suppress or rule over irrational emotion and the efforts of life-hacking pickup artists, gamblers, and efficacy-maximizers to minimize the role that emotions and emotive decision-making play in their lives.<sup>59</sup> Like the Stoics, these hackers rely heavily or primarily

on reason and see it as their key to living a good life, much better than that of the average human.

It ought to be clear, however, that Reagle's explanation goes only so far, or at least that Stoicism does not cleanly or necessarily lead to the hacker ethos Reagle has so helpfully outlined; indeed, Nancy Sherman has argued that those who treat Stoicism purely as a life hack have missed "ancient Stoicism's emphasis on our flourishing as social selves, connected locally and globally."<sup>60</sup> Returning to the earliest example in Reagle's book, the hacker ethos leads to people attempting to conquer and overcome certain simple inconveniences like preparing a simple cup of tea. Where for the hacker a routine task becomes an obstacle to be overcome, for the Stoic, annoyance with the routine might pose an opportunity for self-reflection and improvement, making the Stoic a better person, family member, and citizen. The Silicon Valley approach to the Stoics, then, appears to be something like the modern approach to nature: take the useful parts, strip away the inconvenient parts, and profit, whatever the external costs. By focusing only on self-actualization or the progress of industry, Silicon Valley pseudo-Stoics foreseeably harm others in their pursuit of what they see as their own good.

The preliminary answer to this question, then, comes from uniting Reagle's understanding of the hacker ethos and Gertz's understanding of the numbing effects of our modern technologies. Ultimately, Stoicism seems to hold appeal for our modern makers in Silicon Valley because it offers both a rational and systematic view of the world and, in a narrow interpretation, a sort of hacker approach to calming wayward and inconvenient passions that could distract from progress and innovation. Where Gertz argues that Netflix is often used as an intentionally numbing, zombifying anesthetic for the masses, Stoicism can be "hacked" and used for much the same purposes by the elite. Netflix serves to numb the masses against full-blown nihilism and existential dread, while the platitudes of a self-help approach to the Stoics numb the elites against guilt and self-reflection in service of their truly self-centered project of expanding human power over other humans without apparent end.

### Notes

1. Martin Heidegger, *The question concerning technology, and other essays*, First edition. ed., Harper colophon books, (New York: Harper & Row, 1977).
2. Werner Heisenberg, *The Physicist's Conception of Nature* (New York: Harcourt, Brace, and Company, 1958), 17.
3. Heisenberg, *The Physicist's Conception of Nature*, 17.
4. For examples of each of these, see Tim Wu, *The Attention Merchants: The Epic Scramble to Get Inside Our Heads* (New York: Vintage 2017); Nolen Gertz, *Nihilism and Technology* (New York: Rowman & Littlefield, 2018); Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, First edition. ed. (New York: PublicAffairs, 2019).
5. Emily Chang, "'Oh My God, This Is So F---ed Up': Inside Silicon Valley's Secretive, Orgiastic Dark Side.," *Vanity Fair*, February 2018.
6. Ryan Holiday, "7 Ways Billionaires Like Warren Buffett and Bill Gates Demonstrate the Ancient Philosophy of Marcus Aurelius," *Business Insider*, June 8, 2017, 2017, <https://www.businessinsider.com/stoic-philosophy-exercises-2017-6>.
7. Olivia Goldhill, "Silicon Valley Tech Workers Are Using an Ancient Philosophy Designed for Greek Slaves as a Life Hack." *Quartz*, December 17, 2016, <https://qz.com/866030/stoicism-silicon-valley-tech-workers-are-reading-ryan-holiday-to-use-an-ancient-philosophy-as-a-life-hack/>.
8. Arielle Pardes, "Silicon Valley Ruined Work Culture," *Wired*, February 24, 2020, <https://www.wired.com/story/how-silicon-valley-ruined-work-culture/>.
9. Mike Robbins, *Bring Your Whole Self To Work: How Vulnerability Unlocks Creativity, Connection, and Performance* (Carlsbad, California: Hay House Inc., 2018).
10. Dan Lyons, *Lab Rats: How Silicon Valley Made Work Miserable for the Rest of Us* (New York: Hachette Books, 2018).
11. Joseph M. Reagle Jr., *Hacking Life: Systematized Living and its Discontents* (Cambridge, MA: The MIT Press, 2019).
12. Reagle Jr., *Hacking Life: Systematized Living and its Discontents*, 4.
13. Reagle Jr., *Hacking Life: Systematized Living and its Discontents*, 31. That efficiency is not the end goal of the hacker ethos is demonstrated early in Reagle's work, with an anecdote of a Silicon Valley early adopter of smart-home technologies who spends eleven hours attempting to get his wi-fi-enabled teakettle to brew him a cup of tea. See Reagle Jr., 1, 2.



14. Francis Bacon, *The Major Works* (Oxford: Oxford World's Classics), 480.
15. Bacon, *The Major Works*, 488–89.
16. It is important to note that many of these practices are not as innovative or unique as they might claim to be. The popularity of fasting as a “biohack,” for instance, belies the deep history of fasting as a practice for spiritual and physical health. See, e.g., Jay Richards, *Eat Fast Feast* (New York: HarperOne, 2020).
17. Mark T. Mitchell, *The Limits of Liberalism : Tradition, Individualism, and the Crisis of Freedom* (Notre Dame, Indiana: University of Notre Dame Press, 2019), 28.
18. Max More and Natasha Vita-More, eds., *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future* (Wiley-Blackwell, 2013), 4.
19. Zoltan Istvan, *The Transhumanist Wager* (Futurity Imagine Media LLC, 2013), 8.
20. Mark O'Connell, *To Be a Machine: Adventures Among Cyborgs, Utopians, Hackers, and the Futurists Solving the Modest Problem of Death* (New York: Doubleday, 2017), 7.
21. O'Connell, *To Be a Machine: Adventures Among Cyborgs, Utopians, Hackers, and the Futurists Solving the Modest Problem of Death*, 7. As O'Connell's reporting shows, while people like Zoltan Istvan are somewhat fringe figures, it would be a mistake to label transhumanism as relegated to extremists on the edges. Transhumanism is an ideology that in its various forms has proponents as diverse as Ray Kurzweil to Peter Thiel. See Ray Kurzweil, *The age of spiritual machines : when computers exceed human intelligence* (New York: Penguin, 1999); Mark O'Connell, “The Techno-Libertarians Praying for Dystopia,” *New York Magazine*, April 30, 2017, <https://nymag.com/intelligencer/2017/04/the-techno-libertarians-praying-for-dystopia.html>.
22. Bacon himself charged that that we ought not “so place our felicity in knowledge, as we forget our mortality.” Nevertheless, the boundaries between the radical life extension Bacon envisioned among the wonders of nature and the eradication of death envisioned by the transhumanists are not entirely clear. See Bacon, *The Major Works*, 124.
23. George Parkin Grant, *Technology and Justice* (Concord, Ontario: House of Anansi Press, 1991), 26.
24. Grant, *Technology and Justice*, 26.
25. Grant, *Technology and Justice*, 28.
26. Grant explores the details of justice at greater length elsewhere. See, e.g., George Grant, *English-Speaking Justice* (Toronto: Anansi Press, 1998).

27. Grant, *Technology and Justice*, 30.
28. Grant, *Technology and Justice*, 94.
29. In his book *Nihilism and Technology*, Nolen Gertz uses Nietzsche as an interpreter of modern commercial culture to argue that modern Western people are predominately nihilistic. That is, like the nihilists that Nietzsche recognized, assessed, and criticized in his works, users of technology today are simply attempting to dull the terror of the meaninglessness of existence. Where the nihilists of Nietzsche's day attempted to do this through the teachings of ascetic priests, the nihilists of the present day do this primarily through technology, provided by large companies that fill the function of ascetic priests. Technology, then, emerges, in Gertz's understanding, as fundamentally life-denying and life-destroying rather than progressive and helpful in the way that transhumanists think of it. A nuanced combination of Grant and Gertz allows us to conceive of technology as providing both the means necessary to free one from constraints and the possible means to continue to participate in life-denying activity. See Gertz, *Nihilism and Technology*, 21.
30. Charles N. Smiley, "Stoicism and its Influence on Roman Life and Thought," *The Classical Journal* 29, no. 9 (1934): 646, <http://www.jstor.org/stable/3289820>.
31. Seneca, *Moral and Political Essays*, trans. John M. Cooper and J.F. Procopé (Cambridge: Cambridge University Press, 1995), xvii, xvii.
32. Marcus Aurelius Antonius, *The Meditations* trans. G.M.A. Grube (Indianapolis: Hackett Publishing Company, 1983), II.3.
33. Antonius, *The Meditations* V.49.
34. This conception of providence must be carefully qualified. As Ralph Stob argues, whereas Christians believe in a providence that is concerned with the good of each individual, the Stoic conception of providence allows for an overall ordered goal while leaving individuals "in the lurch." The comfort offered by the Stoic belief is not one of a personal, relational deity who has your particular best interest in mind, but it is rather a self-abasing, self-minimizing sort of psychological activity. See Ralph Stob, "Stoicism and Christianity," *The Classical Journal* 30, no. 4 (1935), <http://www.jstor.org/stable/3290087>.
35. R. J. Hankinson, "Stoicism, Science, and Divination," *Apeiron: A Journal for Ancient Philosophy* 21, no. 2 (1988): 137, <http://www.jstor.org/stable/40913586>.
36. Hankinson, "Stoicism, Science, and Divination," 138.
37. Seneca, *Moral and Political Essays*, "On Anger," I.6.1-2.

38. Seneca, *Moral and Political Essays*, “On Anger,” I.4.3.
39. Seneca, *Moral and Political Essays*, “On Anger,” I.9.1, I.10.1-2.
40. Seneca, *Moral and Political Essays*, “On Anger,” II.1.3.
41. Seneca, *Moral and Political Essays*, “On Anger,” II.1.4.
42. Antonius, *The Meditations* IX.42.
43. Aurelia Armstrong Aurelia, “Spinoza and Nietzsche Contra the Stoics: The Passions, Power, and Practical Philosophy,” *Journal of Nietzsche Studies* 44, no. 1 (2013): 8, <http://www.jstor.org/stable/10.5325/jnietstud.44.1.0006>.
44. Nancy Sherman, *Stoic Warriors: The Ancient Philosophy Behind the Military Mind* (New York: Oxford University Press, 2005), 66.
45. Aurelia, “Spinoza and Nietzsche Contra the Stoics: The Passions, Power, and Practical Philosophy,” 11. Michael Frede explores this notion at length. He argues that the wise Stoic person who truly understands the nature of the good will know that it is to be valued above things that merely have value. In other words, while things like “life, health, and bodily integrity” have value in a certain sense, they are not in themselves valuable, in that there are times when one must sacrifice them to pursue the good in itself. A truly wise person must treat these “valuable” things not as good themselves but as indifferent. See Michael Frede, “On the Stoic Conception of the Good,” in *Topics in Stoic Philosophy*, ed. Katerina Ierodiakonou (New York: Oxford University Press, 1999), 89.
46. Brad Inwood, *Ethics and Human Action in Early Stoicism* (New York: Oxford University Press, 1987), 123.
47. Inwood explains that “[c]rafts and nature are not opposed, but complementary.” This restoration of balance to a point of health or proper function, then, appears different in motivation than the Baconian project of unlocking the useful parts of nature for the augmentation of human biology and will. See Brad Inwood, “Goal and Target in Stoicism,” *The Journal of Philosophy* 83, no. 10 (1986): 556, <https://doi.org/doi:10.2307/2026429>.
48. Gertz, *Nihilism and Technology*, 61.
49. Seneca, *Moral and Political Essays*, “On Anger,” III.36.1.
50. Heisenberg, *The Physicist’s Conception of Nature*, 21.
51. Antonius, *The Meditations* 7.35. Quoting Plato’s *Republic* VI.486a–b.
52. C. S. Lewis, *The Abolition of Man* (New York: HarperOne, 2001), 55.
53. Aurelia, “Spinoza and Nietzsche Contra the Stoics: The Passions, Power, and Practical Philosophy,” 20.
54. National Public Radio, *Invisibilia*, podcast audio, Computer or Human? + Thad 2015, <https://www.npr.org/2015/02/13/385793862/computer-or-human-thad>.

55. Tero Karppi and David B Nieborg, "Facebook confessions: Corporate abdication and Silicon Valley dystopianism," *New Media & Society* 0, no. 0, <https://journals.sagepub.com/doi/abs/10.1177/1461444820933549>.
56. Yvonne Kelly et al., "Social Media Use and Adolescent Mental Health: Findings From the UK Millennium Cohort Study," *EClinicalMedicine* 6 (2018), <https://doi.org/10.1016/j.eclinm.2018.12.005>; Miriah Steiger et al., "The Psychological Well-Being of Content Moderators: The Emotional Labor of Commercial Moderation and Avenues for Improving Support," in *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (Association for Computing Machinery, 2021).
57. Nellie Bowles, "A Dark Consensus About Screens and Kids Begins to Emerge in Silicon Valley," *New York Times*, October 26, 2018, <https://www.nytimes.com/2018/10/26/style/phones-children-silicon-valley.html>.
58. Reagle Jr., *Hacking Life: Systematized Living and its Discontents*, 130.
59. Reagle Jr., *Hacking Life: Systematized Living and its Discontents*, 132, 33.
60. Nancy Sherman, "If You're Reading Stoicism for Life Hacks, You're Missing the Point," *New York Times*, May 14, 2021, <https://www.nytimes.com/2021/05/14/opinion/stoics-self-help.html>.