FOUR

Intel Beethoven: The New Spirit of Classical Music

In November 2015 at the Flugplatz Ahrenlohe, an airport in Tornesch, Germany, the Intel Corporation set a world record. As a live audience watched, technicians launched one hundred unmanned drones into the air, where they performed a synchronized light show meant to mimic a fireworks display. Representatives from Guinness World Records were present and officially decreed that the event—which was called Drone 100—had flown the "Most Unmanned Aerial Vehicles airborne simultaneously."[1] To accomplish this epochal happening, Intel marketing directors had worked for months with engineers at Ars Electronica Futurelab, a small group of artists and technology researchers based in Linz, Austria.

Intel produced a short documentary of the occasion, which played at Intel CEO Brian Krzanich's keynote address at the 2016 Consumer Electronics Showcase in Las Vegas. The documentary video begins with short interviews with Intel employees and drone technicians. Soon, we hear the sounds of an orchestra tuning up, and then we begin to see classical musicians, dressed in traditional concert black, carrying their instruments to a site on the airport's runway where music stands have been set up. The video intercuts shots of the musicians unpacking their instruments with shots of hands carefully unpacking drones from padded cases. Night falls, and all is in readiness; suddenly the drones launch into the sky and spread out into a synchronized formation that swirls and changes color in response to orders given by computers—running on Intel processors—on the ground.

Accompanying this dizzying display of unmanned drone technology, we hear the orchestra launch into the first movement of Beethoven's Fifth Symphony—the familiar four-note "ba ba ba BUM" colloquially known as the "Fate motive."[2] In the original symphony, these opening four notes are capped by a fermata, which causes a moment of silence that feels weighted and portentous.[3] However, the version of the symphony the orchestra played during Drone 100 eschewed this moment of silence, immediately answering Beethoven's opening motive with another one: the perhaps equally well-known four notes of Intel's mnemonic tone. That little sonic logo we hear at the end of every Intel commercial is, in the words of Teresa Herd, Intel's VP-global director, what "defines Intel as a brand."[4] While the impulse of a classical music lover might be to laugh at this bizarre juxtaposition, the orchestra performed it with the utmost seriousness; the music was meant to dramatically underscore an exciting and even awe-inspiring event. For the rest of the fireworks show, the orchestra continued playing this transformed version of Beethoven's symphonic movement, in which every main iteration of the "Fate motive" was answered by Intel's mnemonic tone.

Drone 100 and its soundtrack were a major part of a yearlong marketing initiative Intel undertook in an effort to change its brand image. Intel invented the microchip in 1971, and is primarily known for making chips and processors—nuts-and-bolts hardware that other companies purchase and use to run their computers, laptops, robots, and drones. As a result of this position in the industry, it has long struggled to make itself more visible in a marketplace dominated by glamorous consumer electronics like those made by Apple; for over a decade, the company's advertising slogan has been a plea to Look Inside. Krzanich rolled out the new marketing campaign in his 2016 Consumer Electronics Showcase keynote address, a two-hour-long multimedia presentation during which he played the documentary about Drone 100 and ceaselessly reiterated a new, tweaked version of the corporate slogan: Experience What's Inside. Entering the stage on a hoverboard, Krzanich noted that "almost every part of life that we enjoy today is defined by the power of technology, but the technology alone is not our focus. Instead, I want to emphasize the experiences this cutting-edge technology will deliver to you."[5] The emphasis on experiences continued throughout the two-hour presentation, and was reiterated by the pro gamers, fashion designers, composers, and robot technicians who periodically joined Krzanich onstage, and by a video presentation by Lady Gaga. The new slogan and the focus on experiences are deliberate: for years, industry insiders have been charting a marketing transition from products to experiences, as everything increasingly becomes managed by the Cloud and product turnover becomes ever more instantaneous.

The recomposed Fifth Symphony that underscored Drone 100 was also used in the commercial that Intel produced as part of its marketing transition, and that first ran during the 2016 Super Bowl. The ad—titled

"Experience Amazing"—presents a bewildering array of images intercut at lightning speed. In the first seven seconds alone we see a woman jumping off a cliff; a person silhouetted against a galaxy of green lights; a face with a digital web projected onto it; a laptop screen showing a mixing board; a close-up of a microchip; a skateboarder in midair; a close-up of an eye opening and its pupil dilating; a pixelated image of a violinist; a camera's pulling back to reveal a live violinist standing in front of that image; a robot; a grid of glowing ones and zeroes; a person emerging from underwater; a hand holding a microchip; a camera zoom into circuitry; and a sudden wide shot of a space shuttle taking off. There is no voiceover, and very little text. Instead, the images are tied together by the recomposed version of Beethoven's Fifth.

Walter Werzowa, the Austrian composer who created the remix, also created Intel's mnemonic tone, in 1994. That tone—which in the tech world is known as "the bong"—consists of four notes of equal rhythmic value that outline a fourth and then a fifth (D♭–G♭–D♭–A♭), and it is constructed from multiple synthesized instruments, including a lot of xylophone and marimba sounds.[6] Weaving the bong into the opening of Beethoven's symphonic material was, at least from a purely logistical perspective, actually quite easy, given that Beethoven's famous motive is also four notes long and is frequently being played by different instruments throughout the movement. Werzowa simply replaced certain iterations of Beethoven's motive with the Intel bong. He titled his composition "Symphony in Blue" and recorded it in Vienna with a ninety-piece live orchestra conducted by Claudius Traunfellner.

In this chapter, I will discuss how Intel's new marketing campaign uses Beethoven's Fifth to naturalize capitalism's myriad disruptions of human life, a move symptomatic of neoliberalism's vexed relationship with history. I also examine how the campaign and its use of Beethoven work to naturalize and sanctify the US military-industrial complex and the conditions of endless war and total surveillance that increasingly characterize global life under late capitalism.

Neoliberalism and History

Neoliberal writers and economists manifest a fraught orientation toward the past. On the one hand, because of the instability and inequality their proposed practices generate, neoliberals often try to position free market principles as revivals of ideals from lost historical golden ages, in an attempt to make them seem like timeless virtues rather than historically and culturally contingent economic theories that can be criticized. On the other hand, however, neoliberals champion innovation and creative destruction as the foundations of a healthy society, and to do so they must present the past as a nightmare from which entrepreneurial innovations deliver us.

Examples of the rhetorical devaluation of the past abounded in Krzanich's Consumer Electronics Showcase keynote address. Discussing Drone 100 and what such innovations will mean for humanity, he said dismissively that fireworks "have been around for over 2000 years" and have barely changed at all during that time. However, the Drone 100 project has "completely redefine[d] the firework experience." Krzanich said that he sees "a future where fireworks, and all of their risks, and smoke, and dirt, are a thing of the past. And they are replaced with shows that have unlimited creativity and potential, powered by drones."[7] Other people who came onstage to demonstrate various new Intel-powered products also reiterated this rhetorical formula, which takes as a given that a process or activity must be disrupted simply because it is time-honored: someone who created an app to help farmers manage herds of livestock noted that "for centuries, herds have been managed in the same way. Our app is going to change all that"—without explaining what, exactly, is so bad about the way herds have traditionally been managed or in what way the app will represent an improvement.[8] Similarly, Krzanich credited the Bollywood film composer A. R. Rahman with "transform[ing] the experience of music" because of his demonstration of motion-sensing wristbands that electronically generate synthesized musical sounds.[9] Watching the keynote address presentation, it was difficult for me to understand what it was about music's conventional modes of performance that needed innovating: the wristbands were presented as exciting simply because they were new and used technology, not because they solved any existing problem with musical performance.

Although neoliberal rhetoric about innovation presents aspects of the past as dirty, dangerous, or otherwise in desperate need of an update, it must nonetheless also find ways of grounding the disruptions and destructions caused by the ever-faster cycling of markets within some notion of historical precedent or sense of timeless truth. Neoliberalism desperately requires such precedents, because otherwise its disruptive role in human life would be unbearable to the societies it ruptures. If we did not believe that everything is always and has always been changing, and that the only viable approach to this change is to become adaptable, flexible, and self-sufficient, we would be less likely to accept neoliberal facts of life such as outsourcing, downsizing, and the loss of benefits traditionally provided

by employers, like health insurance and pension plans. In *The Condition of Postmodernity*, David Harvey examines this issue at length, arguing that the cycling of capitalist markets generates a "maelstrom of ephemerality" that grows increasingly unmanageable as "time-space compression" intensifies.[10] Harvey argues that we have been forced to accept the maelstrom of ephemerality caused by creative destruction, which leads us to value instantaneity and disposability above permanence—in marketing terms, we begin to value experiences and spectacles above solidly built products that last a lifetime. However, he considers that a major social ramification of this disposable culture is the loss of a sense of historical continuity, which generates a rising demand for mementoes and symbols of the continuing presence of a lost past. It is in this sense that the revamped idea of classical music I have been assessing throughout this book becomes most useful to corporations like Intel.

The rhetorical tension between evoking the greatness of the past while also scorning the past's old ways of doing things can be seen in the writings of liberals from Friedrich von Hayek to Milton Friedman and beyond, as well as in a wide variety of contemporary corporate marketing schemes and public statements. Marketing efforts in the classical music world can also display a similarly contradictory attitude toward the past. For example, the Los Angeles Philharmonic recently embarked on VAN Beethoven, a marketing project in which a large van fitted with comfy seats and Samsung Gear VR Oculus–powered headsets drove around Los Angeles to "bring the experience of Walt Disney Concert Hall to the people of Los Angeles!" in the words of the press release. Individuals climbed into the van, donned the headsets, and experienced in virtual reality a four-minute snippet of the LA Phil performing Beethoven's Fifth as swirling animations enhanced the concert footage. On the one hand, brochures and press releases advertising such schemes describe classical music as timeless, universal, and the carrier of humanity's highest values—"Music is a fundamental human right," proclaims a VAN Beethoven press release—while on the other hand, they attempt to align classical music with hip new technological innovations, like Oculus headsets.[11]

Many other orchestras and opera houses have attempted to draw in new audiences via the use of new technology, such as incorporating digital light shows or projecting animations during concerts. In general, US classical music institutions large and small have accepted the idea that incorporating new technology of almost any kind is the best means of attracting new and larger audiences and imbuing old art forms with social relevance: a collaboration between Vice Media and Intel called the Creators Project

focuses on rewarding arts institutions for using technology to make art more appealing to consumers; a press release about the new music group NovaTrio emphasizes that classical music and "advanced technology" are wholly compatible, and says that the group's performances are meant to "remind people of these ties and to raise the performance of music into an immersive total-sensory experience to the audience."[12] Such marketing rhetoric—which implies that the latest consumer electronics are not only commensurable with but even inextricable from the authentic performance of centuries-old music—has become commonplace. Thus, classical music hops onto technology's coattails, but at the same time, tech corporations get to be associated with enabling the "fundamental human right" classical music is said to represent.

Neoliberalism was born in an attempt to rescue the free market from the socialist ideals that began encroaching on economic liberalism during the first part of the twentieth century, when the New Deal granted legitimacy and political recognition to the working class and Keynesian economics held sway over much of the Western world. Although neoliberalism is not simply a recreation of eighteenth- and early nineteenth-century liberalism, it does look to this past for its justification, finding in the work of writers like Adam Smith or David Hume the idea of "pure" free market principles, unsullied by misguided communalism.[13] Tellingly, however, neoliberal writers often look even further back than the eighteenth or nineteenth century in establishing the moral justification for an unregulated free market. When contemporary tech corporations appropriate classical music in their marketing schemes, they are seeking a similar sort of precedent for their products and the value system necessary for propagating them.

Friedrich von Hayek, who served as both inspiration and mentor for Milton Friedman, wrote in the 1940s that the value of personal liberty—and, by extension, free market principles—is not only associated with classical thinkers like Smith, Hume, and John Locke but is "one of the salient characteristics of Western civilization as it has grown from the foundations laid by Christianity and the Greeks and Romans." Hayek also asserts that the rise of socialism represents an abandonment of "not merely nineteenth- and eighteenth-century liberalism but the basic individualism inherited by us from Erasmus and Montaigne, from Cicero and Tacitus, Pericles and Thucydides."[14] Neoliberals since Hayek often similarly ground their economic ideas in nineteenth-century philosophy while also routinely evoking a rhetorical linkage with even more distant pasts. Writing in the 1960s, Friedman calls "our" love of freedom and personal liberty "unchanging principles,"[15] and locates the emergence of "political freedom"

in the free market thinking of the nineteenth-century liberals. However, he also goes much farther back in time to demonstrate how deeply the free market is rooted in the human experience. "Historical evidence speaks with a single voice on the relation between political freedom and a free market," he maintains. "I know of no example in time or place of a society that has been marked by a large measure of political freedom, and that has not also used something comparable to a free market to organize the bulk of economic activity." Noting that political freedom always comes along with a free market, Friedman goes on to cite ancient Greece as one of these "golden ages."[16]

These rhetorical evocations of past golden ages are meant to soothe anxieties about the disruption and inequality that free market principles seem inevitably to cause. If these principles governed the greatest eras of human achievement, then perhaps the social problems they engender can be more easily dismissed as the symptoms of too much rather than too little governmental regulation of our innate human instincts. Friedman presents capitalism as a necessary, intrinsic condition for political freedom throughout history, although in practice—as even his own example may illustrate, given that ancient Greece was a slave state—capitalism is not only founded on but actively requires some degree of systematized inequality to function successfully as a system. The principal tenet of modern capitalism is that those with capital must try to accumulate more, which can be done only by increasing the amount of surplus value generated by labor.[17] As Marx demonstrated, the system is predicated on the reality that some people have surplus money, which accumulates, while other people have none, and instead sell their physical labor to capitalists; this is fundamentally an unequal system, even leaving aside its more grotesque historical outcomes (like slavery). Whether or not all individuals have the legal right to better their own personal position within this system via hard work or luck does not change the basic inequality on which the system functions.

Thus, the neoliberal attempt to locate free market ideals in great eras of history must always remain a vague and general one, because any deeper study of history reveals that capitalism tends to worsen inequality rather than to ease it. Many scholars since Marx have attempted to outline the rise of capitalism in history, and to demonstrate how it was contingent on specific historical factors (such as the bubonic plague in medieval Europe and the expropriation of the peasantry from common lands), rather than emanating ahistorically from a basic expression of universal human nature. Such scholars have also been concerned with identifying how the capitalist system requires and maintains inequalities of various types, in

every era. For example, the feminist Marxist Silvia Federici has spent her career demonstrating that race-, class-, and gender-based inequalities are ongoing *requirements* of capitalism, arguing that "the continuous expulsion of farmers from the land, war and plunder on a world scale, and the degradation of women are necessary conditions for the existence of capitalism at all times."[18] These are the brutal facts that so much lofty neoliberal rhetoric is designed to obscure, and they illustrate why neoliberals' grand claims to historical precedents provide so few dates or concrete details.

The Spirit of Neoliberalism

In *The Protestant Ethic and the Spirit of Capitalism*, Max Weber describes the ways that sixteenth-century Puritanism engendered a powerful new belief that amassing profits and participating in market competition were activities pleasing to God, despite the fact that the New Testament explicitly militates against such behavior. Weber quotes the great Puritan father Richard Baxter, who wrote:

> If God show you a way in which you *may*, in accord with His laws, acquire *more profit* than in another way, without wrong to your soul or to any other and if you refuse this, choosing the less profitable course, *you then cross one of the purposes of your calling. You are refusing to be God's steward, and to accept His gifts.*[19]

Over the next few centuries, these ideas became unmoored from their original religious foundations. By the time of Benjamin Franklin, Weber argues, the value of competing to earn profits had been secularized, and turned into simply a "maxim for the organization of life."[20] For Franklin and the other "bland deists" who propagated the spirit of modern capitalism, individuals simply have a duty to work hard and amass profits.[21] This duty is detached from any conception of an explicitly religious salvation, and thus, as Weber notes, it is somewhat strange. If amassing profits means an individual is more likely to go to heaven instead of hell, then it certainly makes sense to work hard to amass profits. If, however, we no longer believe that such activity is evidence of our divinely blessed status, there seems to be little reason for us to work so ceaselessly and compete so viciously with one another. For Weber, then, when we participate in profit-seeking behavior we are enacting a religious ritual that has been emptied of its religious content, which renders the ritual brittle and unsatisfying.

Future writers like Luc Boltanski, Eve Chiapello, Wendy Brown, and

David Harvey have interrogated the various ways that capitalism persuades us to continue participating in it. The condition Weber describes seems unbearable—why don't we revolt, or simply submit to despair and nihilism? Boltanski and Chiapello argue that despite its detachment from explicit religious ideas, contemporary capitalism remains nonetheless quite adept at supplying us with justifications for rallying to the system. Since the nineteenth century, these justifications have come largely from economic science, which uses data to "prove" the efficacy of certain policies or processes.[22] Boltanski and Chiapello maintain that although their foundation in empirical data allows such justifications to appear "non-ideological," they are nonetheless deployed as "powerful moral reasons" for the continuation of the capitalist system.[23] Neoliberal writers thus increasingly manifest a strange ambivalence, simultaneously insisting on the superiority of hard empirical data in justifying capitalism's continuing dominance and making grandly moralizing claims about things like "human nature" that are impossible to demonstrate or define empirically.

In light of work by writers like Federici and Thomas Piketty, reconciling statements about capitalism's wondrous ancient history with the effects of the system in practice is impossible. Even with so general a historical precedent as "ancient Greece," Milton Friedman reveals a basic and unavoidable contradiction between the neoliberal valorization of personal liberty and the unequal, unjust realities of a successful capitalist system. Since it is impossible to actually identify a time in the past when capitalism generated a better quality of life for everyone in a society, and since God and heaven no longer provide meaningful reasons for participating in capitalism, contemporary neoliberals must look to even vaguer justifications for their economic ideas, finding them in pseudoscientific formulations of human nature.

Neoliberals refer confidently to the fact that human nature is based on an instinctive desire to trade and barter, and to be self-interested and competitive in interactions with other individuals—a notion of individualism that is actually quite recent, and that emerged most prominently in the philosophical writings of thinkers like Thomas Hobbes and John Locke, as I discussed in chapter 2. Appeals to basic human nature should raise red flags to any critically engaged thinker, but for many neoliberals such a rhetorical maneuver offers the only means of justifying essentially antihumanist and certainly antisocial beliefs and practices. The neoliberal economist Deepak Lal's recent book advocating for a return to true classical liberalism is organized around the human nature fallacy; he begins

by asserting that the basic model for all human nature is *homo economicus*, meaning that "human beings are self-interested and rational: maximizing utility as consumers and profits as producers."[24] In demonstrating this fact, Lal constructs a brief survey of human history beginning in "the Stone Age in Eurasia."[25] Stating that bartering "is part of our basic human nature," he argues that communalist social structures seek to repress this elemental expression of our species.[26] His historical survey is meant to prove that competitive capitalism is a more natural and moral system than socialism; along the way he compares Gandhi to Stalin, blames Chinese peasants' poor work ethic for the famine of the Great Leap Forward, and uses logic to prove that caring about the misfortunes of strangers is mere "sentimentality" that does nothing to better society.[27]

Neoliberals like Lal contribute to our widespread inability to conceive a postcapitalist world. Since capitalism appears to be inextricably bound up with our biological experience of life, and since we accept many of its tenets as natural expressions of our deepest instincts, it is indeed difficult to imagine some other way of organizing society. As senator Nancy Pelosi put it in a January 2017 town hall meeting, "We're capitalists, and that's just the way it is."[28]

The Idea of Classical Music

> If the classic has been defined in no small way by hinting at some inherently ethical quality, the question will arise at each invocation: whose classic and whose ethics?[29]

Theodor Adorno wrote that capitalist society "applies tradition systematically like an adhesive; in art, it is held out as a pacifier to soothe people's qualms about their atomization."[30] Classical music can serve as just such a soothing pacifier for neoliberal marketers to use on citizens, not only because of its obvious associations with *the classic*, a term that began being used in the eighteenth century to indicate timeless moral virtue, but also because of aspects of the new musical ideology that emerged in response to Beethoven's symphonies and that held those symphonies up as articulations of timeless, universal, idealized truth. The association of Beethoven—and specifically of the Fifth Symphony—with this kind of universal truth and virtue is one reason the work has become so well known. Orchestras feel compelled to program it year after year because audiences experience it as the ultimate work in the canon; its ubiquity and its perception as the

classical symphony nonpareil (as well as the "van" in its composer's name) are surely why it was chosen for the LA Phil's VAN Beethoven marketing scheme.

In marketing campaigns like "Experience Amazing," classical music is often used as a generic stand-in for the idea of historical continuity. The tech strategist E. G. Nadhan, who writes regularly for Intel's *Peer Network* blog, wrote that the most powerful aspect of the Drone 100 event was "the synchronization between the classical audio music in the background with the dynamic visual technology in the foreground." For Nadhan, what makes this synchronization "even more symbolic" is the fact that this music is not new: "it is the time-tested classical music that continues to earn the respect of the connoisseurs with a refined taste for the arts. The same music would have drawn the appreciation of the crowds centuries back." The ultimate message Nadhan derives from Intel's whole campaign is that "the business of the enterprise has not really changed. The enabling technology has."[31] This kind of insistent dichotomy, which presents technological innovation as utterly new while also grounded in timeless historical precedent, is very common in the marketing and self-promotion of tech corporations.

The Intel marketing campaign's use of the symphony aligns the company with a very specific musical ideology that was born in the early nineteenth century. Within this ideology, large-scale instrumental works like Beethoven's symphonies became the means of bringing hidden universal ideals into the light—they enabled us to "look inside." An article about Intel's new commercial and marketing campaign says that the ad pairs Intel's mnemonic tone with Beethoven's symphony to show that "the chip manufacturer does more than just power computers."[32] The "Experience Amazing" ad, as well as Drone 100 and Brian Krzanich's keynote address, attempts to establish Intel at the center of humanity's most timelessly cherished ideals and as the reason products of immeasurable cultural value (like spaceships and Beethoven's Fifth) are born.

The genre of the symphony first emerged as a brief instrumental introduction played before the first act of an opera. From these undignified beginnings—as, essentially, music meant to quiet down a crowd before the main event—it evolved over a hundred years or so until, by the mid-nineteenth century, it had become the preeminent Western musical genre, the genre most associated with genius, artistry, and compositional mastery. Beethoven is strongly associated with this transition in the symphony's fortunes; beginning with his third, the "Eroica," he started writing symphonies that were fantastically long by then-conventional standards

but that also exploited the generic form in interesting ways. Previously, the four movements of a symphony had been more or less discrete: four individual pieces bearing scant musical relationship to one another. But in the Fifth Symphony (which premiered in 1808), Beethoven linked all four movements together via the four-note "Fate motive." This motive recurs frequently throughout the symphony's first movement: one instrument passes it to the next, it rumbles in purely rhythmic form in the timpani, and even the cellos and basses take it up while all the other instruments are playing the movement's second theme, which, conventionally, is supposed to provide a moment of contrast. Not only does this simple motive tie the first movement intricately together, but it also provides the basis for the other three movements.

This compositional technique—dubbed "organicism"—became one of the signal goals of post-Beethoven nineteenth-century symphonic composition. As a structuring principle it fit in well with the cultural predilections arising in Europe during Beethoven's time. A persistent interest in organicism characterized the long nineteenth century, manifesting in many disparate realms of cultural production. In Darwin's theory of evolution, Hegel's and Marx's conceptions of historical progress, and the rise of the *Bildungsroman* (or "novel of development"), we can see deep interest in progressive development throughout the era. E. T. A. Hoffmann's famous essay on Beethoven's Fifth strongly foregrounded the organicism of the symphony as a primary reason for its historical superiority, even when compared with works by other, earlier greats like Mozart and Haydn. Hoffmann observed that for the sensitive and thoughtful listener, "there springs forth, issuing from a single bud, a beautiful tree, with leaves, flowers, and fruit," and described the way Beethoven's "simple but fruitful theme . . . forms the basis of each movement; all remaining subsidiary themes and figures are intimately related to the main idea." This extreme organicism—governing not only each movement but also the symphony as a whole—as well as the fact that the simple starting idea develops and evolves over time, is what lends the work its "unity."[33]

For Hoffmann, though, mere compositional complexity was not the real reason Beethoven's symphony was so superior to all previous compositions. For him, the unity that musical organicism generated was what enabled the work to go beyond the simple evocation of moods or feelings, instead leading the listener "imperiously forward into the spirit world of the infinite!"[34] Its ability to disclose to sensitive listeners the usually hidden realm of the infinite—a realm populated by ideal forms—was the aspect of Beethoven's instrumental music Hoffmann most prized. Mark Evan Bonds

details the resurgence of Platonic idealism in German Romantic philosophy of the eighteenth and nineteenth centuries, noting that within an idealist framework, vagueness or lack of specificity (long considered weaknesses of instrumental music, in comparison with texted music) became transformed into great strengths.[35] For writers like Hoffmann, abstract symphonies like the ones Beethoven constructed were liberated from the tawdry concreteness of words, and from the realm of the merely human; thus liberated, such music attained the ability to reveal transcendent truths to individual listeners with the sensitivity and understanding necessary to accept them.

The conception of complex instrumental music as a vehicle for sublime revelation has colored Western music—its composition as well as its reception and historiography—in various ways ever since. Many German composers after Beethoven were haunted by this conception, feeling duty-bound to generate musical works of ever-increasing complexity and organic unity. Such an urge motivated Wagner's attempt to create the *Gesamtkunstwerk*, the "total work of art" in which every conceivable human art form would be combined in an epic and transcendent "music drama." Meanwhile, many twentieth-century French composers revealed their own entrapment within these dominating musical ideas by rebelling against them, creating instrumental music that self-consciously and often humorously deflated such overweening Germanic pretensions.[36] As recently as 2007, the musicologist Lawrence Kramer advocated for classical music's continuing relevance in contemporary society by putting forth the Hoffmannesque belief that such music enables the discovery of inner selves, and the realization that we are each unique.[37]

Theodor Adorno, too, was very interested in Beethoven's symphonies, and in what they revealed. However, where Hoffmann insisted that this music opened the realm of the infinite—that it transcended human reality and accessed the ideal—Adorno felt that it revealed specific truths about society and culture. For him, "authentic" works of art, like Beethoven's Fifth, articulated social reality, so careful analysis of these works could reveal that reality. Encoded in Beethoven's music are truths about the social relations governing his time and place, and thus good analysis will criticize the musical work and society simultaneously.[38] Given this understanding of Beethoven's music, it makes sense that Adorno was so disturbed by the transformations this music underwent in the growth of the culture industry.

In his essay "The Radio Symphony," Adorno assesses the Fifth Symphony and why it is meaningful, in the most literal sense—he seeks to reveal how the symphony imparts meaning. For Adorno, as for Hoffmann,

the most meaningful aspect of the work is its organicism—the fact that the opening motive is not merely repeated often but is *developed*. Changing perpetually, the motive "gains structural perspective" by "wandering" from instrument to instrument, foreground to background, soft to loud.[39] This development is what enables the motive to be transformed from a "monad" to a "cell," the representative of the whole work. Adorno argues that this development—which comprises the work's ability to impart meaning—is possible only if we hear the transformation of the motive over time. Only in this gradual transformation does its repetition "become more than repetition."[40]

Adorno's essay has often been mischaracterized as simply a critique of the poor sound quality of early radio broadcasts, but what he is arguing is much deeper. Listening to the Fifth Symphony over the radio means not only that its quiet parts become inaudible and the subtle resonances between instruments are effaced; it also means listening while darning socks, chastising children, reading the newspaper, doing the dishes, or discussing the stock market. Such "atomized" listening—which Richard Leppert defines as "listening for the good parts"—reduces the intricate structure of the symphony to a series of sound bites, alienated from their context and incapable of generating meaning.[41]

In Walter Werzowa's remix of the Fifth, the aspects of the symphony that have caused everyone from Hoffmann to Adorno to hear the work as conveying meaning—its organic unity and the development of its main idea over time—are absolutely jettisoned, and replaced with mere repetition unattached to any notion of evolution or change. The remix simply alternates Beethoven's motive (the "good part" of the work) with Intel's mnemonic, back and forth. It also edits the movement drastically, interrupting transitions, cutting the second theme, moving directly from exposition to recapitulation, and ultimately condensing the entire movement from its original 502 measures down to a radically truncated collage of fifty-some measures, selected from various points in the movement. Finally, the remix transposes Beethoven's music, moving it up a half step, from C minor to C-sharp minor. The utility of this transposition is self-evident: the Intel mnemonic is in D-flat, and given the remix's role as an Intel commercial, as well as the centrality of the mnemonic to Intel's brand identity, it would not have made sense for Werzowa to transpose the mnemonic. The transposition also enables Beethoven's four-note opening motive (which here becomes G♯–G♯–G♯–E) to be answered by the Intel mnemonic (D–G♭–D♭–A♭), which, by ending on the same note Beethoven's motive begins on (G♯/A♭), creates the startling effect of "finish-

ing" it, bringing Beethoven's motive full circle before the movement has properly begun.

The "atomized listening" that, Adorno argues, radio broadcasts both encourage and require shifts the meaning of the symphony "from the totality to the individual moment," because the *relation* of the individual moments to one another "is no longer fully affected." The symphony, once so inspiring for its ability to transform monads into cells, is reduced once more to a pastiche of unrelated and isolated utterances. In light of this, the widely held belief that radio compensates for its less desirable aural aspects by bringing the symphony to a wider audience is "hackneyed." For Adorno, broadcasting the symphony over the radio has both "trivialized and romanticized" it: "what is heard is not Beethoven's Fifth but merely musical information from and about Beethoven's Fifth."[42] In the intervening decades since Adorno wrote these words, both the Fifth Symphony and our listening habits have become exponentially more fragmented; the symphony has become a ringtone, a cultural touchstone detached from its original meaning, and we now listen to it on a plethora of devices, which allow us to pause, rewind, and skip sections we are tired of.[43]

Accordingly, Werzowa's composition goes much further in atomizing the symphony than simply broadcasting it over the radio ever could. In Beethoven's symphony, individual moments are meaningfully related to one another, changing, developing, and gaining momentum until ultimately their combination forms something much greater than the sum of its parts. The recomposed version presents only a few parts, not only detached from their appropriate context and thus prevented from making meaning, but also infiltrated by a totally alien idea (the Intel "bong") that slowly takes over; the end of Werzowa's version leaves Beethoven's "Fate motive" hanging on the dominant, and instead concludes with four repetitions of the Intel mnemonic, underneath text of the new slogan: Experience What's Inside.

The advertisement itself also visually detaches the symphony from its traditionally group-oriented mode of production, replacing that production with an atomistic conception of music-making. Although the live orchestral recording of Werzowa's recomposition provides the main soundtrack for the ad, the ad's visuals do not feature him or an orchestra. Instead, to represent the creation of what we are hearing on the soundtrack, the ad shows the Hawaiian musician Kawehi, who creates multilayered songs using the software Ableton Live and an array of technology. In a climactic moment in the advertisement, during the thunderous lead-up to what in

Beethoven's original would be the lyrical B theme, we see Kawehi triumphantly unleash a drum machine beat and a harmonized vocal iteration of the Fate motive that undergirds the rest of the ad's soundtrack.

The Intel advertisement attempts to sell a related set of ideas: by showing paralyzed people and amputees restored to full functioning via robotic prosthetics, the ad tells us that technology liberates individuals physically; by showing musicians and dancers interacting with computers and projection screens, the ad tells us that technology enables and enhances individual creativity; the space shuttle taking off tells us that technology can emancipate us from the earth itself. Finally, though, the ad tells us that technology can liberate us from others and enable us to be creative and innovative all by ourselves. Significantly, almost all the images in the Intel ad depict individuals working alone. With the exception of two shots of huge crowds (one watching a fireworks display; one at a rock concert) and one shot of several men playing video games together and screaming, the ad shows nothing but individuals performing tasks alone: one ballerina, one jogger, one skydiver, one BMX biker, one race car driver, one fashion model, one violinist, one face, one hand, one eyeball, one man hunched over in the dark, soldering a microchip. The ad does not depict the ninety-person orchestra that actually recorded the musical score; instead, it shows Kawehi, playing by herself.

Kawehi represents an ideal neoliberal individual. She uses Web 2.0 platforms like Kickstarter and YouTube to construct and maintain her career, and does not rely on the support of a label or any other kind of traditional employer. In addition, she uses technology to create innovative new musical sounds without the aid of other people, generating an impression of group music-making by splitting herself into multiple parts—using loops to accompany herself and to play her own guitar solos on top of her own drums and chordal accompaniment, and using a harmonizer to diffuse her voice into a multiplicity of voices.[44] In these ways, Kawehi represents the ideal individual to corporations like Intel.

Timothy Taylor concludes his *Music and Capitalism* with what he calls "an antidote to the technological triumphalism" that has now become so widespread in the discourse surrounding technological innovation and music. Noting that new technologies have made it easier for amateurs to record and disseminate their products—an arguably "democratizing" phenomenon—Taylor nonetheless also points out that the very ease of production has increased the workloads of professional musicians, because it enables their bosses "to demand more of them, faster, sooner."[45] Not only

has the rise of digital technology changed musical labor formations and devalued musical expertise, but for many recording artists, "the absence of studio musicians has created a more sterile creative environment."[46] Where once the recording studio was filled with people—people smoking, talking, fighting, and listening together as well as contributing different skills and ideas to a given musical product—now the act of musical production is often a hermetic affair; Taylor argues that some of music's "sociality" is being lost.[47]

As this book has demonstrated, because of the threat to capital they rightly perceive in class consciousness and collective struggle, neoliberals undertake to destroy collective identity in a number of ways. Conservatives work to revoke all the government-funded programs that treat the poor and underemployed as a group with shared challenges and concerns, while progressives seek to maintain such a social safety net, though they do so in a way that similarly discourages collective identification and upholds the power structure: outlining a meritocratic strategy for helping individuals lift themselves out of poverty by dint of hard work and good morals. In neither case is capitalism itself identified as systemically causing inequality. Progressives and conservatives alike see poverty as an individual failing; the difference between them has mainly to do with the degree of sympathy they afford poverty's victims.

Of course, these moves are made not in the name of class warfare but rather with the goal of fostering independence and personal liberty in a given population. But in this formulation, *liberty* becomes attached to individuals' ability to care for themselves financially. Wendy Brown notes that anticollective processes break a citizenry down into individual units of human capital, and says that "a democracy composed of human capital features winners and losers, not equal treatment or equal protection."[48] Neoliberalism thus presents a marketized version of individualism, one in which the individual is all that matters, but all the things that contribute to constructing individuality—such as personal formative experiences, family life, education, race/gender/sexuality, and relations with others—are rendered unimportant in the face of the individual's market actions.

In previous eras of Western history, individualism was positioned as oppositional to society, but here it becomes one of society's requirements: the anticollective as collective value. Attempting to counter the prevalent view that liberal individualism is associated with "egotism and selfishness," Friedrich von Hayek argued in 1944 that in contrast with collectivism, individualism respects "the individual man *qua* man, that is, the recognition of his own views and tastes as supreme in his own sphere."[49] For Hayek,

the possibility for individuals to shape their own spheres "is closely associated with the growth of commerce," a development he credits with having freed the individual "from the ties which had bound him to the customary or prescribed ways." Here, Hayek gestures toward creative destruction and the individual innovation on which modern liberal theory is founded, but by denigrating "customary" ways and "collectivism" he also seeks to establish the idea that social responsibilities serve to thwart individualism. The critical theorist Henry Giroux argues that neoliberalism is increasingly transforming our widespread understanding of freedom from the power of human beings to work together in shaping a functional collective society into "the right of the individual to be free of social constraints."[50] In the new world that corporations like Intel are helping to bring about, individuals are as radically discrete as they were for Thomas Hobbes. But where Hobbes envisioned social linkages in the form of laws imposed from above by an absolutist monarchy, in the Intel Leviathan we are linked together by the streams of data that carry our every experience and thought to the omniscient Cloud for sorting and monetizing.

Artists like Kawehi represent the Crusoe-esque individual fetishized by neoliberals, so it makes sense that the advertisement foregrounds her in its envisioning of music-making. Intel also emphasizes this notion in several short documentaries it produced about Kawehi, each of which glorifies how her use of technology frees her from conventional musical practices, most notably the need to rely on the musical labor of others.[51] In one video, Kawehi asserts that the Intel processor in her MacBook is the main thing that allows her to be a "one-woman band."[52] Similarly, Paul Tapp, Intel Marketing's technology director, says in an interview, "We chose Kawehi because she's a great poster-child for how modern musicians are disrupting the traditional production process. She effortlessly incorporates the sound of instruments in her songs that she has never even needed to learn."[53] No one in the videos or interviews about Kawehi talks about talent or skill (except to point out that computers alleviate our need to attain them); rather, it is technology that, according to Tapp, "is an enabler of creative arts and of new music."[54]

In its destruction of the meaningful relationships among individual musical ideas, Walter Werzowa's remix mimics neoliberalism's focused destruction of relations among individual human beings within society, and the way it replaces those individuals with units of "human capital" that encounter one another in purely transactional terms. Whereas Beethoven's symphonic music is organically deployed, conveying meaning via the structural development of musical ideas, this transformed version jetti-

sons development and the relation of parts to whole, replacing these old-fashioned conveyors of meaning with the simple repetition of a brand.

This is what advertising does; in one sense, Intel's use of Beethoven is nothing special. The music critic Matthew Guerrieri has written an entire book about the first four notes of the Fifth Symphony and how they have suffused Western cultural history, infiltrating everything from disco to recorded answering machine greetings. Guerrieri demonstrates that the use of the "Fate motive" in commercials has been a commonplace for decades—after all, he wrote, "what better way to drill a name or a product or a slogan into the customer's head than to leash it to a tune that seemingly everybody already knew?"[55]

Guerrieri argues that these repetitions of the motive have slowly transformed it until it exists today only as "a neutered, omnipresent cultural artifact," valuable solely for its overwhelming familiarity. For example, the LA Phil's VAN Beethoven project presented only a four-minute snippet of the work, assuming—probably correctly—that it would be enough to give audience members the gist. However, examining Intel's "Experience Amazing" commercial along with the orchestral performance of the recomposed Fifth Symphony as accompaniment to Drone 100 reveals that Beethoven's motive is far from a neutered cultural artifact. On the contrary, its use in these marketing schemes conveys a very particular array of meanings. Certainly, its familiarity is part of why it was chosen to provide the sonic foundation for Intel's dramatic new campaign, but familiarity is not the only or even the most important reason for this choice. There are myriad widely familiar tunes in the public domain, but few of them convey the impression of sublime, timeless truth that Beethoven's motive has signified for two hundred years.

Conclusion: War and Conflict

Intel CEO Brian Krzanich introduced many innovations throughout his keynote address—including robots, unmanned drones, motion-sensing microchips, and sensors that can monitor the human body in various ways—applauding them all for "enabling creativity" and for "giving rise to an amazing new set of experiences."[56] The address, however, presented many moments of dissonance in which the qualities and capabilities attributed to a given innovation did not seem to match what was depicted on the stage.

For example, during the portion of the keynote address's "Creativity" section that focused on fashion, a woman modeled an "adrenaline dress":

a sexy cocktail dress that senses when its wearer's body is flooded with adrenaline and responds by extruding small plastic batwings. The audience applauded rapturously, but from a fashion perspective, what would be desirable about a dress that informed everyone around you that you were terrified? And what benefit did the plastic wings impart—were we to believe that they served as protection of some sort? Protection from what? Similarly, the musical innovations that A. R. Rahman demonstrated did not make sense from a musical perspective. Rahman's presentation was a progress narrative emphasizing the superiority of digitally generated music over old-fashioned acoustic music. It began with a live human drummer playing a series of rototoms with great skill and dexterity, but after a few seconds of this she pretended to accidentally drop her sticks, and began to mime confusion and embarrassment. The dilemma her fake clumsiness caused was solved by the introduction of the motion-sensing wristbands with which another performer began "drumming." The implication seemed to be that you can't drop the wristbands, because they are attached to your wrists; so wristband-wearing drummers are superior to error-prone acoustic drummers. But music the wristbands enabled was demonstrably inferior to the smooth, elegant complexity of what the live drummer had been playing before pretending to falter. The wristbands missed beats, lacked precision, and were unable to play multiple beats in quick succession, as even an untrained drummer holding two sticks can easily do. Again, it was unclear what was meant to be compelling, from a consumer's point of view, about such products. The Drone 100 project also manifested this dissonance. Are fireworks really a product begging to be innovated? Is it really necessary to generate fantastically complex, million-dollar drones in order to make the "smoke and dirt" of conventional fireworks displays a "thing of the past," as Krzanich claimed to desire? Who exactly is clamoring for drastic innovations in how we blow up fireworks a few times a year?

A visit to the "Military, Aerospace, Government" section of Intel's website helps untangle these confusions.[57] The patented RealSense technology that Krzanich's keynote address presented as enabling creativity in fashion and music is here praised for "transforming many activities carried out by Federal agencies and branches of the U.S. military."[58] These activities include monitoring and tracking a subject's "face and emotions," heightening the capabilities of surveillance and reconnaissance, and even "pattern matching of potential recruit tattoos," software that scans human bodies and compares their tattoos against a database of gang- and terrorist-related symbols. "The United States is continuing to invest in these proven platforms for intelligence collection," proclaims an article on the military

website DefenseSystems.com, which also notes that the Air Force is spending more money every year on remote-piloted drones—with and without lethal capabilities—that are enhancing Washington's ability to navigate the challenging environments of its engagements in Syria, Iraq, Yemen, and Afghanistan.[59]

Now it is perhaps easier to imagine much more effective uses for the kinds of technology on display during Krzanich's keynote address. The motion-sensing wristbands, once their precision was improved (perhaps after a few years of perfecting in the consumer market), would be useful in remote-operating military robots; the adrenaline-sensing technology of the bizarre winged dress would make a lot more sense when applied to monitoring systems in the uniform of a soldier in combat (or perhaps when applied to the body of a suspected terrorist undergoing interrogation); and, of course, the fireworks drones that enable "unlimited creativity" are already a huge help in surveilling and killing enemies of the state, both at home and abroad.

The documentary Intel produced about the Drone 100 project quotes Horst Hoertner, director of the company that designed it, who notes that "as soon as you say 'drones,' people think 'dangerous,' but it isn't, really."[60] Yet Intel's own publicly accessible product descriptions demonstrate the falseness of this assertion; drones are indeed dangerous, and one of their most useful applications is in the arena of military engagement, where they are adept at silently placing civilians under surveillance, killing people, and blowing up buildings without putting valued personnel in danger. Intel's drone product manager, Natalie Cheung, is quoted in the same documentary as saying that "the reason why we decided to do Drone 100 is because we wanted to push the future of technology." Pouring immense financial resources into the development of unmanned drones capable of putting on a tepid fireworks display would not be a sound investment or a good way of "pushing the future of technology;" but generating innovations intended for mass purchase by the US military certainly would, especially today, when late capitalism has generated a condition of constant war requiring a ceaseless influx of soldiers and innovative new military products.

Ernest Mandel argued in 1972 that late capitalism generates a condition of endless war. Noting that a "permanent arms economy" represents one of the hallmarks of late capitalism, Mandel traced how arms expenditures create a stimulus for accelerating industrialization and extending the free market into new zones around the globe.[61] Endless war is financially lucrative for corporations, who can invest surplus capital into manufacturing an endless stream of weapons. It is also beneficial to the US government to be

ceaselessly at war: once permanent war becomes normalized, the United States can constantly intervene in other countries in order to sculpt them into free markets amenable to US investment without raising undue alarm in the American citizenry, who have become conditioned to accept these interventions as simply the necessary, if unfortunate, result of the spread of freedom and safety.

While in some ways the Fifth Symphony may seem to be an odd piece for a contemporary tech corporation to link its products to—as I've suggested, in some senses the whole notion of "classical music" is incommensurable with the glorification of technological innovation—in other, perhaps more fundamental ways, the work is quite apropos. After all, the Fifth itself is a highly militaristic piece, one long understood as depicting victory in a battle (against fate, or against the Germans, or the Americans, or the Prussians—the Fifth has served many different nationalistic causes over its history).[62] The main motive was used for the letter *V* in Morse code (*V* for victory), which then became a trope of Allied resistance during World War II (for example, a BBC timpanist played the motive before every wartime broadcast). The symphony charts a narrative of violence, death, and transfiguration, from the main motive's brutal attacks throughout every moment of the first movement, to the overwhelming, bombastic conclusion of the fourth movement. Indeed, for two hundred years Beethoven's heroic period has often been understood in essentially warlike, violent terms.[63]

In addition to endless war, another thing we have been conditioned to accept is the notion that technological innovation is inevitable, automatically beneficial, and driven by the need to serve society (rather than by military or corporate interests). Scholars who study the military-industrial complex assess, among other things, the collaboration between the state and the technological corporations that produce the products it requires for surveillance activity. Julie Cohen describes this growing "surveillance-industrial complex," and charts the recent emergence of what she calls a newer "surveillance-innovation complex," which "casts surveillance in an unambiguously progressive light."[64] Since the Quantified Self movement that began in Silicon Valley in 2007, rhetoric has proliferated about the liberating and empowering capabilities that innovations in data accumulation bestow on us. In our efforts to better ourselves and become more connected to one another, we use devices and apps that harvest myriad data about our movements, preferences, purchases, social connections, work activity, and physical health.

In what is ostensibly our "free" time, we play games on our phones or through social media platforms that are also designed to collect our per-

sonal information. According to Cohen, such platforms provide a "method of behavioral conditioning," which teaches us that surveillance is an intrinsic aspect of life-changing technological innovations (like Apple watches, Facebook, Nike+, Google Maps, Uber and Lyft, and the various listening "pods" that have suddenly proliferated in everyone's homes). Thus, we learn to accept and even celebrate our participation in the expansion of the surveillance state. As Cohen points out, now that surveillance has been folded into the widely held cultural value of innovation, it has become "relatively impervious to regulatory restraint."[65]

This imperviousness also allows surveillance technology to penetrate the criminal justice system, in the form of "e-carceration" schemes that place convicted criminals (as well as immigrants, people with disruptive mental illnesses, and drug addicts) under constant monitoring via ankle bracelets or sweat-analyzing wristbands, as well as by license plate readers and facial recognition software deployed by drones. E-carceration is touted as potential "prison reform," because it could be used to release inmates from the brutal for-profit prisons in which they would otherwise be housed. However, such a transformation of incarceration not only continues to profit corporations—the ones who innovate, produce, and maintain the technologies e-carceration requires—it also widens the dystopic zone of surveillance and intensifies the policing of poor people and people of color. Critics of e-carceration note that these technologies are used not only to harvest valuable data from prisoners but also to strengthen existing policing strategies that prevent "undesirable" types of people from moving freely throughout the city. GPS tracking devices may be used to keep a sex offender away from schools; they could also be used to prohibit African American people from entering upscale white neighborhoods or to make it impossible for poor people to congregate in public spaces. Such devices are already being used to monitor people as they await trial, and immigrants who have not committed any crime; soon they may start being attached to the bodies of people arrested for acts of political protest, or poor parents whose child rearing is being monitored by Social Services, or homeless people whose presence disturbs affluent homeowners and shoppers.

"This journey never really ends . . . new products are always on the horizon, and areas of conflict will always exist."[66] The word *conflict* indicated Brian Krzanich's transition into a segment on Intel's progress in "reforming the supply chain" by which minerals mined in countries like the Democratic Republic of Congo get sold and manufactured into Intel microchips. Since many African nations like the DRC have been destabilized by foreign intervention meant to open their natural resources to corporations

like Intel, this supply chain has conventionally been characterized by extreme violence and horror; the mines are often run by warlords and maintained by brutally enforced slave labor. The products of such supply chains have become euphemistically known as "conflict minerals," and Krzanich acknowledged that the challenges they present are "complex." Nonetheless, since it is Intel's goal "to improve the lives of everyone on the planet through their experiences with technology," the company decided to make every Intel product "conflict free" by 2015.[67]

Although countries like the DRC descend into social chaos partly because of foreign interventions meant to open a cheap supply of resources for multinational corporations, the acceptance of endless war and the increasing displacement of political action onto consumer choices enable corporate undertakings like Intel's to seem benevolent. Krzanich ended this section of his keynote address by emphasizing the empowering role consumption can play in bringing about social equality: "And you can look for the conflict free symbol on our products to be confident that you're doing your part to improve the human experience." Intel's corporate responsibility page similarly informs us that "our choices can impact the lives of millions."[68] Consumers are invited to show their disapproval of slave labor, not by protesting the foreign interventions that have generated such labor formations in countries like the DRC, but rather by purchasing the products that those interventions make possible—products now made using less slave labor than they relied on before, and marketed via this statistic.[69] Thus, the desire to end corporate oppression worldwide becomes reconfigured as an imperative to purchase the products of those corporations.

Increasingly, capital seeks to infiltrate every sphere of life, including not only free time, social interactions, work, and war but also sleep. In a harrowing essay, Jonathan Crary explores how the US military is experimenting with drugs that would enable soldiers to remain alert for days or even weeks without sleeping, so that the condition of war would become uninterrupted even by soldiers' natural circadian rhythms.[70] It is easy to imagine the integration of this kind of goal with the physical, emotional, and mental monitoring systems Intel is developing. Discussing the growing prevalence of the kind of smart technology that is moving our society toward universal connectivity, Krzanich noted that we can see this connectivity expanding every day, "whether it's our thermostats, our refrigerators, our cars, our bodies, they're becoming smart and connected." He said that the next step is for computing to "gain senses" so that it can "become an extension of you. It's integrated into you, you *want* it, it's part of your daily routine."[71]

Inserting its products into the military-industrial complex is not

enough, however. From a marketing standpoint, to attain true global dominance Intel must find ways of capturing the consumer market—as noted above, this has long been a concern of the company, which for decades has been outpaced in this regard by corporations like Apple and Microsoft. The military will purchase only so many drone processors and motion-sensing chips; to truly corner the tech market a corporation must also be successful in selling cheaper versions of those products to individual consumers. By parading technological innovations primarily intended to aid the military and the surveillance state as enabling individual consumer creativity, Intel effectively kills two birds with one stone: early adopters will purchase the music-producing wristbands or the adrenaline dress or the consumer drone because they are cool and new, while Intel can also supply the military-industrial complex with the tools it needs to maintain American global dominance and advance Western corporate interests abroad. Meanwhile, our use of Intel's products also serves to generate vast amounts of free data for that corporation, which it uses to further monetize our movements, habits, and private lives. Thus, for Intel—or for Google, or for all the other massive corporate conglomerates who use classical music in their marketing campaigns—appropriating the associations of moral virtue, timeless grandeur, and fundamental human rights that vaguely adhere to the idea of classical music is crucial if they are to make capitalist globalization, the surveillance state, and drone warfare seem like inspiring features of humanity's highest nature.

For two hundred years, Beethoven's instrumental music has served as a metaphor for all that is most exalted and transcendent. This vague but deeply felt perception is one that can be used to promote neoliberalism very effectively. Neoliberals evoke transcendent human nature and the great golden ages of the past in arguing for free market principles, but they do so without specificity—they never provide dates, primary source evidence, or even the kind of scientific proof they otherwise claim to value so highly. Neoliberal belief is about gut feelings, not facts or intellectual understanding. We feel in our gut that liberty and personal choice are morally right and thus that entrepreneurial success is an indication of virtue, but we must be careful not to bring these vague ideas into the light of intellectual understanding. If we did, we would see how fraught, ambivalent, and historically contingent they really are.

Whether Beethoven's Fifth does reveal to us the infinite world of the spirit realm is not my main concern here. Rather, I want to show that the scraps of this idea that cling tenaciously to Beethoven are what make his music attractive to people who believe (or who want to believe, or who

want others to believe) that there are such things as transcendent, universal truths. Among such people are neoliberals, who believe not only that free market principles are the reason for every great advancement in human history, but even that they are encoded into the very DNA of our species. Given this faith, it makes sense that the marketing departments of tech corporations would look to Beethoven, and other "classical" music, to underscore ad campaigns selling neoliberal ideas as timeless truths. And by emphasizing that this music constitutes a "fundamental human right" that is just as vaguely conceived as the great golden ages of the free market that neoliberals cite, many classical music institutions' marketing campaigns fall right into step with attempts to naturalize and spiritualize the products and processes of corporate globalization.