Who Are We Where? The Music, Art & Science of Self-Discovery

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A timely, eye-opening book about climate change and energy generation that focuses on the consequences of nuclear power production and the limits of alternative, non-carbon energy resources, from award-winning author William T. Vollmann

Carbon Ideologies Volume 1: No Immediate Danger by William T. Vollmann [Viking, 9780399563492]

In his nonfiction, William T. Vollmann has won acclaim as a singular voice tackling some of the most important issues of our age, from poverty to violence to the dark soul of American imperialism as it has played out on the U.S./Mexico border. Now, Vollmann turns to a topic that will define the generations to come--the factors and human actions that have led to global warming. Vollmann begins No Immediate Danger, the first volume of Carbon Ideologies, by examining and quantifying the many causes of climate change, from industrial manufacturing and agricultural practices to fossil fuel extraction, economic demand for electric

power, and the justifiable yearning of people all over the world to live in comfort. Turning to nuclear power first, Vollmann then recounts multiple visits that he made at significant personal risk over the course of seven years to the contaminated no-go zones and sad ghost towns of Fukushima, Japan, beginning shortly after the tsunami and reactor meltdowns of 2011. Equipped first only with a dosimeter and then with a scintillation counter, he measured radiation and interviewed tsunami victims, nuclear evacuees, anti-nuclear organizers and pro-nuclear utility workers.

Featuring Vollmann's signature wide learning, sardonic wit, and encyclopedic research, No Immediate Danger, whose title co-opts the reassuring mantra of official Japanese energy experts, builds up a powerful, sobering picture of the ongoing nightmare of Fukushima.

An eye-opening look at the consequences of coal mining and oil and natural gas production--the second of a two volume work by award-winning author William T. Vollmann on the ideologies of energy production and the causes of climate change

Carbon Ideologies Volume 2: No Good Alternative by William T. Vollmann [Viking, 9780525558491]

The second volume of William T. Vollmann's epic book about the factors and human actions that have led to global warming begins in the coal fields of West Virginia and Eastern Kentucky, where "America's best friend" is not merely a fuel, but a "heritage." Over the course of four years Vollmann finds hollowed out towns with coal-polluted streams and acidified drinking water; makes covert visits to mountaintop removal mines; and offers documented accounts of unpaid fines for federal health and safety violations and of miners who died because their bosses cut corners to make more money.

To write about natural gas, Vollmann journeys to Greeley, Colorado, where he interviews anti-fracking activists, a city planner, and a homeowner with serious health issues from fracking. Turning to oil production, he speaks with, among others, the former CEO of Conoco and a vice president of the Bank of Oklahoma in charge of energy loans, and conducts furtive roadside interviews of guest

workers performing oil-related contract labor in the United Arab Emirates.

As with its predecessor, No Immediate Danger, this volume seeks to understand and listen, not to lay blame--except in a few corporate and political cases where outrage is clearly due. Vollmann is a carbon burner just like the rest of us; he describes and quantifies his own power use, then looks around him, trying to explain to the future why it was that we went against scientific consensus, continually increasing the demand for electric power and insisting that we had no good alternative.

From poverty to violence to American imperialism that has played out on the U.S. / Mexico border, your nonfiction books are known for tackling some of the most important issues of our age. What was the impetus for examining climate change and the dire consequences of oil, coal, natural gas, and nuclear power production?

Vollmann maintains that Carbon Ideologies is not meant to offer solutions to global warming. What did he want to accomplish in this study?

One of the ways Vollmann tries to understand the collective human mindset and ideologies of big energy is by crisscrossing the globe, and burning a lot of carbon. From West Virginia to Colorado, Japan to Bangladesh, you spoke with miners, pronuclear utility workers, and those operating the oil and fracking rigs. What are some of the experiences shared by the people who make their living by working in these industries?

Why is this type of on-the-ground, experiential journalism so crucial to tell the story of climate change?

Vollmann has a penchant for going to extremes to research your subjects by putting himself in the middle of the stories, often at great personal risk; take for example, entering the contaminated zones near Fukushima equipped at first with just a Geiger counter and a few extra layers of clothes. What drives Vollmann into harm's way to tell his stories?

Almost as a refrain, you continually ask What was the work for? We have ended up burning so much carbon so that we could keep the lights on and raise man's efficiency, that we have destabilized

the planet's climate. How do you think we could have gotten so carried away?

As Vollmann notes in Carbon Ideologies, the link between carbon dioxide and rising temperatures was understood by some scientists as early as 1965, and openly discussed by energy analysts in the 1980s. Yet today, there are still those who deny climate change. In Vollmann's reporting and interviews, was there a common trait or thinking about climate change that deniers shared?

In June 2017, President Trump announced that the Paris agreement was bad for America's economy. Throughout Carbon Ideologies, there is emphasis that short-term profits are often prioritized over longterm consequences. By breaking the Paris agreement, is Trump prioritizing America's economy over the future of the planet? Why are the President's views on climate change dangerous for both public opinion and public policy?

In his nonfiction, William T. Vollmann has won acclaim as a prolific and ambitious voice tackling some of the most important issues of our age, from poverty to violence to the consequences of American imperialism. Known for his socially engaged nonfiction and inventive fiction, Vollmann is one of the truly singular voices in American letters. As The Washington Post has said, his "books tower over the work of his contemporaries by virtue of their enormous range, huge ambition, stylistic daring, wide learning, audacious innovation and sardonic wit."

Now, in the two-volume Carbon Ideologies, Vollmann turns to a topic that will define generations to come: global warming, and the factors and human actions that have led to it. Viking will publish the first volume, No Immediate Danger: Volume One of Carbon Ideologies, followed by a second volume, No Good Alternative, in June. Taking both a critical and an empathetic look at humanity's misuse of fossil and nuclear fuels, Vollmann seeks to understand our collective mindset—from outright denial and complacency to exacerbation—surrounding this crisis, and to answer a simple yet essential question: why are we knowingly destroying the planet?

No Immediate Danger begins with a "Primer" on the myriad causes that have brought us to this state

of emergency, including electric-powered population growth and the justifiable yearnings of people all over the world to live in comfort. To satisfy our ever-increasing demand for energy, we rely on four helpers: coal, oil, natural gas, and nuclear fuels. Each of these creates its own loyalties. To map those out, Vollmann went travelling around the globe—burning some carbon of his own in a quest to understand the consequences of each type of production, and to arm readers with the language and information to make educated choices about energy use. In the rest of No Immediate Danger, he turns to nuclear power, whose own proud "carbon ideology" is that it barely contributes to global warming. Nuclear plants were popular in Japan; then came the tsunami of 2011. Vollmann chronicles multiple extended visits he made to the contaminated no-go zones and ghost towns of Fukushima, Japan, after the reactor meltdowns. Equipped first only with a dosimeter and then with a scintillation counter, Vollmann measured radiation and interviewed tsunami victims, nuclear evacuees, anti-nuclear organizers and pro-nuclear utility workers. He found that the safety of many localities, even after decontamination, might remain questionable for decades.

Featuring his signature wide learning, razor-sharp wit, and encyclopedic research, and embellished with tables and hundreds of Vollmann's own photographs, No Immediate Danger is written as a letter to the future, explaining how we've allowed global warming to happen. The result is an affecting, truly sobering global portrait of mankind's most damaging and perhaps lasting legacy—over consumption—making this a unique work of both science and literature that only someone like Vollmann could write.

In his groundbreaking two-volume collection, Carbon Ideologies, William T. Vollmann turns to a subject that will define generations to come: the human actions that have led to global warming. In the first volume, No Immediate Danger, he looks at the consequences of nuclear power production and chronicles visits he made to Fukushima, Japan after the reactor meltdowns. In No Good Alternative (Viking; On Sale June 5, 2018; advance galleys available now), he examines coal mining, oil, and

natural gas production. Taking on added significance in light of the growing climate change crisis—and the Trump administration's efforts to undo existing environmental regulations—this is one of the year's most important and timely books.

No Good Alternative begins in the coalfields of West Virginia and Eastern Kentucky, where "America's best friend" is not merely a fuel, but a "heritage." Over four years, Vollmann finds hollowed-out towns with coal-polluted streams and acidified drinking water, makes covert visits to mountaintop removal mines, gathers accounts of horrific, unnecessary accidents, and collects cherished memories of coalminers whose livelihoods were built from "king coal." Traveling to northwest Bangladesh, Vollmann interviews activists battling against the open-pit aspirations of a multinational corporation, and labor union members whose grim tales of the mining life contradict their insistence that "the coal must come out."

To write about natural gas, Vollmann journeys to Greeley, Colorado, where he interviews anti-fracking activists, a city planner, and a homeowner whose family is ill from fracking. Turning to oil production, he speaks with working people in Poza Rica, Mexico, the former CEO of Conoco, and a vice-president of the Bank of Oklahoma in charge of energy loans, then conducts furtive roadside interviews of guest workers performing oil-related contract labor in the United Arab Emirates.

Embellished with tables and hundreds of Vollmann's own photographs, Carbon Ideologies seeks to understand and listen, not to lay blame—except where outrage is clearly due. The result is an affecting, truly sobering global portrait of mankind's most damaging and perhaps lasting legacy—over consumption—making this a unique work of both science and literature that only someone like Vollmann could write.

Carbon Ideologies was envisaged as a single work. When the manuscript arrived, several times longer than its contractually stipulated maximum, my publisher asked me to cut it. But for some reason, I just didn't want to. After anxious negotiations, Viking finally agreed to indulge me once more, and it was decided to break the book into two. (My gratitude is expressed in the acknowledgments section.)

As originally laid out, Carbon Ideologies ended with a section of definitions and conversions. What is the difference between a gamma ray and an alpha particle? How many gallons of Mexican crude oil would it take to do the work of a ton of bituminous Appalachian coal? Some of this information, particularly the items on heat, energy, efficiency and power, gets referenced throughout the whole work. Where then should it go? Viking and I decided to place it all at the end of the first volume, where it could find immediate use. To reduce expenses, it will not be reprinted at the end of the second volume.

Carbon Ideologies also contains about 129,000 words of source notes, citations and calculations. I am sorry to say that Viking could not justify the cost of printing these. Therefore, Carbon Ideologies will be the first of my books to contain a component which exists only in the electronic ether (see https://www .penguinrandomhouse.com/carbonide ologies). I will deposit a copy of that section in my archive at the Ohio State University.

All this renders the first volume particularly uninviting. It also makes that volume more practically useful, in exact proportion to its dreariness. Perhaps some unborn desperate generation will be helped by those pages in finally crafting a social code of thermodynamic work.

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A Russian woman opined that the winters of her city, Saint Petersburg, were often just as severe as formerly, but their duration had diminished from five to four months. Well, but what could such anecdotes prove? (Encyclopaedia Britannica, 1911: As concerns the popular impression regarding change of climate, it is clear at the start that no definite answer can be given on the basis of tradition or of general impression.) I went to Mexicali for half a week, and found the nights hotter than I remembered, but a taxi driver who had lived there all his life insisted that temperatures were unchanged, although the humidity might have increased. (Across the border, another cab driver told me that his relatives in Algiers were now experiencing snow, which they had almost never seen; they loved it.) A fellow Californian who had backpacked the Sierras for decades returned from a hike in June, when he

would have expected to see wet green meadows, and then snow at the high elevations; this time he told me: "A lot of trees dead and dying. Kind of alarming, actually."—Again, these observations described only weather. They proved nothing about climate. —A businessman in Bangladesh asserted that 20% of his country would lie underwater within 35 years. (You from the future might know that more of it sank faster.) And as we waited to board our Amtrak train in Sacramento, I asked the old lady who stood beside me on the platform whether she believed in global warming, to which she said: "Oh, absolutely. Even the children are getting sunburned more easily. When you wear black pants you feel the sun sooner. We've done too many things not knowing what the effect would be."

"What should we do about it?"

"Pray. That's all we can do."

That was how so many of us felt! We couldn't make any practical difference. As the Unabomber calculated in his manifesto: When a decision affects ... a million people, then each of the affected individuals has, on the average, only a one-millionth share in making the decision. So we couldn't do anything. Or else we just didn't want to. In 2015, when the price of crude oil decreased by half, the U.S. Congress might have increased the fuel tax, however modestly, and employed the proceeds on funding renewable energy (or, if nothing else, on building seawalls). In its customary elevated style, Time magazine announced how everything would actually play out:

CASHING IN: THE DROP IN OIL PRICES IS EQUIVALENT TO A $125 BILLION TAX CUT. HERE'S WHAT THAT MEANS:... BIG CARS ARE BACK.

Accordingly, solar energy stocks decreased in value; sales of hybrid vehicles declined. How could we help it that we liked big cars? There was nothing to do but watch the buffalo get slaughtered.

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For awhile our powerlessness got represented and recapitulated up through various levels of government. In 2014 the Attorney General of West Virginia announced: The Office's end goal is to stop

the EPA from hurting our state, and if we can't do that, we plan to at least gum up the works enough so that it limits the damage that the Obama administration can inflict on our citizens. The defiant frustration in his utterance, which played well to certain interests, must have been felt in greater measure by the White House's feeble occupant. (Near the end of his second term he sadly remarked: "There's this notion that there's something I might have done that would prevent Republicans to [sic] deny climate change ...") You see, we were all feeble! A West Virginian delegate (who happened to be a coal miner) complained that Obama "speaks as though the Earth's climate ends and begins at the shores of the United States, while willfully ignoring the fact that China is revving up its economy by using coal"—some of which came from the United States, a fact he willfully ignored. In other words, we Americans could hardly make a difference; therefore, nobody should make us try.

Accordingly, carbon's ideologues empowered themselves when and where they could. In 2015, a Wisconsin agency that manages thousands of acres of state land ... banned its employees from working on climate change issues while on the job. The only person who voted against that ban, Wisconsin's Secretary of State, was a scientist. In other words, he actually possessed the competence to determine whether or not our actions could "put up enough smoke to make a difference." Remarking that climate change was in fact altering forests, he decried "the trend of public officials who, either out of ignorance or out of political expediency, deny climate change."—And so denial led happily to silence.

Meanwhile the Pope, who had also unfortunately been encumbered with scientific training, prepared to release a key policy document which is expected to blame mankind for climate change, a view which has enraged US sceptics who say religious leaders have no right to take part in a scientific debate.

Some of us lived in a fairly robust democracy of opinion, but lacked any democracy of ideas, let alone of policy. Our various educational systems failed to impart the minimum knowledge which a citizen would have needed to judge coal, nuclear power and other methods of keeping on the lights. This knowledge would have entailed some

competence in the following procedures: carrying out simple mathematical conversions, marshalling facts, comparatively quantifying energies, emissions and efficiencies; performing risk-benefit analyses, deducing the specific material interests of each carbon ideologue, recognizing omissions, inaccuracies and outright lies, positing and testing relationships between facts, verifying and disproving all claims, including our own—and, most crucially, deciding what we needed to know, and how to seek that information. Some apparent phenomena would still have resisted measurement and much would have remained arguable. But the less we measured, the more conveniently we could argue—while the threat continued to become a calamity. Some lonely soul in Florida whose basement kept flooding might blame the landlord instead of the climate—and who was I to dispute his theory? In President Trump's time it got even better; his administration coined the phrase alternative facts. Meanwhile, each cool day disproved global warming anew—because in the time when I lived (and maybe every time), official communicators hindered us from learning the semantics of "experts," while encouraging us to pretend that information could in and of itself be "entertainment," so that any nuanced statement became inferior to an easy answer. The "experts" liked it that way, of course; so did the spin doctors and cost-cutters, the anti-secularists, politicians, industrialists, tired "consumers," schoolchildren, wildcatters, go-getters, marketing consultants, advertisers and bought technicians.

To be sure, there were some experts, whose knowledge and integrity I will honor in these pages. We should have listened to them.

In Japan the people relied on their leaders great and small. An understanding of, say, radioactivity was not required. The officials in contaminated areas discouraged what were called harmful rumors. Citizens tried to believe in the goodness of corporations and the sincerity of cabinet ministers, or else shut out of mind what could not be helped. They lacked comprehension of the various waves and particles that threatened them, not to mention the units of measurement used in media pronouncements. We all learned to live with what we could not see. In the "red" zones, the word of

the day was "invisible." And in America, of course we did it to ourselves; we had always been intellectually lazy, and the less asked of us, the less we had to say. Again, we were no worse than others. (If anything, we might have been less rigid in our ideas than the Assyrians.) In our time the sky never stopped raining claims and counterclaims. We came to think that we had heard them all. Had we in the teeth of our complacent miseducation arrived at any common conclusion, we lacked the power to enact it. So we lived private lives, not worrying about the unpreventable, while the "experts" kept cashing in.

So did I. When I lived, the profit motive was unanswerable. An unemployed West Virginian told me: "Well, I can't blame them coal companies for going away. I mean, business is business."

For those who couldn't aspire to profit, mere survival was even harder to argue with. An art teacher in that same county (the high school where he taught sat right on top of a mountaintop removal mine) remarked: "It's cultural devastation to lose families in the coal mines and it's cultural devastation to have families break up when men can't feed their loved ones. When you make a product, and you base it on the labor of men's backs, and then you take it away, you turn us into a Third World country." Naturally he did not want the coal companies to take it away. Coal was poison, sure. It poisoned the rivers when it got cleaned. His solution: "Why do you clean coal? It's got dust on it. Why not make the Chinese clean their own coal?"—He was another good man, who couldn't see that what hurt the Chinese would eventually hurt us. Well, maybe he saw it and didn't care. Were I in his shoes, or in his pupils' shoes, I might have behaved the same. I might have said: "It's going to be a hungry winter, and the baby's sick, and I can't pay the electric bill. Let me worry about my own."—Isn't that how it must be for you in our starving future?

We all lived for money, and that is what we died for.

Now that we are all gone, someone from the future is turning this book's brittle yellow pages. Unimpressed with what I have written so far, he wishes to know why I didn't do more, because when I was alive there were elephants and honeybees; in

the Persian Gulf people survived the summers without protective suits; the Arctic permafrost had only begun to sizzle out methane; San Francisco towered above water, and there were still even Marshall Islands; Japan was barely radioactive, Africa not entirely desertified.

As I said, this little book makes not even the beginning of a solution. It is simply an attempt to give the main questions their due. When I began Carbon Ideologies I walked away from my nonfiction publisher, because my research had already cost more than the editor proposed to pay. So I spent my own money, and occasionally other people's, to hike up strip-mined mountains, sniff crude oil, and occasionally tan my face with gamma rays. Had I been richer, I might have accomplished more—but what, exactly? To tell the truth, there were times when I longed to forget about some ecosystem somewhere. I knew I'd find no adequate personal answer to the question "What should we do?" But I felt ashamed of doing nothing.

Well, in the end I did nothing just the same, and the same went for most everyone I knew. This book may help you in the hot dark future to understand why.

Excerpt: What Should Be Measured?

... wherefore the best means that I could imagine to wake him out of his trance was to cry loud in his ear 'Hough host! What's to pay? Will no man look to the reckoning here?' Thomas Nashe, The Unfortunate Traveller, 1594

In a boggy meadow a few paces to the side of a former logging road in West Virginia, a pipe assemblage crouched hissing. Bubbles rushed up from the pool from which rose one of its tubular columns; there was a reek of natural gas, and from the side of that pipe came a steady outrush of gas, comparable in force to the jet of compressed air from a motorized tire pump, which when I was alive could blow a penny across a parking lot. Since methane is a primary constituent of natural gas, I suspected its presence in this petrochemical breeze that gushed so continually, the product of negligent waste. Until meeting the retired mining inspector Stanley Sturgill I used to believe that what I smelled in places such as this was methane, which

actually bears no scent; the odor was crude oil.—In its first 20 years, methane, as you may recall, is at least 86 times more effective at trapping heat than carbon dioxide.* The environmental activist who was guiding us here remarked that he had already informed the state Department of Environmental Protection of this gas rig's ongoing crime. Of course nothing was done, here and in thousands and millions of other sites.

Holding the pancake frisker directly in the gas jet, I took a one-minute timed count, and obtained a reading of 15 counts per minute, 0.06 microsieverts per hour—the most modest I had ever obtained in West Virginia, and indeed pretty close to the lowest possible measurement.

Coal-fired power plants give off poisonous emissions, some of which are even said to be radioactive—but my superficial measurements never found that to be so. The air dose by the John E. Amos Power Plant in Nitro, West Virginia (as measured by poking the frisker out the window of a moving vehicle, a procedure which should have increased the number of encountered particles), was a trifling 39 counts per minute, 0.12 micros per hour. (I neither dug in the ground nor frisked anybody's tomatoes.)

In order to accurately inform you to what extent the four modes of resource extraction and utilization considered in Carbon Ideologies were or were not harmful, I would have needed to measure at least the following: carbon dioxide, methane, chlorinated fluorocarbons, aerial particulate sizes, concentrations and compositions; acidity, turbidity, conductivity and metal content of water, the latter subcategorized into selenium, cadmium, aluminum, etcetera; I also ought to have sampled the density of specific microorganisms, amphibians and crustaceans. Accomplishing this was impossible for me, and I am sorry. At a manageable price I could indeed have bought a meter to monitor certain emissions such as carbon dioxide, but the salesman sadly explained that because those gases mix so instantaneously with air, a useful measurement could only have been obtained right up on the smokestack—from which I was excluded by the so-called regulated community.

That environmental activist in West Virginia (his name was Chad Cordell) carried a device to sample water for pH and conductivity; maybe I should have bought one. But more often than not, I found myself in waterless places.

So please consider the pancake frisker readings in the remainder of this book as placeholders for the measurements that I would have taken had I possessed more money and power.

Perhaps it was just as well. My readings in the red zones scored sufficient drama in their way; and only one variable—radioactivity—needed to be considered. The manifold effects of fracking, coal-burning, oil refining and kindred operations augmented one other variable of yet more crucial interest: the warming of our planetary home. Since I could frisk neither a smokestack nor a barrel of oil for greenhouse emissions, there was nothing for it but to let this book grow inchoate. I could hint at the villainous parts played by this heavy metal and that gas; there were so many villains! I could portray well-meaning ignorance, mercenary dishonesty and ruthlessness, indifference, useless heroism and sensible accommodation. Among the tales of coal and oil and natural gas I never heard of accidents comparable to the reactor failures at Fukushima. What then could my narratives be?

Although they do not speak directly to climate change, I ask you to consider the preceding nuclear section as a concentrated relation of this book's theme, which runs like this:

Once upon a time there was something dangerous that could not be seen, felt, heard or smelled. ("Because it's invisible ... ," sighed my Japanese taxi drivers.) Making use of its associated fuel had been convenient, but terribly mistaken. The best plan would have been to get away from this nearly unknowable thing, but such a course of action appeared so utterly inconvenient that we preferred to continue on as before, which might entail killing our children. Then again, maybe our children would be lucky enough to die from their own stupidity instead of ours. As The Wall Street Journal reminded us, I think by way of reassurance:

It's easy enough to drive out to the country and find somebody in overalls willing to blame the latest flood, drought, windstorm or six-legged pest outbreak on the increased carbon in the atmosphere.

About Permissible Limits

For every human presupposition and every enunciation has as much authority as another, unless reason shows the difference between them. Montaigne, "Apology for Raymond Sebond," 1575-80

Assuming that our generation had in fact stood ready to measure, record and publicly share local and planetary levels of hydrofluorocarbons, nitrous oxides, carbon dioxide and all those other invisible analogues of radio contamination, the next and still more contentious step must have been to establish legal ceilings for each, along with procedures for addressing violations.

At the end of Volume I, I compared Japan's and Ukraine's statutory limits for cesium-137 in various foods. Their variability of categorizations, as in the case of milk, did not entirely obscure consistent ways of thinking. For example, the Ukrainian allowance for higher radioactivity in dried than in fresh foods presumably derived from a supposition that before consumption the dried items would get rehydrated in a significant bulk of (I hope less radioactive) liquid; therefore, one would ingest a smaller quantity of dried than fresh milk, even if the respective liquid volumes were the same. This is arguable, but plausible. And although the Ukrainian allowance of 2,500 becquerels per kilo for dried berries did seem awfully lenient, in fact the two nations' chains of reasoning ran somewhat parallel:

The Ministry of Health of Ukraine set its standards based (I quote) on the fact that the content of Cs-137 and Sr-90 in food and drinking water should respect the accepted boundaries of the annual effective exposure of 1 mSv.t And the Japanese Ministry of the Environment had likewise said: To achieve further food safety and consumer confidence, Japan is planning to reduce [the] maximum permissible dose from 5 mSv/year to 1 mSv/year.

Yes, permissible limits would inevitably be arbitrary, like speed limits, felony charges and rules of war, but that alone could not invalidate them, because the lack of limits was more perilous.

And we needed to draft them for greenhouse gases. In addition to that annual per capita food radiation limit of 1 millisievert, we should have established annual per person emissions ceilings for, at the very least, the dozen most pernicious heat-trapping agents (doubtless you from the future have a longer retrospective wish list).—But whatever those ceilings were, we would have hated them as infringements of our freedoms. And so when I was alive we wasted years arguing about national and international carbon budgets. It was as if Japan and Ukraine had agreed to disagree as to whether they needed to safeguard their citizens against unregulated intake of cesium-137.

That was one reason we kept burning and selling coal when I was alive.

What We Should Have Done

By 2007, Germany had already fulfilled a large part of its obligations within the framework of the aforementioned European burden-sharing, amounting to a reduction of 22.4% with regard to the base year emissions [of 1990] ... German Greenhouse Gas Inventory, 1990-2007

Total U.S. emissions have increased by 7.4 percent from 1990 to 2014.. . at an average annual rate of 0.3 percent. American greenhouse gas report, 2016

There had only been one hope for us: To reduce demand.

I've told you that we could have done it through birth control or genocide, but the second strategy appealed to no one whom I cared to know, and the first would have been angrily resisted in the name of freedom, or of religion. Because the warning of Thomas Malthus had been temporarily invalidated through astounding increases in food production, we could pretend that the fate of rabbits that bred unchecked on little islands need not be ours. Reader, we might not have loved you, but most of us took joy in our children whose descendant you are; wasn't that cause enough to beget them? In his brave, eloquent and otherwise subversively sensible encyclical, Pope Francis still found it necessary to say: Instead of resolving the problems of the poor and thinking of how the world can be different, some can only propose a reduction in the birth rate ... To blame population growth ... is an attempt to legitimize the present model of distribution ... I caviled, disagreed, was

outnumbered.—Well, a third way remained: Through changes in policy, mores (not to mention improvements in technology and education, which might buy time), we could have deliberately reduced consumption.* Had we leavened the present model of distribution with a sprinkle of decency, the affluent would have reduced their per capita use of energy, while the poor could have consumed more—even as total aggregate consumption fell.—Carbon Ideologies has told you why it did the opposite.

In 1829 Goethe remarked: Mankind is conditioned by needs; if these are not satisfied, there is impatience; if they are, there is indifference. Obviously this rule applied in equal measure to demand: For the Bearded Man In Your Life: Bluebeards Original, the #1 beard care company, has everything your loved one needs to grow (and maintain) healthy facial hair.—Well, since he needed it, how could anyone deny him the fulfillment? Never mind what it was made and packaged from, and how much energy that work required. And once he possessed it, how dare anyone take it from him?

Demand is vitality, and vitality, like this book, is forward-looking. We set snares for the future, then check our traps to learn what gifts we have caught. The baby crocodile (like the mining corporation) needs to grow; in other words, it must keep eating, in order to enlarge its appetite. The human counterpart to reptilian voraciousness is called "hope." Won't tomorrow be better than today? Believing so helps make it so.—In your time, optimism will truly be the best counsel. As for my generation, pessimism would have served.

Had we better valued what we already possessed, and distinguished needs from desires, demand might have lessened, if not of its own accord, then through education in what was necessary and what was well-made, through emulation of seeking, searching heroines and heroes; and through supplications to harmless vanity. Love of family (without excessive multiplication), pride in place, and, for those who cared, happiness in learning, seeing, worship or meditation of any sort, would have cost our planet little. One January morning at the Fushimi Inari-Taisha, a temple well-famed for its 10,000 torii, snow was melting loudly into rain

through the vermilion windings of rectangularly puddled stone steps that wandered from shrine to shrine up the mountain of snowy-shouldered trees; here and there we won views of Kyoto; in place of loudspeakers we heard crows; and although, to be sure, the construction and maintenance of this masterpiece required thermodynamic work, we who walked those ways in our crowds drew down no electricity (and, for that matter, spent no yen) in the "consumption" of that experience. What we claimed to cherish most of all (these appeared as place-holders in our action movies, and "accessories" in our purchases) included the following: love, sex, reliable, friendly affection; happiness, excitement, personal attractiveness, novelty, distraction; safety, both for ourselves and for those who depended on us; freedom from fear and pain; and, yes, acquisitions of things. Many such aspirations could have been indulged in at the cost of fewer greenhouse emissions. I have slept in homeless camps whose inmates took pleasure in sunsets, breezes and even visiting skunks. The obvious fact that I (and most of them) preferred not to be homeless did not invalidate the other fact that I could have pleased myself more frugally than I supposed.

Of all the things I owned, I valued most my books. I hoped that someone would use them after me. In 2013 some materials technologists thoughtfully noted:

A garment from a "fast-fashion" chain can be discarded after one outing as cheaply as it was bought, whereas something made or enhanced by a friend at a time of crisis cannot be discarded at all, as it has become "emotionally durable" and part of an individual's life-story. The emotional permanence of buildings and objects has been a constant of many societies, and only under the mass availability created by industrial pro¬duction has it been lost.

What sort of society would invest meaningfulness in durability? People who understood scarcity in their bones certainly valued the lasting function of objects. In Madagascar, in a waste called the Burned Land, a man once asked me for an empty plastic bottle of the disposable kind; it was not disposable to him, and his gratitude shamed me. I suppose that you in the future would take better

care than did I of aluminum foil, reclosable plastic bags and other "big five" materials. Again, I would not have chosen to live either his life or yours, but why shouldn't I have voluntarily done a portion of what extreme impoverishment compelled you to do? That essay from 2013 proposed that the "heroes" or "role models"... should be "local" rather than being exemplars of high mobility and consumption. My own heroine was Rhonda Reed, because she had said: "I don't like buying new stuff. That just grinds me something fierce."—That localism has its dark side glares out at any student of Balkan hatreds; but patriotism must be healthy to the extent that it instills pride in living where one is, and in caring for people and things pertaining to that place.—Some years ago, on a certain mossy island, lay an Inuit town a couple of miles beyond which I had raised up my tent, and since I made a point of attending their church, people began to know me a little, and children and teenagers visited. We swam together in icy water, and I sat sketching while they caught baby birds. They felt sorry for me because I could never be from there, which was self-evidently the best place on earth. How their lives turned out I cannot say, but during our three-week acquaintanceship they mostly struck me as social, contented, healthy—at a considerably less than American cost in power consumption.

One category of Japanese beauty is sabi, or "beguiling decrepitude," as exemplified by a half-decayed scarlet leaf in a mound of yellow ones, or the face of a lovely old woman. Noh mask-carvers (and some Noh actors) assured me that the beautiful masks associated with their professions did not "come alive" until they had been worn on stage, breathed through, sweated in and scuffed for a good century or two. A renowned carver told me: "You use nice color, and then on top of it you put something else to make it look more subdued, so it doesn't look too shallow. After 50 or 100 years, if you've used something unsubtle, it's really going to show; it'll start looking worse and worse." This did not mean that a visitor would see ordinary Japanese walking around in hand-dyed rags; nor did Japanese convenience stores use plastic bags other than extravagantly; all the same, in Japan I sometimes got hints of "emotional durability." What

if more objects had been manufactured with this as an end?

Like my books, my eyeglasses frames should have lasted all my life. If somebody had to swap lenses in and out whenever my vision changed, so be it; and whether the greater good called for those to be glass or plastic I leave to the calculations of Professor Gutowski; for the frames themselves "big five" materials might have been justified: aluminum or steel for at least the lens sockets, to minimize warping and degradation over the years. I can envision their other parts as metal also, or maybe some kind of wood. They could have been ornate or not, to satisfy my taste and budget. (Being "artistic," I might have decorated them myself.) These eyeglasses would have gained "character," like a strong walking stick, an heirloom firearm, a well-built musical instrument, a wedding ring, a family Bible, a dependable all-manual camera, or a leather briefcase. Had what I imagined actually been made, someone, even you, could have used my eyeglasses after me.—Needless to say, there was "no demand" for any such. My own demand, expressed to optometrists, inevitably met with silence. Once my nearsightedness stabilized in middle age, my storebought frames inevitably failed long before their lenses, which, aside from a scratch or two, would have served as well as ever—but a screw began to loosen in a sidepiece; after only two or three re-tightenings, the flimsy ring it inhabited would break; then the frame jockey would calmly inform me that my only way forward was a new pair. Of course this remained my "choice": I could and sometimes did get by with epoxy or even masking tape, but because the glasses now looked decrepit without any sabi I got treated like a poor man, which sometimes inconvenienced me in my work; more importantly, functional durability was lacking. While I was interviewing oil workers in the Emirates, my right lens fell out day after day, sometimes striking concrete and accruing more scratches, until, preferring to "fight other battles," as my father would have said, I gave up and went to the Ruwais Mall. The frames were "worn out," they explained. By the time I finished Carbon Ideologies, aged 58, a good 20 pairs of glasses might have flowed from oil wellheads or natural gas pipes onto my nose, and then ... Well, it seemed wrong to throw them

"away," so I kept them awhile; perhaps I could "donate" them to an NGO, but if I couldn't get the frames fixed, how would some poor man manage? After I died, they and their embedded manufacturing energy must have become junk.

Of course I was a freak. My thoughts about spectacles were trivial and strange. And so another study concluded that even though the evidence on increasing product lifespans suggests that ...* life extension is beneficial and technically not diicult, durability is not currently wanted by consumers or producers.

Well, was one of Tom Jones's eco-dictators supposed to rein us all in, impoverish us, limit our choices and keep us goddamned grateful for whatever patched and grubby cardigans we rented?—Now, there was a nasty concept! Better to focus on easy, boring little improvements...

For example, we could have double-glazed our windows and insulated our walls. Thanks to these tricks, the required furnace output of a certain two-storey house in Saint Louis fell from 118,800 to 67,800 BTUs per hour.—For that matter, a certain German company had begun producing boilers with built-in communications systems. If this improvement truly reduced needless fuel consumption, then why not install only those boilers from now on? In both cases the cost might have pained us, but once Goethe's indifference set in, we would have met an inertia not of consumption, but of conservation.

But again, trusting in such individual and voluntary choices (which would be avoided by most, in order to satisfy more glamorous demands, and which anyhow only the affluent could afford) reminded me of that leaflet I'd seen in Charleston, West Virginia, shortly after the regulated community had poisoned the water supply: we were merely to TURN UP THE TIPS! to struggling waitresses in order to somehow BEAT THE SPILL! ...—while Jim Justice continued to rack up his 23,693 water pollution violations.

Yes, I did my part to ruin our future. But Jim Justice did worse.

We could have burned fossil fuels at higher temperatures, which would have more completely combusted them, thereby emitting smaller quantities of methane and nitrous oxide' But the "we" in this case would consist of the Puerto Rican utility officials who secretly sulfurized the air,' the obliging souls at the John E. Amos facility in West Virginia who bought Jim Justice's coal—without previously soliciting his or any other bids—the "Public Information Specialist" at my local utility company who when I asked about climate change would not even mention that phrase in his meaningless reply,' and those Bangladeshi brick kiln owners who could afford only to burn the cheapest coal, cheaply:—Let us

call them all the regulated community. No doubt a few did care about what our planet would become after their deaths. As for the others, if nothing else, I hope that Carbon Ideologies has showed off the sterling virtues of those individuals.

Hence we should have begun by truly regulating the regulated community. But we couldn't, for two reasons: Firstly, they would have screamed; and sec-ondly, we all would have paid more.

(In my homeland we believed in economic "checks and balances," and even in an adversarial legal system. So did we also need an adversarial regulatory system? As a self-employed businessman, I would have hated that. But what do you from the future care about what I might have hated?)

Yes, we could have regulated ourselves before nature did. It has not escaped you that we decided to wait. Biology imposed its penalties. Species died; epidemics and insects took their commissions; our food supply, let us say, simplified itself. Well, since 90% of all species had already come and gone in that long pre-human time of trilobites, mastodons and dinosaurs, why take responsibility for anthropogenic extinctions? Happily agreeing with this line of reasoning, the regulated community sold us more carbon—because as the Executive Vice-President of the National Corn Growers Association indignantly demanded: "Are we going to reduce greenhouse gas emissions today because we believe there's an economic benefit 15 years from now? That's way too hypothetical for a family-owned and operated business that has to make a payment this year. The banker doesn't get paid in hypothetical dollars." I hope he enjoyed his real dollars.—Since we (to tell the story in his

terms) postponed payment, the fine grew at compound interest, with sterner punishments presently imposed by physics. We were all safely dead by the time the oceans boiled.

To stop Jim Justice, and apprise the Executive Vice-President of the National Corn Growers Association of the existence, believe it or not, of non-economic benefits, we should have continued tracing and quantifying our emissions and energy flows for the products we made; then made, and enforced, socioeconomic policy based on that information. (We could have retired petroleum jelly from lip balm, even if that necessitated going back to goose grease. We could have phased out the coal tar derivative colors which I loved so well in certain highquality paints.) How much radio contamination, chemical poisoning* and greenhouse gas pollution was each "demand" worth? How many more tons of cement must we produce? To determine that, we had to answer the question what was the work for? In my time we never did.

Had we lived up to this elementary duty to our children, and to you, then we could have usefully gone about the dreary business of setting permissible standards by the hundreds. (We should certainly have established and enforced permissible limits for each significant greenhouse gas.) Could steel be manufactured at lower energy expenditures? Then enact those into standards. Could plastic wastes find any new beneficial use? Why, then, enable—and require—the regulated community to put them to that use.

But the future can never trust the present; it must unceasingly (often unavailingly) plead its cause. Ignoring and denying the compound interest rising up against us in an invisible greenhouse cloud, we expected to rub out our names on every proof of obligation, bequeathing the debt to you. So we had always done before, with our dispossessions, blood feuds, invasions, rapes and robberies, as had been done to us; the past necessarily stained the present, so we passed on the favor, kicking it down through time... <>

Energy: A Human History by Richard Rhodes [Simon & Schuster, 9781501105357]

It is not an overstatement that energy - its availability, technology, and corresponding challenges - directly alters the course of human development. People have lived and died; businesses have prospered and failed; nations have risen and fallen over energy challenges.

For readers of Daniel Yergin's The Prize and Jared Diamond's Guns, Germs, and Steel, Energy: A Human History is a rich look at energy transitions over time, with a thorough examination of the current challenges presented by global warming, a surging world population, and renewable energy. As the

author of The Making of the Atomic Bomb and numerous other books, Richard Rhodes is well-equipped to write this epic history of transformation, from wood to coal to oil to electricity and beyond, ripe with human stories. Through more than four centuries of progress, Rhodes invokes a cast of well-known characters - Queen Elizabeth I, James Watt, Benjamin Franklin, George Westinghouse, Enrico Fermi, Rachel Carson - as well as introducing little-known figures who revolutionized the field.

Though a work of history, Energy: A Human History could not be timelier. The issues we face today are informed by the past - each invention and discovery brought new challenges, and through continuing adaptions, we arrive at the present. In Energy: A Human History, Rhodes confronts global warming and the dangerous gap between renewables' limited market penetration and the urgency of the threat.

Richard Rhodes discusses various topics:

- From the very beginning, energy transitions often occur due to a lack of resource, and our ability to find a new resource and adapt accordingly. Elizabethan England's firewood shortage led to a massive shift towards coal. With coal came the need for technology to pump out drowning coal mines, prompting the invention of the steam engine, which further industrialized England's economic infrastructure.
- Changing a society from one major energy to another typically takes 100 or more years, for many reasons: new sources have to be located and produced; new

technologies are crude and need to develop; a new form of energy must be accepted, tested, and adapted; older energy institutions compete with the new even in decline; major infrastructures have to be changed (roads and railroads built, pipelines laid, refueling stations set up, power lines strung).

- From coal to petroleum, pollution has always been a serious issue. Gasoline was a waste product of petroleum distillation until the coming of the automobile. It was too volatile and flammable for lamp fuel; its only use was as a cleaning agent. Refineries would either pour the gasoline they produced out onto the ground or into dry ponds to evaporate or dump it into a nearby creek or river in the dark of night. Many American streams were largely dead by the beginning of the 20th century from pollution from industrial, slaughterhouse and refinery wastes.

The great challenge of the twenty-first century will be limiting global warming while simultaneously providing energy for a world population not only increasing in number but also advancing from subsistence to prosperity. Given the scale of global warming and human development, we will need them all if we are to finish the centuries-long process of decarbonizing our energy supply — wind, solar, hydro, nuclear, natural gas.

Excerpt: You're about to embark on a four-hundred-year journey with some of the most interesting and creative people who ever lived. Since they're scientists and inventors and engineers, their names don't always attach to their work. But they shaped the world we live in, for better and for worse. Mostly for the better, I believe. After you travel with them, I think you will too. At least you'll know more about what they did and why and how they did it. I was surprised and sometimes amazed at how many of their stories have been forgotten. Some of the references I use to tell those stories were histories and biographies that date back two hundred years or more. The books and documents are old, but the stories are new.

Who are these paragons? One writer at least: William Shakespeare, not as playwright but as

part-owner of the Theatre, the first in London. He and his partners dismantled it (the landowner claimed they stole it) for the wood in a time when wood had become scarce around London. They carted it across the Thames River to build the larger Globe Theatre in naughty Southwark, next door to a bear-baiting arena.

A Frenchman, Denis Papin, concerned with feeding the poor, whose invention of the pressure cooker prepared the way for the steam engine.

James Watt, of course, the Scotsman who gave us the steam engine itself, but also Thomas Newcomen before him, whose great galumphing atmospheric steam machine preceded Watt's elegant elaboration.

I visited a replica Newcomen engine in England on one of the few days a year when its keepers fire it up. It was the size of a house and a champion coal hog. (Coal isn't cheap anymore, which is why they seldom fire it up.) I shoveled a scoopful of coal into the firebox and talked with the retired engineer who ran it. I asked him what equipment he needed to keep it running, and, with a chuckle, he hefted a big hammer. The Newcomen was all pipes and cranks and often out of whack, so he whacked it.

Newcomens squatted at the pithead—the surface opening into a mine—and pumped water out. They were too inefficient to be made portable. Watt's more efficient engine could be smaller—small enough to mount on wheels and rails to haul the coal from the pithead to the river in order to be barged down to London. Then someone realized you could haul people as well as coal, and the passenger railroad emerged and quickly branched out all over England. America too, but our engines burned wood through most of the nineteenth century, penetrating the wilderness far from any coal mine and then connecting the continent.

Among twentieth-century paragons, there's Arie Haagen-Smit, a Dutch specialist in essences who was teaching at the California Institute of Technology (Caltech), in Pasadena. One day in 1948, concerned government officials found him in a laboratory full of ripe pineapples, condensing their tropical aroma from the air. They asked him to do the same for the ghastly Los Angeles smog. He cleared out the pineapples, opened a window,

and sucked in thousands of cubic feet of smoggy air. He ran the air through a filter chilled with liquid nitrogen, and scraped up a few drops of brown, smelly gunk. After he'd analyzed the gunk chemically, he announced it was automobile exhaust and the exhaust of nearby refineries. Unlike the old and often deadly smoke and fog (smoke + fog = "smog") that blighted cities where coal was burned, this new stuff compounded in the air like a binary poison gas. Catalyzed by sunlight, it turned the air sepia.

Oil companies didn't want to know that. Their chemists scoffed at Haagen-Smit's analysis. They found no such reaction, they told the world. Which fueled the stubborn Dutchman's anger. Back to the lab. He showed that the oil company chemists' fancy equipment couldn't distinguish the smog-forming process. For his part, Haagen-Smit used strips of old inner tube to measure how much smog ozone embrittled rubber and his pineapple-analyzing gear to sniff out the components that combined to blight the air. Government stepped in then and began the process of cleaning up Los Angeles.

Energy: A Human History is full of such stories. It's more than merely stories, however. Its serious purpose is to explore the history of energy; to cast light on the choices we're confronting today because of the challenge of global climate change. People in the energy business think we take energy for granted. They say we care about it only at the pump or the outlet in the wall. That may have been true once. It certainly isn't true today. Climate change is a major political issue. Most of us are aware of it—increasingly so—and worried about it. Businesses are challenged by it. It looms over civilization with much the same gloom of doomsday menace as did fear of nuclear annihilation in the long years of the Cold War.

Many feel excluded from the discussion, however. The literature of climate change is mostly technical; the debate, esoteric. It's focused on present conditions, with little reference to the human past— to centuries of hard-won human experience. Yet today's challenges are the legacies of historic transitions. Wood gave way to coal, and coal made room for oil, as coal and oil are now making room for natural gas, nuclear power, and

renewables. Prime movers (systems that convert energy to motion) transitioned from animal and water power to the steam engine, the internal combustion engine, the generator, and the electric motor. We learned from such challenges, mastered their transitions, capitalized on their opportunities.

The current debate has hardly explored the rich human history behind today's energy challenges. I wrote Energy partly to fill that void—with people, events, times, places, approaches, examples, parallels, disasters, and triumphs, to enliven the debate and clarify choices.

People lived and died, businesses prospered or failed, nations rose to world power or declined, in contention over energy challenges. The record is rich with human stories, a cast of characters across four centuries that includes such historic figures as Elizabeth I, James I, John Evelyn, Abraham Darby, Benjamin Franklin, Thomas Newcomen, James Watt, George Stephenson, Humphry Davy, Michael Faraday, Herman Melville, Edwin Drake, Ida Tarbell, John D. Rockefeller, Henry Ford, Enrico Fermi, Hyman Rickover, the coal barons of old Pennsylvania, and the oil barons of California and Saudi Arabia—to name only some of the more obvious.

Whole oceans of whales enter the story, the oil of their bodies lighting the world. Petroleum seeps from a streambed, and a Yale chemistry professor wonders what uses it might have. Horses foul cities with their redolent manure, an increasing public health challenge, and when the automobile replaces them, rural populations no longer required to grow their feed fall into permanent decline. The development of arc welding paces the pipeline distribution of natural gas. Nuclear energy announces itself by burning down two Japanese cities, an almost indelible taint.

Global warming itself, the evidence slowly accumulating across a century of increasingly anxious observation, provokes a biblical-scale confrontation of ideologies and vested interests. Wind energy, the bountiful energy from sunlight, vast supplies of coal and natural gas compete for dominance in a turbulent world advancing toward a population of ten billion souls by the year 2100. Most of them are residents of China and India, the two most populous countries in the world, just now

moving out of subsistence into prosperity and consuming energy supplies accordingly. The energy is there, but can the earth sustain the waste of its burning?

You will not find many prescriptions in Energy: A Human History. Every century had its challenges and opportunities—some intended, some unintended—but in any case, too complex, too rich in implication, for simple moralizing. What you will find are examples, told as fully as I am able to tell them. Here is how human beings, again and again, confronted the deeply human problem of how to draw life from the raw materials of the world. Each invention, each discovery, each adaptation brought further challenges in its wake, and through such continuing transformations, we arrived at where we are today. The air is cleaner, the world more peaceful, and more and more of us are prosperous. But the air is also warmer. In August 2015, for example, northern Iran suffered under a heat index of 165 degrees Fahrenheit (74 degrees Celsius). May all this curious knowledge from our history help us find our way to tomorrow. I have children and grandchildren. I hope and believe that we will. <>

Twitter: Social Communication in the Twitter Age
Second Edition by Dhiraj Murthy [Digital Media and Society Polity Press, 9781509512492]

Twitter is a household name, discussed for its role in national elections, natural disasters, and political movements, as well as for what some malign as narcissistic "chatter." The first edition of Murthy's balanced and incisive book pioneered the study of this medium as a serious platform worthy of scholarly attention. Much has changed since Twitter's infancy, although it is more relevant than ever to our social, political, and economic lives.

This timely second edition shows how Twitter has evolved and how it is used today. Murthy introduces some of the historical context that gave birth to the platform, while providing up-to-date examples such as the #blacklivesmatter movement, and Donald Trump's use of Twitter in the US election. The chapters on journalism and social movements have been thoroughly updated, and completely new to this edition is a chapter on celebrities and brands.

Seeking to answer challenging questions around the popular medium, the second edition of Twitter is essential reading for students and scholars of digital media.

Excerpt: "What Hath God Wrought" — Samuel Morse's first message, on May 24, 1844, on the newly completed telegraph wire linking Baltimore and Washington — was a mere 21 characters long. Alexander Graham Bell's first message on the telephone to his lab assistant on March 10, 1876, "Mr Watson — come here — I want to see you," was more liberal: 42 characters long. And 95 years later, Ray Tomlinson sent the first email, with the message "QWERTYUIOP," from one computer in Cambridge, Massachusetts, to another computer sitting beside it. Tomlinson's message: a spartan 10 characters.

In the past, technology determined the length and duration of the message. In the internet age of today, our ability to communicate is seemingly limitless. But the computer has ushered in a new era of brevity. Twitter is a digital throwback to the analog succinctness of telegrams. Yet what is the significance of this electronically diminished turn to terseness? Does it signal the dumbing down of society, the victory of short attention spans, or the rise of new virtual "me" cultures? Are we saying more with less, or just saying less? Or perhaps we are saying more about less. This position is well illustrated by "status updates," short one- or two-line messages on the popular social networking platform Facebook. Though these short messages are often trivially banal (e.g., "mustard dripping out of my bagel sandwich"), they are elevated to "news," which Facebook automatically distributes to your group of "friends," selected individuals who have access to your Facebook "profile," that is, your personalized web page on the site. Once the update percolates to your friends, they have the opportunity to comment on your update, generating a rash of discussion about dripping mustard, and so on. A photo of the offending bagel sandwich might be included as well. Platforms such as Snapchat and Instagram prioritize the role of images, but brief comments remain very important to these media.

This form of curt social exchange has become the norm with messages on Twitter, the popular social

media website where individuals respond to the question "What's happening?" with a maximum of 140 characters. These messages, known as "tweets," can be sent through the internet, mobile devices such as smartphones and tablets, and text messages. But, unlike status updates, their strict limit of 140 characters produces at best eloquently terse responses and at worst heavily truncated speech. Tweets such as "gonna see fim tonite!" or "jimmy wil be fired 2day" are reflective of the latter. The first tweet on the site, "just setting up my twttr" (24 characters), by Jack Dorsey, the creator of Twitter, on March 21, 2006, perhaps led by example. This book emphasizes that Dorsey's message, like that of Morse, was brief and, like that of Bell, was unremarkable — setting up one's Twitter and asking the recipient to return.

After 11 years of 140-character tweets, Twitter decided to double this to 280 characters from November 2017. Before rolling the change out to the general public, Twitter began trialing this "feature" with a select group of users (Watson 2017), though initial testing suggested that only 5 per cent of the group opted to use over 140 characters in their tweets. Critics argue that this will drown out Twitter timelines, compromising the platform's uniquely succinct form of social communication.

Our contemporary use of Twitter — in part a social, political, and economic information network — has evolved over more than a decade. So it may be some years before the impact of the 280-character expansion can be evaluated. Given that our behaviors on all social media platforms are interlinked, it may be that Twitter is answering a call for individuals to express themselves more fully, though in the context of these platforms more broadly, 280 characters is still relatively terse.

By drawing this line between the telegraph and telephone to Twitter, this book makes its central argument — that the rise of these messages does not signal the death of meaningful communication. Rather, Twitter has the potential to increase our awareness of others and to augment our spheres of knowledge, tapping us into a global network of individuals who are passionately giving us instant updates on topics and areas in which they are knowledgeable or participating in real-time. In

doing so, however, the depth of our engagements with this global network of people and ideas can also, sometimes, become more superficial. For example, policymaking by elected officials on Twitter may not only be superficial due to brevity, but also potentially dangerous due to a lack of context for foreign policymakers reading these tweets. Of course, the opposite can be true too where brief, superficial tweets are positive, serving as public evidence of continued political engagement.

Many of us would be worried if Twitter replaced "traditional" media or the longer-length media of blogs, message boards, and email lists. The likelihood of this is, of course, minimal. However, Twitter is also mediating access to these types of content for many. For example, Twitter's "Moments" feature presents a selection of trending "news" for users to be able to easily navigate. Though aspects of Twitter such as this may be reducing information diversity or dumbing down what we consume (and this potentially has real effects on politics, economics, and society), this book concludes with the suggestion that there is something profoundly remarkable in us being able to follow minute-by-minute commentary in the aftermath of an earthquake, or even the breakup of a celebrity couple. This book is distinctive in not only having Twitter as its main subject, but also its approach of theorizing the site as a collection of communities of knowledge, ad hoc groups where individual voices are aggregated into flows of dialog and information (whether it be the election of Donald Trump or the death of Prince). The first edition of this book in 2013 was instrumental in starting this conversation, and this second edition continues the important work of thinking critically about Twitter.

Ultimately, Twitter affords a unique opportunity to re-evaluate how communication and culture can be individualistic and communal simultaneously. I also describe how these changes in communication are not restricted exclusively to the West, as any mobile phone, even the most basic model, is compatible with Twitter. Tweets can be quickly and easily sent, a fact that has led to the growth of its base to 313 million monthly active users with 79 percent of accounts outside of the USA. This has been useful in communicating information about

disasters (e.g., the 2016 Kaikoura earthquake in New Zealand) and social movements (e.g., #BlackLivesMatter). At an individual level, tweets have reported everything from someone's cancer diagnosis to unlawful arrests. For example, in April 2008, James Karl Buck, a graduate student at the University of California, Berkeley, was arrested photographing an anti-government labor protest in Mahalla, Egypt. He quickly sent a one-word tweet from his phone, "arrested," which caught the attention of Buck's Twitter "followers," those who subscribe to his tweets. His one-word tweet led to Berkeley hiring a lawyer and Buck's eventual release. There are, of course, many distinctions to be made between the tweets sent by Buck, or those sent during the Mumbai bomb blasts, and the more unremarkable, everyday tweets. Contrast the tweet Prasad Naik sent moments after the Mumbai bomb blasts, "Firing happening at the Oberoi hotel where my sister works. Faaak!" with Biz Stone's third tweet, "wishing I had another sammich." Though an intentionally striking and loaded comparison, it is just this absurdity that happens daily, hourly, and by the minute on Twitter. This combination of banal/profound, combined with the one-to-many — explicitly — public broadcasting of tweets, differentiates Twitter from Facebook and text messages.

Rather than selectively condemning Twitter (e.g., as a threat to democracy) or, on the other hand, praising it (e.g., a bringer of democracy), the book poses important questions to explore the possibilities and pitfalls of this new communications medium. Although I examine the practice of social media through specific Twitter-mediated events, this book's emphasis is both explanatory and theoretical. Specifically, my prime aim is to better understand the meanings behind Twitter and similar social media through concise yet sophisticated interpretations of theories of media and communication, drawing upon a diverse array of scholars, from Marshall McLuhan to Erving Goffman and Gilles Deleuze to Martin Heidegger. Though this network of thinkers and scholars crosses several disciplines, their work sheds light on a problem of communication faced since the dawn of the modern age: unraveling the connections, to paraphrase McLuhan, between the medium and the message. The chapters present analyses of the shifts in which

we communicate by exploring the role of Twitter in discourses of new media forms, communication, social formations, and digitally mediated communities. Early chapters introduce Twitter, historically contextualize it, and present theoretical frames to analyze the medium. Comparisons between historical media forms are made to highlight the fact that new media forms are not all that "new" in many of the ways in which they organize our social lives. For example, when the telephone began to get a critical mass in US households, there were similar feelings of anxiety that the "public" would erode the "private," as anyone could call your house as you were having an intimate family dinner or in deep conversation with a visiting friend. The middle chapters include specific discussions of Twitter and its relationship to journalism, disasters, social activism, health, and celebrities/ branding. The book then brings together theory and practice to make conclusions on the medium itself and its role in social communication within an "update culture," a culture in which society has placed importance on updating friends, family, peers, colleagues, and the general public. The question of whether this pattern signifies "me-centric" rather than "society-centric" cultures is explored in the conclusion. At the start of each chapter, I single out an individual tweet to frame the forthcoming chapter.

Since writing the first edition of this book in 2011-13, the arguments I had made in terms of Twitter being a place to update the world about one's experiences, thoughts, and reflections have now become part of mainstream understandings/engagements about the medium. Pop culture has often interrogated why Twitter has become part of our daily lives. The Comedy Central television show South Park compares leaving Twitter to suicide and the celebrity Alec Baldwin makes a cameo appearance as a social media addict who posts compulsively on Twitter, ultimately opting to have antenna implants in his head in order to broadcast his thoughts without even typing. Their parody highlights serious public concerns over the seamless broadcasting of what people are thinking (what Mark Zuckerberg termed "frictionless sharing", and such practices may be crossing over into the line of what is colloquially referred to as "Too Much Information" (TMI).

This is an important aspect of public perceptions of Twitter and what role it plays in society. Some argue that the medium has blurred the private and public too much and that the private needs to be more ring-fenced. Others argue that this blurring of public and private is a net positive in the context of Twitter. For example, the medium could potentially be changing citizen activism in countries with no freedom of the press, or providing women with a public sphere to discuss intimate partner violence (IPV). Twitter has become the subject of very large social questions and the medium has been placed right in the middle of many prominent debates.

What is noteworthy is that privacy cuts both ways as some argue that they do not want to know what someone had for breakfast a particular day, but at the same time want individuals to be broadcasting live updates during disasters, activist events/social crises, celebrity breakups, and presidential elections. This is tricky terrain. The case of Lisa Bonchek Adams, a mother of three who had terminal cancer and tweeted over 176,000 times, is a good example. With many intimate tweets that explicitly conveyed to her followers her experiences with cancer, she mostly drew support, but also condemnation. On the one side, the argument was that individuals such as Adams should be encouraged to use Twitter in these ways as often patients of chronic illnesses such as terminal cancer need high levels of support and Twitter enables new ways to support these types of individuals both by other cancer patients and survivors, as well as by the public at large. Others, such as the journalists Emma and Bill Keller, publicly argued against her approach. This case provoked a sharp controversy about the public and the private, and what role Twitter should play in our lives. In an age where some perceive that everything is posted on social media, this case highlights how boundaries are being negotiated and redrawn all the time. And my book too had to be rewritten!

My work on this book has been shaped by generous input and encouragement from family, friends, colleagues, and scholars. I am very grateful for their involvement in the development of this book. Students in my classes over the years have been taught material from early versions of

chapters, and offered engaging and highly useful feedback. I am also indebted to my students for providing me with a treasure trove of examples of interesting Twitter users and tweets. Thank you to my former research fellow, Macgill Eldredge, who imported the data sources in chapter 7 into a standardized format and produced the spike data histogram, and my graduate students — Kyser Lough for shooting the image used in figure Li and Jordon Brown for proofreading assistance. The reference librarians at the British Library patiently helped me navigate archives regarding the telegraph, material which fundamentally shaped the historical context of the book. I have greatly benefited from input from my colleagues at Bowdoin College, Goldsmiths (University of London), and The University of Texas at Austin. I would also like to thank Andrea Drugan, Ellen MacDonald-Kramer, Mary Savigar, and the rest of the Polity team for their invaluable support in making this project a reality. Screenshots of tweets are used where possible to provide a fuller context.

"Aware" Communities

In this book, the aim has been to explore the larger implications of Twitter for modern social, political, and economic life. Part of this exploration has involved examining the ways in which Twitter is both individualistic and communal. Barry Wellman, whose work has extensively covered the social implications of the interne and the rise of a more networked society, remarked (in reference to the role of GPS navigation systems) that the technology is framed as "me-centric" as opposed to the society-centric focus that reading a physical map gives us (i.e., a greater context of our surroundings). In a me-centric world, the focus is on you/your life/things from your vantage point, and is myopically oriented to "the moment." From Wellman's point of view,' it can also illustrate where your life is going (in terms of your momentum), whereas a society-centric view places primacy on your role in society as part of a collection of people. Though it appears that Twitter is me-centric, this binary does not seem to describe Twitter as well as it does GPS, the reason being that Twitter, as discussed, can help maintain communities (especially ad hoc ones) that resemble more society-centric formations, such as the cancer

support groups (discussed in chapter 7) and communities in the aftermath of a disaster (discussed in chapter 5). The binary is useful in highlighting how Twitter can be viewed from two oppositional perspectives. Moreover, our social lives are not constructed from a mutually exclusive relationship between me-centric and society-centric. Rather, many of our daily activities straddle both. Twitter follows suit and is simultaneously individualistic and communal (as well as banal and profound). Furthermore, Twitter's (real/perceived) role in major news events (ranging from the downing of US Airways Flight 1549 to the 2011 "Arab Spring" movements and the 2016 Kaikoura earthquake in New Zealand) is framed as society-centric. The fact that Twitter has become mainstream through these events continues to change its demography and the ways in which the medium is used. Though social communication in the Twitter age may seem me-centric, there is more happening than meets the eye. One glance at the stream of tweets after a disaster provides evidence of society-centric awareness systems such as the "ambient" news environment discussed in chapter 4. Though I have argued that Twitter should not be viewed as a toppler of governments, perhaps, at another level, tweeting together can introduce us to new people and new ideas locally and globally. It may be making us aware of broader issues and engaging us with non-homophilic communities. At 140 characters at a time, tweeters support a complex update culture which, in many ways, represents a thriving — albeit disjointed — group capable of both the banal and the profound, sometimes simultaneously.

Twitter as Mainstream, yet Unique

Twitter maintains a unique position in contemporary social, political, and economic life. The combination of the medium's brevity and simplicity and mass diffusion has brought together a set of characteristics that has made it attractive. This is the case not only for individual people who broadcast thoughts, feelings, and ideas, but also for politicians, celebrities, and other prominent people who do the same. Twitter is simultaneously a very public and private space in that much of the communication that exists on the platform is never really heard by anyone except the person tweeting or a couple of other people. The vast

majority of tweets theoretically have a large reach, but are only really being seen by a small group. At the same time, there are tweets circulating by more prominent people or opinion leaders in particular domains (from particular occupational domains to hobby/interest areas) that command a much greater influence on the platform. This is of course true with social communication more generally and social media more broadly. In other words, social communication is always stratified. However, the openness of Twitter in terms of being able to engage with anyone through an @-mention continues to be one of the unique aspects of Twitter that have captured the public imagination. Another simultaneous characteristic of Twitter is that many tweets are not inherently produced to be consumed by others. Having studied Twitter for nearly a decade, it has become clear to me that many also see value in writing things down and posting them on Twitter, much like they regarded diaries in the past (Murthy forthcoming). One of the interesting aspects of Twitter, not initially realized by scholars, is that not everyone on Twitter wants to be heard. Indeed, it is tempting for some to paint broad brushstrokes, labeling the platform as riddled with attention seekers. However, we should be careful in making totalizing arguments like this. In many ways, this could hardly be farther from the truth. Twitter has many individuals not crying out or chatting all the time, but using the medium to keep their finger on the pulse of what is relevant to them. Other users do, of course, choose to communicate many details about their lives on a daily basis.

That said, the proliferation of the Internet of Things (IoT) has made it easier for those regularly wanting to produce content about their lives. Specifically, in the case of fitness trackers, it is very easy to have your device automatically tweet updates about how far you have run, the number of steps you have taken during the day, how many calories you have burned, or where you have cycled to. These automatic postings do not have to originate from IoT devices, but could be coming from automatic posting of the weather in your area, Spotify favorites, recipes used, or items purchased from Amazon. In this way, Twitter has become part of a larger sharing culture (see Meikle 2016, for a fuller discussion). This is not something new, but harks back to long-standing trends of human

communication. After all, we are social animals who want to share with others what is happening to us. People have shared Polaroids in the past with friends, sent clippings of news stories they found were interesting, and written letters. The difference with Twitter is that the volume of this

has increased many times, as well as the speed at which it is happening. And our diverse responses to platforms such as Twitter can in part be attributable to the increases in this volume and speed, which we still have not fully understood in terms of its impact on our lives. Like previous electronic communication technologies, Twitter is compressing space and time. Moreover, as Luke argues, "Each new technology and discourse of modernity fabricates its own complex of technoregions to be conquered and mastered" and we are still in the early stages of social communication in the Twitter age. Though Twitter is a fast-moving target and one that is challenging, there is now more need than ever to understand it.

The Future

Twitter is a very active medium and presents a wide range of possible areas to study. This book has started the conversation rather than concluding it. For example, one area not explored here is censorship, a subject that has been invoked with reference to newsgroups, websites, blogs, and many other interne spaces. Twitter has had an explicit "tweets must flow" policy since 2011, which was penned by cofounder Biz Stone (Stone 2011). And the limits of the platform have been historically tested. Take the case of Peter Daou's (@peterdaou) tweet in August 2011: "Unbelievable: Is Twitter REALLY allowing #reasonstobeatyourgirlfriend to be a trending topic??! Twitter activists responded to the #reasonstobe atyourgirlfriend with the hashtags #violenceisnotfunny and #14oreasonsdvisnotajoke (led by @feministing). The latter hashtag was picked up by prominent Twitter users, including @nationalnow (the US-based National Organization of Women) and @Fem2pto, who used this hashtag to counter tweets encouraging domestic violence. Despite this response, a significant number of users asked for the hashtag to be censored. Cases like this have been plentiful on Twitter over the years. But the surge of the so-

called alt-right white nationalist movement on Twitter during the 2016 US presidential election led to the company rethinking parts of the "tweets must flow" policy. They banned prominent members of the movement such as Charles Johnson "for soliciting donations to 'take out' a Black Lives Matter activist"Moreover, in February 2017, Twitter launched a "safe search" feature which was intended to help combat abusive speech. However, when Twitter tried to curb abuse done through the listing notification feature, they grossly misunderstood the situation and had to roll back the change after a mere two hours as users leveraged notifications to identify abusers. This incident highlights the tension between Twitter's American free-speech ideals and differing legal restrictions on speech worldwide — an issue not restricted to Saudi Arabia and China, but also in European countries such as Germany. Twitter's highly variable corporate footprint outside the USA also has the potential to land the medium in legal disputes over hate speech and other "problematic content."

Clearly, Twitter has political, social, and economic effects, and the multitude of specific cases could never be fully captured in a book like this. Ultimately, it is a communications medium and its perception and use are socially constructed. Issues ranging from bullying to excessive intrusions of privacy are important to understanding Twitter and, indeed, its future. However, the medium has also fostered innovative social formations built on extensive weak-tie networks, which have updated the world during disasters or helped solve problems through crowdsourced collective intelligence. Like every "new" communications medium, Twitter will be eclipsed at some point in the future. The American Library of Congress is archiving tweets and one day historians will study selections of the enormous corpus of text generated by the Twitterverse. For better or for worse, one thing is clear: Twitter has shaped modern social communication. <>

[The Economics of Entrepreneurship, Second Edition](#) by Simon C. Parker [Cambridge University Press, 9781316621714]

This second edition of [The Economics of Entrepreneurship](#) is an essential resource for scholars following the current state of this fast-

moving field, covering a broad range of topics in unparalleled depth. Designed to be used both as a textbook for specialist degree courses on the economics of entrepreneurship, and as a reference text for academic research in the field, the book draws on theoretical insights and recent empirical findings to show how economics can contribute to our understanding of entrepreneurship. New topics, such as crowdfunding, entrepreneurship education and microenterprise field experiments, appear for the first time, while existing treatments of topics like regional entrepreneurship, innovation and public policy are considerably deepened. Parker also discusses new empirical methods, including quasi-experimental methods and field experiments. Every section - indeed every page - of the new edition has been updated, resulting in a rigorous scientific account of entrepreneurship today.

We usually include table of contents. The following gives a thorough sense of the comprehensiveness of this title.

This book is intended for use in graduate-level courses and as a source of reference by researchers. I have used it to teach doctoral seminars on the economics of entrepreneurship in Canada and the United States. A set of PowerPoint slides accompanies many of these chapters and is freely available from the publisher and the author. It is hoped this will simplify the life of instructors who use the book for teaching purposes.

The previous edition of this book was published by Cambridge University Press in 2009. In the eight years since then, the published literature on entrepreneurship has grown enormously. Many well-established topics have continued to attract research attention, especially (but not only)

regional entrepreneurship, risk aversion and overoptimism, and the macro-institutional setting in which entrepreneurs operate. At the same time, several new topics have emerged, which had barely registered with most researchers a decade ago. These include crowdfunding, entrepreneurship education and microenterprise grant and training evaluations using field experiments.

It has also been necessary to update the book by incorporating the numerous new articles which have been published since 2008. Updates have been made to every section — indeed, every page — of the new edition. Several chapters in the previous edition have been expanded, while others have been split off into new chapters of their own. To single out just one aspect of the more substantial changes, theory on regional and macroeconomic aspects of entrepreneurship has been separated into a distinct chapter from the evidence on regional and macroeconomic aspects of entrepreneurship. At the same time, the treatment of innovation, social capital and venture capital (among other topics) has also been considerably upgraded and enhanced since the previous version. The book also discusses new empirical methods, including quasi-experimental methods and field experiments. These new methods are becoming increasingly widespread in published entrepreneurship research at the time of writing.

The spectacular growth of research in entrepreneurship is warmly welcomed, though it has posed several challenges in writing this book. It has made it more important than ever to retain the focus of this volume on economics, or at least on topics of interest to economists even if the authors are non-economists. This is not to say that the coverage of the book has narrowed; rather, I have tried to resist the temptation to incorporate material which belongs squarely in the psychology or management camps, such as cognition, entrepreneurial passion, entrepreneurial orientation and the like. I have also continued to sidestep descriptive accounts of the processes that entrepreneurs follow when startingnew ventures, as well as typologies of entrepreneurs, which are essentially descriptive as well. Mainstream economic theory relies on some form of optimisation, which rules out discussions of

qualitative research contributions or reasoning based on induction or some kind of informal inference. It also rules out discussions of `Austrian economics' approaches to entrepreneurship, which are critical of mainstream economics but which seem to me to lack predictive content, and which moreover appear to misunderstand the role of assumptions, especially as they relate to equilibrium, in mainstream economic theory.

The interface of the economics of entrepreneurship with psychology is more subtle and deserves special comment. Neoclassical economics has traditionally assumed full rationality of agents, which rendered detailed psychological considerations moot. More recent research has taken more of a behavioural economics stance, in which individuals make decisions while harbouring some kind of cognitive bias, such as over-optimism. I have always believed that contributions from this research stream fall well within the ambit of the economics of entrepreneurship, and so the intersection of psychology, economics and entrepreneurship does appear in this book.

If economics is applied as one type of razor to the broad literature, entrepreneurship is the other razor. For instance, in this book innovation is not discussed as an end in itself, either with regard to its determinants or as an outcome measure; but it is discussed — and in this edition secures its own dedicated chapter — as it relates to entrepreneurship. That is true both of independent (`entrepreneurial') and corporate (`intrapreneurial') innovation.

In short, this book does not claim to provide a comprehensive overview of the entire entrepreneurship literature. It confines its attention to the incentives that underpin entrepreneurial decision-making and behaviour; the strategic interactions between entrepreneurs and other agents; the performance of entrepreneurs; and the impact that entrepreneurs have on the economy as a whole. That, in brief, is the space encompassed by the economics of entrepreneurship.

Should non-economists read this book? I hope they do, as economics generates rich theory which can cross-fertilise other disciplines, as well as numerous empirical insights which can inform and enlighten across disciplinary boundaries. Moreover, agency

theory, human capital theory, the economics of information and real options theory are among the economic theories which continue to influence business and management scholars. Also, a better understanding of the economics literature relating to entrepreneurship might even prevent some management scholars from trying to reinvent the wheel. For example, much has been made of opportunity recogni¬tion in management and entrepreneurship journals following Venkataraman's famous study published in 1997. Yet economists have long recognised the importance of opportunity recognition and exploitation by entrepreneurs, with early studies including Schultz (1980), Rosen (1983) and Baumol (1990). For instance, according to Sherwin Rosen, entrepreneurship entails `exploiting the new opportunities that inventions provide, more in the form of marketing and developing them for widespread use in the economy than in developing the knowledge itself'. Separately,

Corriveau modelled both long-run growth and output fluctuations originating in 'the actions of entrepreneurs who seek, find and exploit profit opportunities that arise out of process innovations'. Another example is occupational choice theories, which originated in economics in the 1970s and 1980s, yet which have been reworked subsequently in some management and entrepreneurship journals as ostensibly `novel' contributions.

The presentation style and format of this edition has been adjusted, with the inclusion of rigorous derivations of results rather than just the `summarising logic' which the previous edition tended to favour. The previous edition often jumped straight to results, shortcutting their derivation. While that made for brevity, it reduced the ease with which technical readers could grasp the mechanisms generating the results. In many ways, the present volume is closer to my original 2004 book The Economics of Self-Employment and Entrepreneurship. It is hoped that several topics are now treated in the requisite depth, while providing a clear exposition of influential theories and findings and continuing to supply the all-important intuition behind them. I have also added concluding

sections to most chapters, where my personal impressions about what we know, what matters and where future research is needed, are set out.

The entrepreneur is the single most important player in the modern economy.

Entrepreneurship is increasingly in the news. Governments all over the world extol its benefits and implement policies designed to promote it. There are several reasons for this interest in, and enthusiasm for, entrepreneurship. Entrepreneurs run the majority of businesses in most countries, producing one-half of output and accounting for over 40 per cent of total wealth. Their enterprises provide specialised goods and services that are ignored by the largest firms. Entrepreneurs generate productivity gains from dynamic entry and exit which spurs economic development. This comes about both from selection and competition. Selection involves incumbents who are inefficient or do not satisfy consumer demand being replaced by entrants who are more efficient or better meet demand by offering new or better quality products. Entrants also intensify competition and thereby discipline incumbents to provide cheaper or more innovative goods.

The most dynamic entrepreneurs pioneer new markets for innovative products, creating jobs and enhancing economic growth. As a striking example, in 2016 three of the most innovative and fast-growing US companies — Google, Amazon and Facebook — did not exist twenty-five years earlier; while Apple, the world's largest technology company by assets, started as an entrepreneurial venture forty years ago. These companies have changed the way we live, work and enjoy our leisure time. Like them, some of today's new start-ups will eventually grow to become tomorrow's corporate giants.

Even entrepreneurial ventures which grow less dramatically than these can create positive externalities. For example, they may develop supply chains that help attract inward investment; create wealth and facilitate social mobility; and even help people cope after natural disasters. Increasingly, corporate managers and employees, as well as high-school and university students and researchers, are being urged to become 'more

entrepreneurial', to enhance efficiency and generate new ideas for our world.

As the wellspring of industrial dynamism, wealth creation and innovation, entrepreneurship is an integral part of economic change and growth. Yet entrepreneurship has only recently come to be regarded as a field. A complete view of it recognises its multidisciplinary academic underpinnings, drawing from economics, finance, business studies, sociology, psychology and other fields. This heterogeneous provenance reflects the multidimensional nature of entrepreneurship.

What Economics Adds to the Study of Entrepreneurship

Today, the economics of entrepreneurship is a thriving research field. Although the `business studies' approach to entrepreneurship research remains dominant in terms of field journals, conference activity and academic posts — in other words, in most practical respects in academe — the economics of entrepreneurship literature continues to develop rapidly, making a distinct contribution of its own. However, many non-economists continue to ignore the economics of entrepreneurship literature, while a minority even disparages economics, sometimes claiming that the discipline itself is intrinsically unsuited to the study of entrepreneurship.

One of the objectives of this book is to rebut the anti-economics arguments, by demonstrating constructively what the subject can and does say about entrepreneurship. It is the author's belief that anti-economics arguments mainly reflect ignorance about the current state of economics. Before going on to define what the economics of entrepreneurship is, and what it brings to the analysis of entrepreneurship as an academic field, it is worth briefly trying to understand these claims, which can be summarised as follows:

1. Economics (it is alleged) assumes that agents know prices and goods and, automatonlike, optimise resource usage via mathematical rules. But entrepreneurs cannot optimise because they cannot know the prices of goods or services which do not yet exist; they must therefore use

heuristics and exercise idiosyncratic judgement.
2. Economics entails the analysis of equilibrium. But the essence of entrepreneurship is that entrepreneurs recognise disequilibrium opportunities and exploit them, destroying the status quo in a ceaseless progression of disequilibrium states.
3. Economics assumes perfect information and competition, so in equilibrium profits are eliminated. But without a profit motive there can be no entrepreneurship; and in the real world imperfect information and imperfect competition prevail, so even small entrepreneurial ventures can possess some market power.
4. Economists have chosen not to write the entrepreneur into their models. For this reason the entrepreneur is absent from economics textbooks. But the entrepreneur is central to economic growth, so neoclassical growth theory is at best incomplete and at worst misleading.

I will take these criticisms point by point. The first one is based on a simple misunderstanding about optimisation in economics. For example, Bayesian methods are ideally suited to modelling situations of entrepreneurial uncertainty; and economists have a long tradition of assuming that agents act on the basis of subjective probabilities about the future, even if subjective probabilities differ from objective probabilities. That is, it is recognised that individual agents can and do make mistakes. Although the `rational expectations hypothesis' of neoclassical economics does not allow agents to make systematic errors, this is far from being the only school of thought in modern economics. Economic models are increasingly beginning to incorporate per¬sistent over-optimism, bounded rationality and other cognitive biases into individual behaviours and choices. So nowadays the criticism of hyper-rationality in economics is wide of the mark.

The second criticism seems to be based on another misunderstanding, this time about the notion of equilibrium in economics. `Equilibrium' describes a resting point which eventually obtains after some change occurs. Even if the economy never arrives at

a predicted equilibrium, because it is disrupted by another event, it is still helpful to predict the eventual likely outcomes of a given change. As it happens, many economic models now analyse the behaviour of individuals in environments which undergo continual unpredictable change, and deal with equilibrium as a dynamic concept (captured, for example, by the notion of an `equilibrium growth path'). A further example relates to innovation, where some economists model the dynamic processes that generate new knowledge and opportunities, rather than taking them to be exogenous as in much of the business studies entrepreneurship literature.

It is surprising to see some critics continuing to make the third point, which is now hopelessly out of date. As numerous examples in this book attest, imperfect information and imperfect competition play a central role in modern economic analysis, including applications to entrepreneurship. It is essential not to erroneously conflate `normal' and `supernormal' profits. The former is the return needed to keep factors of production employed in their present use. It is not competed away to zero. Economists merely claim that when markets are competitive or contestable, and products are homogeneous, `supernormal profits' (i.e. profits in excess of normal profits) will eventually be competed away. It is a mistake to claim that this precludes exploitation of temporary or even ongoing entrepreneurial opportunities. Indeed, economists would say that one manifestation of entrepreneurship is precisely entry by new firms to compete for profits with incumbents. Other manifestations and definitions of entrepreneurship are also possible, including those based on innovation, managing uncertainty and owning a business; these fall well within economists' ambit too.

The first part of the fourth criticism states that economists do not write entrepreneurs into their models, firms or the broader economy. That might have been true when Baumol wrote that 'the theoretical firm is entrepreneur-less — the Prince of Denmark has been expunged from the discussion of Hamlet'; but with the development of new theories, perspectives and subject areas such as agency theory, personnel economics and game theoretic

work on innovation, this is no longer the case. As this book will hopefully show, numerous economics journal articles now treat the entrepreneur as a distinctive economic actor, albeit usually as a 'firm-organising' rather than an `innovating' entrepreneur. Baumol pointed out that it is the innovating entrepreneur, and not the firm organiser entrepreneur, whose role is inherently difficult to describe and analyse systematically, and who is really absent from conventional economic models of the firm. As he wrote about published work in economics at an earlier time: 'one hears of no ... brilliant innovations, of no charisma or any of the other stuff of which entrepreneurship is made'. But this entrepreneur is doomed to be absent from all scientific theories, economic or otherwise Criticising economics for this state of affairs is hardly fair.

The second part of the fourth criticism has greater substance, however. The terms `entrepreneur' and `entrepreneurship' are still missing from most leading economics textbooks in microeconomics, macroeconomics and industrial organisation. In my opinion these are unfortunate and unnecessary omissions and this criticism is a fair one.

In short, and allowing that economists can do more to incorporate the entrepreneur into mainstream textbooks, it is time for the anti-economists to stop caricaturing economics as a subject locked in a 1970s neoclassical time warp, where economies are characterised by perfect information, perfect foresight, perfect markets and perfect price flexibility. They should instead start to consider what economics can add to our understanding of entrepreneurship.

In essence, the economics of entrepreneurship analyses how economic incentives affect entrepreneurial behaviour, and how entrepreneurial behaviour in turn affects the broader economy.[1] This is clearly a broad definition and covers a wide variety of issues, as the various chapters of this book amply testify. Consider by way of example a corporate manager's decision problem of whether to retain employees who develop new innovations within the firm as `intrapreneurs', or whether to let them quit and start up as independent entrepreneurs. In this problem, economic incentives are clearly of key importance. Of course, incentives also shape

behaviour more generally. Individuals do not have to become entrepreneurs, but choose to do so when the incentives (not necessarily financial) are sufficiently favourable. Indeed, the whole idea of public policy towards entrepreneurship is premised on the notion that government interventions (through taxation, regulation, grants, etc.) affect entrepreneurs' incentives and thereby their behaviour.

One could in fact go further and argue that one cannot fully understand topics like female entrepreneurship, ethnic minority and immigrant entrepreneurship, or entrepreneurial effort without some knowledge of labour economics. Labour economics sits at the heart of participation choices and work participation decisions, as does the microeconomics of incentives. The latter in turn underpins much cutting-edge research on entrepreneurial finance, both debt finance and venture capital. And for their part, these issues cannot be understood without some knowledge of financial economics. Likewise, public economics informs the analysis of public policy towards entrepreneurship.

Finally, one can also point out some limitations in some non-economics approaches to entrepreneurship which the economics approach avoids. One is a lack of predictive theory, and ad hoc (or post hoc) hypothesis generation. For instance, it is not much of a theory which merely states that people lacking entrepreneurial intentions are less likely than others to become entrepreneurs; or that individuals who lack access to resources needed to start a business are less likely to actually start a business. This type of obvious reasoning, which is deemed uninteresting and therefore unpublishable by mainstream economics journals, can nevertheless be found frequently in other approaches to entrepreneurship. Nor does the economics approach to entrepreneurship content itself with merely listing descriptive and anecdotal evidence which lacks conceptual or causal interpretation and which is not obviously generalisable. By applying its armoury of sophisticated theoretical and econometric methods, the economics of entrepreneurship seeks to extend the understanding of all entrepreneurship scholars, whether they are economists or not. My hope is that

this book will help to convince the sceptical reader of this potential.

Coverage and Structure of the Book

This book builds on my previous volumes by continuing to organise, extend and assess the current state of the branching, acquisitive and rapidly growing literature on the economics of entrepreneurship. The book is intended to serve as a comprehensive overview and guide to researchers and students of entrepreneurship in a variety of disciplines, not just in economics. For brevity and focus, some topics will be mentioned only in passing and will not be explored in depth. These include academic entrepreneurship and family firms. These are examples of topics where the application of economic methods and reasoning has had only limited purchase to date. Some alternative disciplinary approaches will be acknowledged but will perforce also receive only fleeting attention. Such approaches include organisational, strategic and managerial decision-making by entrepreneurs; `organisational ecology' and 'evolutionary economics' approaches to entrepreneurship; and practical advice ('how to' information) to entrepreneurs. Nor will I provide descriptive case studies of individual entrepreneurs, small firms or the industries in which they operate. These topics are ably covered in numerous business studies texts.

The book is organised in four parts. The first part deals with selection into entrepreneurship, analysing which people become entrepreneurs and why. Chapter 2 discusses prominent microeconomic theories in the economics of entrepreneurship while Chapter 3 treats regional and macroeconomic theories. Chapter 4 presents a consistent treatment of econometric techniques which are extensively deployed in applied entrepreneurship research. Chapters 5 and 6 are the empirical counterparts to Chapters 2 and 3, summarising evidence from prior studies at the individual, regional and macroeconomic levels. Chapters 7 and 8 focus on entrepreneurial selection for some particular demographic groups of interest: ethnic minorities, immigrants and women.

The second part of the book analyses the financing of entrepreneurial ventures. Chapter 9 deals with debt (bank) finance; Chapter 10 treats venture

capital and business angel finance; and Chapter 11 covers other sources of finance, including microcredit schemes, family finance, trade credit and crowdfunding. Chapter 12 provides an extended discussion of wealth and entrepreneurship, which bears on entrepreneurial finance and in particular on borrowing constraints which may prevent entry into entrepreneurship among impecunious individuals.

The third part of the book considers several aspects of entrepreneurial performance, from the standpoint of both individual entrepreneurs and the broader economy. Chapter 13 explores theories and evidence about the growth of entrepreneurial ventures. This is related to one of the topics covered in Chapter 14, namely job creation. Chapter 14 also deals with entrepreneurial effort, which bears on the types of entrepreneurship that people choose to practise, the effort they supply, and how long they supply it before they retire. Chapter 15 discusses entrepreneurial incomes and the returns to human capital, while Chapter 16 treats entrepreneurial innovation. Survival of entrepreneurial ventures is another, albeit subtle, metric of entrepreneurial performance: Chapter 17 presents theory and evidence on survival and exit at the venture level.

The final part of the book deals with public policy. There are four chapters here. Chapter 18 sets out some principles of entrepreneurship policy. Chapter 19 analyses finance and innovation policies towards entrepreneurship, while Chapter 20 discusses the impact of various kinds of government regulation on entrepreneurship. Chapter 21 draws the book to a close with a discussion of: various kinds of taxation that affect entrepreneurs; labour and product market policies towards entrepreneurship; and miscellaneous macro issues including the role of the welfare state, trade unions, the role of `enterprise culture' and macroeconomic instability. The final section of Chapter 21 concludes the book with some final thoughts.

Defining and Measuring Entrepreneurship
The first and most pressing task is to define entrepreneurs and entrepreneurship. It should be said immediately that there is no general agreement about the meaning of these terms. Some researchers identify entrepreneurs with residual

claimants, such as small business owners or the self-employed, while others restrict their definition of entrepreneurs to business owners who employ other workers. Others again take a Schumpeterian standpoint and argue that entrepreneurship entails the introduction of new paradigm-shifting innovations rather than engaging in a particular occupation. A popular definition of an entrepreneur in business studies is someone who `perceives an opportunity and creates an organisation to pursue it' often without owning the resources necessary to do so. This definition implies that new venture creation is the essence of entrepreneurship.

Part of the divide between the economics and business studies approaches to entrepreneurship is attributable to the different definitions of entrepreneurship they utilise. Economists are often content to identify entrepreneurs with business owners (in industrial organisation and macroeconomics), the self-employed (in labour and microeconomics) and small firms (in industrial organisation). These practical definitions all rely implicitly on residual-claimant and risk-taking aspects of entrepreneurship... <>

The Trademark Guide: How You Can Protect and Profit from Trademarks, Third Edition by Lee Wilson [Allworth Intellectual Property Made Easy Series, Allworth Press, 9781621536321]

Intellectual-property lawyer Lee Wilson, who has been studying and writing about trademark law for more than thirty years, knows that trademarks are a crucial part of the American economy. In plain language with scores of real-life examples, this new edition The Trademark Guide draws on Wilson's experience and addresse issues important to both would-be trademark owners and those who already own trademarks, including:

- How to choose a trademark without risking a lawsuit
- How trademark rights are gained and perfected
- How to use a trademark properly
- What constitutes trademark infringement
- What to do if your trademark is infringed
- How trademark law applies to new media

Completely updated to reflect recent court decisions and changes in the law, this edition features an Internet trademark resources list and expanded information on trademarks in the digital world. Packed with examples, FAQs, and a glossary, The Trademark Guide, Third Edition, will become the go-to for anyone with questions about the complexities of trademark law.

The Patent Guide: How You Can Protect and Profit from Patents, Second Edition by Carl W. Battle and Andrea D. Small Patents [Allworth Intellectual Property Made Easy Series, Allworth Press, 9781621536260]

Coming up with a million-dollar idea is only the first step in what might seem like a long and difficult process. In The Patent Guide, Second Edition, experienced patent attorneys Carl W. Battle and Andrea D. Small deliver basic and comprehensive advice that is easy to understand and will allow you to protect, promote, and profit from your ideas.

Chapters discuss such topics as:

- How to commercialize your invention
- Where to find sources of information and assistance
- What guidelines you should follow when obtaining a patent
- How to obtain foreign patent rights
- How to maintain confidentiality of your ideas
- When to use patent attorneys and agents
- How to deal with invention brokers and promotion firms
- How to enforce your patent against infringement

Fully updated and revised, this new edition includes information on inventor notebooks and records, updates to the patent filing process in the United States and abroad, the latest USPTO forms and templates, and changes to electronic filing and submission procedures.

Excerpt: New concepts and ideas come in many forms: a new book, product name, machine, chemical composition, manufacturing process, medical treatment, or ornamental design. All of these are considered "intellectual property," or "property of the mind," and you can buy, sell, license, and otherwise exploit intellectual property for value in the same way that you can other personal property and real estate. How you can protect and profit from your idea depends on the type of idea it is, the kind of legal protection that is available, how concrete and developed your idea is, and how effectively you promote and market your idea.

A bare idea is usually not protected by patents, copyrights, trademarks, or any other form of intellectual property. A concept is difficult to protect, license, or market, unless it is in a tangible form. An invention must be reduced to practice before it can be patented. An idea must be created via some medium, such as a book, a videotape, or a sound recording, before it can be protected by copyright. Trademark rights ultimately require use of the mark with some good or service. Thus, an idea merely carried in your head is useful to no one.

Some people occasionally confuse patents, copyrights, and trademarks. Although the rights of patents, copyrights, and trademarks resemble each other, they are different and serve different purposes. The differences between each of these rights are explained below.

A US patent for an invention is a grant of a property right by the government, acting through the US Patent and Trademark Office (USPTO), to the inventor, or to his or her heirs or assigns. The term of a patent is seventeen years from the date on which the patent was granted if the application was filed before June 8, 1995, or ii) twenty years from the date of first filing for an application filed on or after June 8, 1995. The term of the patent is subject to the payment of periodic maintenance fees. The right conferred by the patent grant extends throughout the United States and its territories and possessions, and is, in the language of the statute and of the grant itself, "the right to exclude others from making, using, or selling" the invention. A patent does not grant the owner the rights to make, use, or sell the invention; it only grants the right to exclude others from making, using, or selling the invention. Because the essence of the right granted by a US patent is the right to exclude others from commercial use of the

invention, the patent owner is the only one who may make, use, or sell his or her invention. Others cannot do so without authorization from the patent owner. Thus, a patent owner can choose to manufacture and sell the invention or can license others to do so. Detailed information on patents is presented in chapters 8 through 12 of this book.

A copyright protects writings and other artistic creations of an author against copying. Literary, dramatic, musical, and artistic works are included within the protection of the copyright law, which in some instances also confers performing and recording rights. The copyright protects the form of expression rather than the subject matter of the writing. A description of a machine could be copyrighted as a written work, but this would only prevent others from copying the description. The copyright would not prevent others from writing a description of their own or from making and using the machine. Copyrights are registered in the US Copyright Office in the Library of Congress and additional information concerning copyrights can be obtained from the Register of Copyrights, Library of Congress, Washington, DC, 20559 (telephone 202-707-3000). Detailed information on copyrights can also be found in chapter 2 of this book.

A trademark relates to a use in trade of any word, name, symbol, or device that identifies the source of goods. The trademark indicates the source or origin of the goods and distinguishes the goods from the goods of others. Trademark rights can prevent others from using a confusingly similar mark but do not prevent others from making the same goods or from selling the goods under a nonconfusing mark. Similar rights can be acquired in service marks, which are used in the sale or advertising of services. Trademarks and service marks, which are used in interstate or foreign commerce, can be registered in the USPTO. Basic information on trademarks is provided in chapter 2. Before introducing the basics of patenting your invention, The Patent Guide, Second Edition, provides a requisite overview of how to make your ideas and inventions a success. The first thought of many inventors is to present their ideas to a big national company. If you do approach a company or anyone else about your idea, ask that party to

sign a confidentiality agreement. The confidentiality agreement obligates the other party to maintain your idea in confidence and to not use or disclose it without your permission. If the other party refuses to sign a nondisclosure agreement, file a patent application for your invention before disclosing it. Present written terms to the other party, nevertheless, that any disclosures you make are in confidence and that you expect compensation if your invention is used. Important information on how to maintain the confidentiality of your idea or invention is provided in chapter 3.

You may be able to produce your idea or invention yourself. Working from your home and selling items on the Internet or via mail order is a good way to get started. If you can start (or already have started) your own company, you will usually be better off, because selling your company may be easier than promoting an idea or patent to a larger company, even if your company is losing money. Starting a business to market your invention is discussed in chapter 16. Between the extremes of starting your own company and selling your company to a big business is taking your idea to small- and medium-sized businesses. Such firms may be happy to produce an item that sells in amounts too small to interest large companies. Thus, a small firm may be a better choice and more interested in trying to make your idea a reality.

Once you have looked at issues such as originality, production, distribution, and marketability, it's time to consider protecting your idea. If you do have a patentable idea, look into protecting it under the patent laws. To document your invention, ask a close friend (under a confidentiality agreement) who understands your invention to sign his or her name on a dated diagram or written description of it, or file a disclosure document or a provisional patent application with the USPTO. Taking one of these measures will provide evidence of the time you came up with your invention in case of a dispute with other inventors over who conceived the idea first. Filing a disclosure document with the USPTO your patent against infringers, and what the licensing opportunities are for your patents and inventions.

While you probably still have to invest considerable time, money, and effort in your

invention, you can get help from a number of sources. Patent attorneys and agents can help you make a patent search and file and prosecute a patent application, if you cannot do this yourself. Invention promoters are firms that offer—for a fee—to take on the whole job of protecting and promoting your idea. Invention brokers work for a portion of the profits from an invention. Invention brokers may help inventors raise capital and form companies to produce and market their inventions, and they often provide sophisticated management advice.

Other sources of help include invention and entrepreneurial centers located at university campuses. The National Science Foundation funds some centers and provides assistance for inventors and innovators. The Small Business Administration's (SBA) Small Business Institutes (SBI) are located at several hundred colleges and universities around the country, and they may provide the market research, feasibility analysis, and business planning necessary to make an invention successful. The Office of Energy-Related Inventions in the US Department of Commerce's National Bureau of Standards sometimes evaluates, free of charge, non-nuclear energy-related inventions and ideas for devices, materials, and procedures.

Inventor's clubs, associations, and societies are useful sources for networking, gathering information about patenting, and promoting your ideas and inventions. Such organizations might be located in your area. Talking with other inventors is probably the most helpful thing you can do. Don't forget that a big part of being successful with your ideas and inventions will involve being informed, learning from experience, and networking with others for advice and assistance.

The Appendix of this book provides helpful information on various sources of information, including publications, addresses, telephone numbers, Internet sites, and other contacts that are useful to you in protecting and profiting from your ideas and inventions, as well as important patent laws and regulations.

The Copyright Guide: How You Can Protect and Profit from Copyright, Fourth Edition by Lee Wilson [Allworth Intellectual Property Made Easy Series, Allworth Press, 9781621536208]

While copyright may seem like a mystery full of pitfalls, it is actually quite easy to understand—as Lee Wilson demonstrates in The Copyright Guide, Fourth Edition. This resource explains everything you need to know to make copyright work for you, including how to license your copyrights, how to acquire the right to use the works of others, what copyright infringement is, how to protect your works from infringement, and how to avoid infringing on the works of others.

This is a must-read for anyone who creates or uses copyright— which, due to the explosion of information technology, is just about everyone! In plain language with scores of real-life examples, this newly updated edition addresses important issues in copyright, including:

- How to secure copyright protection without a lawyer
- What constitutes copyright infringement
- How copyright law applies to new media
- When parody is really infringement
- How to handle copyright trolls

The Copyright Guide, Fourth Edition is written for everyone who creates, acquires, or exploits copyrights. Copyright owners constitute an increasingly large segment of our society. This group includes painters; illustrators; photographers; filmmakers; sculptors; graphic designers; industrial designers; jewelry designers; textile designers; journalists; novelists; poets; screenwriters; playwrights; technical writers; copywriters; students; scholars; editors; researchers; songwriters; composers; record producers; recording artists; choreographers; computer software designers; and television and movie directors and producers; as well as newspaper, book, and magazine publishers; educational institutions; radio and television broadcasters; toy manufacturers; music publishers; record companies; movie studios; museums and art collectors; software companies; advertising agencies; poster companies; photo archives and stock photo houses; theatrical producers; dance companies; pop music tour promoters; and manufacturers of all sorts of consumer products. In fact, in today's world, unless you engage solely in a profession or occupation that produces and sells only tangible products, you

must know something about the most common sort of intangible property—copyrights.

For anyone whose livelihood or avocation is centered in one of the US information industries, copyrights and the exploitation of copyrights are basic facts of life. No one in America escapes the effect of copyrights. There may be no spot in your house or school or office where you are not surrounded by copyrights. The copy and illustrations on the box your breakfast cereal comes in are copyrighted. Every book in your school locker, except for those published before 1923, is copyrighted. The professional journals or trade publications at your office are copyrighted, as is every single memorandum, letter, report, proposal, or other document you produce on the job. Copyrights float through the air as radio and television broadcasts and arrive in the mail

as magazines and newspapers and show up in shopping bags as DVDs and bestselling novels and video games.

Of course, this proliferation of expression may be a mixed blessing. We are inundated by our own communications. Toddlers who can't read know the names of cartoon characters. College students who can't remember the date of the Norman Conquest can recite dialogue from reruns of TV sitcoms. Their grandmothers can recall the convolutions of plot from television soap operas for the last twenty-five years. And aging baby boomers can sing every word of popular songs from their youth, almost on key.

This is mostly because the United States is unique in its cultural affection for and legal protection of free expression. We forget that we are the only nation that has the First Amendment. Many other nations impose more restrictions on what their citizens can say and write and publish than we do. In fact, throughout history, during numerous periods and in various places, you could be imprisoned or killed simply for saying or writing the wrong thing; unfortunately, this is still the case in some places.

But not in America. The rebels and mavericks who sailed across the oceans in wooden boats to settle in what became the United States knew the value of free thought and free speech. They came here

seeking both. They gave us the right to think what we want and say what we think.

But even before the enactment of the First Amendment, the men who wrote our Constitution acted to ensure the production of the works of art and intellect necessary to create and promote culture and learning in our infant nation. In article I, section 8, clause 8 of the main body of the original, unamended Constitution, they gave Congress the power "to Promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Congress carried out this mandate by passing the first US copyright statute in 1790 and also by enacting a succession of patent statutes. You may think from reading the language of the Constitution that only authors of books are protected by copyright law. That is not the case.

Historically, American copyright law has interpreted broadly the "writings" granted constitutional protection. At the time of the enactment of the first copyright statute, only "maps, charts, and books" were protected. During the two centuries since, US copyright statutes (there have been several) and court decisions have extended copyright protection to new subjects of copyright as previously nonexistent classes of works emerged, needing protection. This system of enumerating the classes of "writings" protected by copyright worked well enough until it became obvious that technology would create new methods of expression faster than the courts and lawmakers could amend the then-current copyright statute to include emerging technologies within the scope of copyright protection. The present US copyright statute abandons the effort to enumerate every class of work protected by copyright and simply states that "copyright protection subsists ... in original works of authorship fixed in any tangible medium of expression, now known or later developed [emphasis added], from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." This language allows copyright to expand automatically to extend protection to new forms of expression, including many that the men who passed the first copyright statute could never have

imagined. This is fortunate, because the revolution in communications that characterized the last half of the twentieth century shows no signs of abating. Indeed, it may have reached warp speed.

By recognizing property rights in creative works and awarding ownership of those rights to the creators of the works, our copyright statute encourages expression in every art form and medium. It balances the interests of creators against those of the public. Creators reap the profits from their works for the duration of copyright protection by limiting access to creative works to those who pay for the privilege of using them. The public immediately enjoys controlled access to the works artists, writers, and composers create, and, eventually, those works become public property, available for use by anyone. This is precisely what the founding fathers had in mind; James Madison cited copyright as an instance in which the "public good fully coincides with the claims of individuals."

So, the United States gives its citizens the right to say or otherwise express almost anything at all and rewards that expression, whether meritorious or mundane, by bestowing upon it a copyright. But what, exactly, is a copyright?

A copyright is a set of rights that the federal copyright statute grants to the creators of literary, musical, dramatic, choreographic, pictorial, graphic, sculptural, and audiovisual works and sound recordings. Copyright law rewards creators by granting them the exclusive right to exploit and control their creations. With a few narrow exceptions, only the person who created the copyrighted work or someone to whom he or she has sold the copyright in the work or given permission to use the work is legally permitted to reproduce the work, to prepare alternate or "derivative" versions of the work, to distribute and sell copies of the work, and to perform or display the work publicly. Any unauthorized exercise of any of these rights is called "copyright infringement" and is actionable in federal court.

But this is only the beginning of the story. The rest follows in what I hope is a logical progression. I have practiced intellectual property law for nearly half my life, but I still find the concept of copyright and the elaborate structures that our world

community has erected around it fascinating. The law says that a copyright is a set of exclusive rights that belongs, in most instances, to the person who creates the copyrighted work. That's true, but what copyrights really are is magic. There's something wonderful in the fact that in a mass culture like ours, where individual voices are obscured by the noise of the rat race, you can create, all alone and out of thin air and your own brain, something that pays the rent.

I hope you find copyrights as interesting as I do. They are one of the last means by which an individual person, unaffiliated with any large organization or institution, can change people's minds, lift their spirits, and feed their souls. Where's your pencil?

[The Trademark Guide: How You Can Protect and Profit from Trademarks, Third Edition](#) by Lee Wilson [Allworth Intellectual Property Made Easy Series, Allworth Press, 9781621536321]

Intellectual-property lawyer Lee Wilson, who has been studying and writing about trademark law for more than thirty years, knows that trademarks are a crucial part of the American economy. In plain language with scores of real-life examples, this new edition [The Trademark Guide](#) draws on Wilson's experience and addresse issues important to both would-be trademark owners and those who already own trademarks, including:

- How to choose a trademark without risking a lawsuit
- How trademark rights are gained and perfected
- How to use a trademark properly
- What constitutes trademark infringement
- What to do if your trademark is infringed
- How trademark law applies to new media

Completely updated to reflect recent court decisions and changes in the law, this edition features an Internet trademark resources list and expanded information on trademarks in the digital world. Packed with examples, FAQs, and a glossary, [The Trademark Guide, Third Edition](#), will become the go-to for anyone with questions about the complexities of trademark law. <>

[Gigged: The End of the Job and the Future of Work](#) by Sarah Kessler, [St. Martin's Press, 9781250097897]

"With deep reporting and graceful storytelling, Sarah Kessler reveals the ground truth of a key part of the American workforce. Her analysis is both astute and nuanced, making GIGGED essential reading for anyone interested in the future of work." —Daniel H. Pink, author of WHEN and DRIVE

The full-time job is disappearing—is landing the right gig the new American Dream?

One in three American workers is now a freelancer. This "gig economy"—one that provides neither the guarantee of steady hours nor benefits—emerged out of the digital era and has revolutionized the way we do business. High-profile tech start-ups such as Uber and Airbnb are constantly making headlines for the disruption they cause to the industries they overturn. But what are the effects of this disruption, from Wall Street down to Main Street? What challenges do employees and job-seekers face at every level of professional experience?

In the tradition of the great business narratives of our time, Gigged offers deeply-sourced, up-close-and-personal accounts of our new economy. From the computer programmer who chooses exactly which hours he works each week, to the Uber driver who starts a union, to the charity worker who believes freelance gigs might just transform a declining rural town, journalist Sarah Kessler follows a wide range of individuals from across the country to provide a nuanced look at how the gig economy is playing out in real-time.

Kessler wades through the hype and hyperbole to tackle the big questions: What does the future of work look like? Will the millennial generation do as well their parents? How can we all find meaningful, well-paid work?

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Preface
PART I The End of the Job

Excerpt: When I first heard about the "future of work" in 2011, I was working as a reporter at a tech blog—a job that involved wading through an endless stream of startup pitches.

This future, dozens of young entrepreneurs explained to me, didn't involve jobs. Nobody liked jobs: The boredom! The rigid structure! The obedience! What the world really needed were gigs.

The pitch came in different versions. Some startups had created ecommerce stores for labor. Small businesses and Fortune 500 companies alike could sift through worker profiles by skill and hire them on a project-by-project basis. Other startups worked more like dispatchers. Drivers, dog walkers, and errand runners could get notifications on their phones when a job became available and choose to either accept it or reject it. A small handful of companies had taken a third approach, breaking work into tiny tasks that took only minutes and paid only cents. They assigned online crowds of people to work on large, tedious projects, like transcribing audiotapes, or checking to make sure that grocery stores across the country remembered to put a certain brand of cola in a prime location.

The rise of these new apps, their founders assured me, meant that soon we would all be working on the projects we chose, during the hours that we wanted. We would no longer be laboring for the man, but for our own tiny businesses. This meant that in the future, it wouldn't matter how many jobs got shipped overseas or were taken by robots. We could work for our neighbors, connect with as many projects as we needed to get by, and fit those gigs in between our band rehearsals, gardening, and other passion projects. It would be more than the end of unemployment. It would be the end of drudgery.

The idea was deeply appealing to me. In addition to sounding like more fun than a job, this version of the future of work relieved a deep uncertainty I had about the future.

From a young age, my baby boomer parents had instilled in me that the mission of becoming an adult—the path to dignity, security, and independence—was to obtain a job. Most adults I knew in my rural Wisconsin town had a straightforward profession like teacher, lawyer, or mechanic. They worked at the grocery store or for the postal service. A large Nestlé factory in a town nearby made the air smell like chocolate if the wind blew just right, and another factory made Kikkoman soy sauce. Becoming employable—not following dreams, seeking some sort of personal fulfillment, or whatever it is they tell kids in coastal states—was in itself deserving of respect and dignity.

So eager was I to become a real person, a person with a job, that I'd spent a good chunk of my summer vacation before high school at a greenhouse, picking aphids off of herbs and pulling the hard-to-reach weeds (being 13, I was skinny enough to squeeze between plant stands). My parents didn't need the money. I didn't need the money. Jobs just felt instinctively important.

I'm told most millennials don't feel that way, but I haven't really met many people in general who don't value stability and safety. Maybe what makes millennials different is that those things feel particularly elusive. My peers and I came of age at a time when everything everyone believed about work was at best in flux and at worst already clearly no longer the case.

In 2005, when I was a junior in high school, I decided I would become a journalist. In 2007, as newsrooms were scrambling to move their business models online, the Great Recession started. And three years after that, the winter of my senior year of college, the unemployment rate in the United States hit double digits. Only the computer programmers, it seemed, were excited for graduation. As I conjured a frantic storm of resumes, informational interviews, and job fair mailing lists, I had trouble sleeping and, at times, breathing. Though at the time I was narrowly focused on my own employment prospects (or lack thereof), my anxiety was small by comparison to many. I had a college degree, parents willing to help me, and connections at a local greenhouse that would have been happy to have me back for

another summer. I was going to be ok. About the future, the world around me, I wasn't so sure.

Media wasn't the only industry being remade by technology. As newsrooms were announcing layoffs, other companies were using internet freelance marketplaces and staffing agencies to zap white-collar jobs overseas. Artificial intelligence and robotics were replacing others. Many of the jobs that remained in the United States no longer came with security. Companies had, under pressure from shareholders, cut the fat from their benefits packages for employees, piling more and more risk onto their shoulders. As the economy recovered, the companies hired temp workers, contract workers, freelancers, seasonal workers, and part-time workers, but full-time jobs that had been lost to the recession were never coming back. Over the next five years, nearly all of the jobs added to the US economy would fall into the "contingent" category. That "job" that we'd all been told was the key to our secure life no longer seemed like a natural path.

As a young person, you're not allowed to sit out the future. You don't get to put off learning how to use email because you'd rather fax. Nobody thinks that's endearing. When you see a trend coming down the pike, you know it's going to hit you. So perhaps when entrepreneurs described for me a world in which work would be like shopping at a bazaar (a gig economy startup had picked up this concept in its name, Zaarly), it appealed to me more than it would have to someone with more gray hairs: I'll take that vision of the future—no need to play that horrifying mass unemployment and poverty vision that I had all lined up and ready to go.

I wrote my first story about the gig economy in 2011, long before anyone had labeled it the "gig economy." The headline was "Online Odd Jobs: How Startups Let You Fund Yourself." Though my job changed throughout the next seven years, my fascination with the gig economy didn't. I first watched as the gig economy became a venture capital feeding frenzy, a hot new topic and a ready answer to the broader economy's problems. Then, as stories of worker exploitation emerged, I listened as the same companies that had once boasted about creating the "gig economy" worked

to distance themselves from the term. I saw the gig economy start a much-needed conversation about protecting workers as technology transforms work.

The more I learned, the more I understood that the startup "future of work" story, as consoling as it was, was also incomplete. Yes, the gig economy could create opportunity for some people, but it also could amplify the same problems that made the world of work look so terrifying in the first place: insecurity, increased risk, lack of stability, and diminishing workers' rights. The gig economy touched many people. Some of them were rich, some poor, some had power, and some didn't. Its impact on each of them was different.

The chapters of this book alternate between five of their stories. It's not intended to be a complete, bird's-eye view of the gig economy. Any economy is built by humans, and this book is about them. <>

Know Thyself: Western Identity from Classical Greece to the Renaissance by Ingrid Rossellini [Doubleday, 9780385541886]

A lively and timely introduction to the roots of self-understanding--who we are and how we should act--in the cultures of ancient Greece, the Roman Empire, and Middle Ages and the Renaissance
"Know thyself"--this fundamental imperative appeared for the first time in ancient Greece, specifically in Delphi, the temple of the god Apollo, who represented the enlightened power of reason. For the Greeks, self-knowledge and identity were the basics of their civilization and their sources were to be found in where one was born and into which social group. These determined who you were and what your duties were. In this book the independent scholar Ingrid Rossellini surveys the major ideas that, from Greek and Roman antiquity through the Christian medieval era up to the dawn of modernity in the Renaissance, have guided the Western project of self-knowledge. Addressing the curious lay reader with an interdisciplinary approach that includes numerous references to the visual arts, Know Thyself will reintroduce readers to the most profound and enduring ways our civilization has framed the issues of self and society, in the process helping us rediscover the very building blocks of our personality.

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Excerpt:

Who are you?

If someone asked that question today, most people would offer answers that, aside from general references to gender, nationality, and ethnicity, would essentially focus on their personal characteristics, choices, and preferences. The common assumption is that the individual self is a fully autonomous and original entity, capable of selecting whatever path he or she decides to entertain in a way that is completely independent from traditional views and expectations. Individual identity, as we conceptualize it today, is something like a kit whose parts can be chosen, styled, and assembled at will: a do-it-yourself enterprise.

Although that is for the most part true, psychologists never fail to remind us that what we experienced as children remains an essential factor in the shaping of our adult selves. In order to understand our present, we need to revisit our past. The same thing could be said about our collective history: understanding who we were remains an essential component in understanding who we are today.

Do I mean to imply that Know Thyself is a sort of psychological guide to a more rewarding and fulfilling relation with our true selves? Yes, in fact, but definitely not in a conventional way. What I

mean is that this is not a book about psychology but a book about history with a psychological slant: in other words, a book that, besides describing crucial moments of history from Greek antiquity to the Renaissance, highlights how the different definitions that the "self" has received contributed to the creation of the values and ideals that, down the centuries, have shaped and motivated the choices and actions of people and the makeup of their society.

In choosing this particular lens for observation, I was inspired by the nineteenth-century French historian Fustel de Coulanges, who claimed that recollecting facts is an insufficient way to look at history without an equal focus on the nature and development of the human personality. What that perspective reveals is that history is a complex tapestry woven from actual events but also from the narratives that we humans have imposed upon those facts to try to make sense of ourselves and our reality.

This book is meant to be not an academic treatise but a guide addressed to the lay reader who, while genuinely curious to explore the past, often feels intimidated by the excessive complexity of scholarly studies. Things have only gotten worse in these last decades: because as the disciplines we generally label humanities have become increasingly neglected in our academic curricula, understanding earlier ways of thinking has become, for many, ever more difficult and frustrating.

To try to remedy that confusion and make this book as clear and accessible as possible, I chose to avoid the over-detailed style typical of specialized approaches, to offer instead an interdisciplinary overview that, although simplified, still provides a comprehensive map of major patterns of history and culture. To clarify the discussion, I have also included many references to the visual arts. This choice is based on the fact that for thousands of years—at least until the invention of the printing press, in the middle of the fifteenth century—visual art was the only available means of mass communication capable of conveying, to a population that was largely illiterate, the models of excellence that the political, philosophical, and/or religious ideology of the times considered best

fitted to exemplify what a human being was expected to be.

An important theme that we will explore while looking at the ideals that different epochs nurtured concerns the recurrent creation of legendary and mythical facts—the narratives that, for the sake of inspiration, tradition fostered with an intensity that often appears much too exuberant for the rigorous test of credibility as Joseph Campbell indicated when he wrote that a "myth is something that has never happened, and is happening all the time."

To begin, let me bring you back to Delphi of ancient Greece, where people went to consult the oracle of Apollo: the Greek god of reason who was also the only pagan divinity who appeared willing to respond to the people who came to seek his advice.

I use the verb "to appear" because how Apollo's oracle worked was more ambiguous than revelatory, in the sense that rather than offering clear guidance, it only provided cryptic hints and scattered pieces of information. These were as confusing and indirect as the language of his messenger—the priestess, called Pythia, who in delirious fits of trance channeled the voice of Apollo, by whom she claimed to be possessed. The paradox of the oracle was that because it forced people to interpret the vagueness of those utterances, the ball was implicitly returned right back to those who sought its guidance. That way, rather than having the god clearly telling them what to do, people were indirectly led to use their own intellectual faculties to come up with the answers best fitted for their particular challenges and problems.

The key to that clever strategy was expressed in the motto etched at the top of Apollo's temple: "Know thyself." The dictum essentially meant this: because the meaning you give to your life is what propels your actions, before asking what to do, ask yourself who you are.

This was (and is) by no means an easy endeavor, as proven by the endlessly varied answers that we humans have come up with all along the centuries.

Take our modern view of identity, for example. To encourage self-awareness in a child, we say, discover the talents and qualities that make you the very special and original person that you are. The corollary idea is that only by developing one's distinct and unique identity can one become a good member of the "larger self" that society represents.

If confronted with such an example of fierce individualism, the Greeks of early times would have recoiled in horror. To the Greeks, attributing ultimate value to choices and preferences that focused on the singular over the collective self would have been considered an absolutely unethical, if not completely unthinkable, proposition. For the Greeks, one's place of origin represented not simply a geographic setting but rather the place of one's family and community and as such the overriding source of one's identity. Where you were born and the social group to which you belonged determined who you were and consequently what was expected from you. Individual freedom of choice, the way we understand the term today, had little to do with that older mentality. For that reason, the command to "know thyself" essentially meant that you should use the guidance of reason to fulfill, in the best way possible, the ethical duties and obligations that your role as a member of the larger community entails.

This dramatic difference of interpretation may lead us to think that between that past and our present no direct connection can be drawn. As this book will show, however, that's not at all true. Even if our balance has dramatically shifted toward the singular self, finding a point of convergence between the individual and the collective still remains a very pressing concern of our contemporary existence. What that tells us is that despite the ever-evolving patterns of history, the concept of identity has always involved two fundamental dimensions: who we are independently, and who we are in relation to one another.

The latter aspect has prompted endless debate throughout our cultural history. Are we naturally predisposed to live with others, as Aristotle believed, when he famously stated that man is a "political animal"? Or is society a useful but totally unnatural artifice only created and maintained to increase our chance of survival? Although no definite conclusion has been reached (or is ever

likely to be), we can all agree that even if we consider our socially inclined character instinctual, that instinct has nothing to do with the inflexible, unvarying spirit of communal collaboration that rules the life of an ant or a bee. In fact, our all-too-human tendency to favor self-interest well above communal purposes has always been the most consistent obstacle to the creation of a fully harmonic and unified society.

Of course, in the small and culturally cohesive communities of early historical times, keeping the individual in line with the greater identity that society represented was far easier than in the free, diversified, and fast-changing reality of our globalized and technologically connected world. Given such complexity, fostering a civic-minded identity has become more difficult than ever, as we see in the polarization of opinions and ideas that characterize our contemporary world.

What to do about this? This book does not pretend to offer an answer to such a difficult problem. All it proposes is to return to the early times of our history with the intention of rediscovering the building blocks of our contemporary personality. My belief is that only by exploring the ways in which past generations have looked at our inner landscape and the narratives they developed to cope with the contradictions of our nature can we acquire a better understanding of how we got here and what made us who we are today. Even if that alone would not solve our contemporary problems, improving our critical capacity to look within can contribute to increasing, even by just a few degrees, the clarity our present needs in order to find the best way to progress toward the future in a fruitful and positive manner.

[Know Thyself](#) is divided into five parts: ancient Greece, ancient Rome, early Middle Ages, late Middle Ages, and humanism and the Renaissance.

The first part of the book explores the Greek belief that man was a creature occupying a point in between an animal and a god. Reason, which was considered the principal quality of human life, was meant to maintain that central balance through the control of all passions, including the excessive expressions of pride and ambition that the Greeks defined as hubris. From Homer's epics to the development of the polis, the birth of philosophy,

and the creation of democracy, the immense faith that the Greeks placed in their understanding of human reason produced one of the most vibrant civilizations the world had ever seen. Yet, despite all their brilliance, the Greeks also imbued culture with some of the sturdiest seeds of bias and prejudice—as in disparaging all non-Greeks as uncivilized barbarians (when in fact Greece owed an enormous debt to much older Eastern cultures, like the Egyptian and the Babylonian) and attributing a gender quality to the concept of rationality. This was a quality that only men were believed to possess to the total exclusion of women, who, as symbols of sensuality, were seen as the embodiment of the irrational passions and appetites belonging to the material body. Assuming that the mind of a woman was too weak to harness the impulses of the body had long-lasting consequences in Western culture. Barring women from all social and political activities was the most damaging effect of that prejudice. Significantly, the word "virtue" derives from vir, which means "man" in Latin, while the word "hysteria," which was used up to the nineteenth century to indicate emotional instability, derives from hystera, meaning "uterus" in Greek.

One of the most influential views that the Greek philosophical tradition established was to identify in reason the governing force of the entire universe: as the mind ruled the body, the cosmos was believed to have received its harmony and order (kosmos in Greek meant "order") from a divine and superior rational Mind. To live in agreement with that divine force, man had to apply to himself and to his society the same rules of harmonic collaboration that regulated all other aspects of nature. This view led the Greeks to passionately despise all tyrants and despots: people who, allowing pride to override judgment and rationality, arrogantly assumed that their talent alone was sufficient to rule society. Ironically, the end of the polis era was brought about by what the classical times had feared most: the rise of the monarchic absolutism of the Macedonian king Alexander the Great.

The second part of the book describes the enormous influence that the Greek concept of polis (which is the root of the word "politics") had on its

Roman conquerors—most important, the view that man, as a rational being, could realize his full humanness only through the military, civic, and political participation that the city demanded. For the Greeks, as well as the Romans, civilization (from civitas, "city" in Latin) could be attained only by men who, by fully assuming their role of citizens, brought to full fruition their inner talents and potentialities.

Of all of Roman history, the period that most political thinkers, from Cicero to the American Founding Fathers, considered the best example of an ideal society was the time of the Roman Republic, which came to an end with the ascent to power of Augustus and the creation of the Roman Empire. To give the impression that his rule did not contradict but rather fulfilled the earlier ethos of Roman

times, Augustus tried to instill in his subjects the belief that in following his leadership, Rome would have fulfilled its destiny as ruler of the world—a role assigned to the city by the gods in recognition of its extraordinary contributions to law, culture, and civilization. Despite the considerable boost that the narrative received from Roman writers and artists, that positive image did not withstand the test of time, especially when the corruption of so many emperors who followed Augustus caused the unraveling of the moral fabric that had once sustained the greatness of Rome.

The third part of the book analyzes the rise of Christianity (an offshoot of Judaism, which was also greatly influenced by the Hellenistic tradition and the mysticism of Eastern cults) amid the havoc brought about by the barbarian invasions and the fall of the Western Roman Empire. The Greeks and the Romans had optimistically believed, with Aristotle, that men, being rational, were naturally inclined to coexist with others to create a just and balanced society. Christianity sharply refuted that view, affirming that humanity, having suffered irreparable damage after the original sin of Adam and Eve, could not have functioned without the assistance of faith and the intermediary action of grace. The fall of Rome was used as evidence that given the sinful defectiveness of man, no attempt to create a perfect society would have succeeded because human egotism would have always

prevailed over communality and hate over empathy and justice. Within that new, pessimistic mindset, the world was transformed into a place of sorrow and hardship: a locus of trial for a sinful humanity whom God would judge at the end of time. As religion became entrenched with every aspect of the human existence, the church, filling the void left behind by the secular state, assumed a role of leadership and preeminence that, next to spiritual, was also cultural, political, administrative, and institutional.

The fourth part of the book shows how the pessimism that pervaded the early part of the Middle Ages started to lift in the eleventh century, when, with the end of the barbarian invasion, a period of peace and prosperity slowly began. The main characteristic of those times was the rebirth of cities and the rise of a new merchant class eager to establish its place in society independent of the aristocratically led hierarchy of the previous feudal era.

The greatest contribution that those new market towns gave to culture was the creation of universities that allowed learning to spread beyond the cloistered control of the religious orders. The most obvious beneficiary of that revival of learning was the secular state, whose administrative and legal functions were now greatly improved by the service of many educated lawyers and officials. As the secular powers became stronger and better organized, a collision with the ecclesiastic apparatus, which for centuries had kept a tight control over society, became inevitable, making the tug-of-war between the state and the church one of the main characteristics of the late Middle Ages. With the discovery of the Greek heritage (ironically preserved and returned to the West by the Muslims, against whom Christian Europe had launched so many Crusades), a major transformation in views and ideas occurred. Within that dynamic, the revival of Aristotle assumed particular importance, especially when Thomas Aquinas managed to reconcile the principles of Christianity with the optimistic views about human nature advocated by the Greek philosopher. As a consequence, man's role was radically transformed to become, from a sinful and morally crippled creature, God's superior and talented collaborator

charged with bringing to realization the potential inherent in His magnificent creation.

This new view is at the root of humanism and the Renaissance.

To facilitate the comprehension of a period as complex and geographically sprawling as the Renaissance, I chose to limit my analysis to the Italian Renaissance, focusing in particular on the two cities that most emblematically embodied the spirit of the time: Florence and Rome. In Florence, the development of the city-state gave way to a nostalgic return to the political ideals of classical times that, in contrast with Augustine's view, now enthusiastically revived the value and importance of the city of man. The narrative that prevailed was that by applying the wisdom that the Greeks had associated with the polis and the Romans with the republic, the Italian city-states could finally realize the dream of a just and stable society reflecting, as a microcosm, the encoded order impressed by God upon the entire macrocosm of His creation.

Unfortunately, the optimistic confidence that man's uniqueness and exceptionalism could assure the permanence of a stable and free society was short-lived, overcome as it was by the despotic rule of the Medici family, who brought to an end the dream of the republic. With the cultivation of beauty that the new masters of Florence fostered, art was given an aesthetically pleasing quality that, rather than promoting civic virtue, was now directed at enforcing a court mentality principally devoted to the celebration of the monarchical power that the Medici represented.

The sense of bewilderment that many people felt when the sweeping republican passion that had animated Florence was suffocated by the Medici reached new dramatic heights when Byzantium (presentday Istanbul) fell into Muslim hands in 1453 and when Martin Luther, rebelling against the widespread corruption of the church, initiated the Protestant Reformation that forever split the Christian world. For the wealthy and powerful papacy that by now had become a monarchical power in its own right, the most devastating event occurred when a German division of mercenary soldiers, sympathetic to Luther, sacked Rome in 1527.

As the pendulum of history swung again in the direction of pessimism and disenchantment, new doubts were cast about the much-praised greatness of man. Hope seemed to be gone, but as history repeatedly shows, it is always within the darkness of winter that spring prepares its return.

What that tells us is that identity, rather than a fixed and crystallized reality, has been, and will always be, a work in progress. The fact that the word "culture" evokes the concept of agriculture is revealing in that sense. Ideas are like any other living thing: once planted, they never remain the same. They grow, they mature, they change. Most of all, as this book repeatedly points out, they travel just like seeds blown by the wind. The point is important also because it reminds us that despite all ideological divisions between West, East, North, and South, identity remains the result of the most fruitful and enriching of all phenomenon—the cross-pollination of peoples, cultures, and ideas. <>

Nine Lives: My time as the West's top spy inside al-Qaeda by Aimen Dean, Paul Cruickshank, Tim Lister [Oneworld Publications, Oneworld Publications]

"A compelling and invaluable account of life inside al-Qaeda through the eyes of a first-rate spy. This unique narrative throws open the shutters of the secret worlds of terror." —Lawrence Wright, bestselling author of The Looming Tower

As one of al-Qaeda's most respected scholars and bomb-makers, Aimen Dean rubbed shoulders with the mastermind of the 9/11 attacks and swore allegiance to Osama bin Laden himself. His job was already one of the most dangerous in the world. But what the others didn't know was that he was working undercover for MI6.

This is the story of a young Muslim determined to defend his faith, even if it meant dying for the cause, the terrible disillusionment that followed when he realised he was fighting on the wrong side, and the fateful decision to work undercover with his sworn enemy. In a career spanning decades in some of the most lethal conflicts of the past fifty years, we discover what it's like to be at the heart of the global jihad, and what it will take to stop it once and for all.

CONTENTS

Excerpt: When any spy emerges from the secret world to tell their story, questions are naturally asked about the veracity of their account. Britain's intelligence services never comment publicly on such matters; nor is there generally a paper trail.

In the course of reporting on the threat from jihadi terrorism for the best part of two decades we have developed many trusted sources in and out of government on both sides of the Atlantic. This has allowed us to corroborate key details relating to Aimen Dean's work for British intelligence. This and our own research has allowed us not only to confirm critical associations and events but establish beyond doubt that there simply wasn't another informant inside al-Qaeda like him. In the years immediately leading up to and following 9/11, Aimen Dean was by far the most important spy the West had inside al-Qaeda, with his identity among the closest guarded secrets in the history of British espionage.

Aimen would probably never have contemplated writing a book had his cover not been blown by an intelligence leak in the United States. But he believes now is the right time to tell his story. His experiences and insights shed great light on the evolution of jihadi terrorism and what it will take to confront one of the great challenges of our times. Nobody can recall every last detail of their life perfectly, nor the exact order and date of every encounter. The chronology presented in this book is the result of many hours of research on the events he witnessed and the individuals he met. In describing technical aspects related to al-Qaeda's efforts to develop explosives, chemicals and poisons we took great care not to go beyond chemistry and details already in the public domain in the news media, academic studies, court documents, government reports and the like. As an extra precaution we consulted with leading experts on these types of weapons.

This book includes extensive notes. Those which may be of interest to the general reader are marked by stars in the text and included as footnotes. Substantive notes which may be of more interest to the specialist reader — as well as citations — are marked by numbers and are situated at the back of the book in the chapter-by-chapter endnotes. We also include a cast of characters, as well as a map of Afghanistan and Pakistan showing the location of jihadi training camps before 9/11. The exact position of the Khalden camp in relation to the town of Khost has never been definitively established by academic researchers. Our placement is based on Aimen's best recollection.

In several cases we have used pseudonyms to conceal the identity of individuals for a variety of reasons and this is made clear each time in the text. We refer to British intelligence officials by pseudonyms. This book includes quotations from the Koran and the hadith (the collected sayings of the Prophet Mohammed). These have been translated by Aimen. Hadith are cited by collection and their order number in the collection. Alternative English translations of the major collections are available on websites such as sunnah.com. The hadith citations in this book refer to the Arabic collections. The English numbering can be different because of the way translators have split up hadith. After the first reference the authors have omitted the prefix `al-' for some recurring names.

I looked out at the broiling haze enveloping Dubai. It was an August afternoon in 2016 and I comforted myself with the thought that the month after next the sapping humidity would begin to ease.

I was packing for a family wedding in Bahrain, not one I was looking forward to in the mid-summer torpor. But it was the marriage of the oldest son of my eldest brother, Moheddin. I could hardly say no.

It was to be an all-male affair, in accordance with the conservative customs of my family. My wife wasn't coming to Bahrain but she was uneasy about my trip.

My five brothers and I had grown up in Saudi Arabia up the coast and across the causeway from Bahrain, but the tiny pearlshaped kingdom was our homeland. We carried Bahraini passports and — for different reasons — we had enemies there. Moheddin was a veteran of the Afghan jihad and had held a government job in Saudi Arabia until forced to leave the Kingdom because of an unlucky and unwitting connection to an al-Qaeda suicide bomber.

Once I had sworn an oath of allegiance in person to Osama bin Laden and worked on al-Qaeda explosives and poisons experiments. But al-Qaeda's callous indifference to civilian casualties and the madness of a global campaign of terrorism were too much for me to stomach. It had corrupted the cause in which I believed: defending Muslims wherever they might be.

And so, in the parlance of espionage, I had been `turned' by British intelligence. I was not an unwilling partner. In fact, I welcomed the chance to expiate any misdeeds during my four years as a jihadi. For the better part of a decade I had been one of the very few Western spies inside al-Qaeda until 'outed', by description if not by name, thanks to a clumsy leak that the British suspected emanated from the White House.

Eventually, someone in al-Qaeda joined the dots and worked out that the leaks pointed towards me as the informant. One of the group's most senior figures denounced me as a spy, and the dreaded fatwah followed. It was a religious command ordering my liquidation.

But here I was — eight years later — still in one piece. Some days, I even forgot that there were people out there who wanted to slit my throat. Surely by now it was a little late for the fatwah to be carried out? Many of those who wanted me dead had themselves been killed — in Afghanistan,

Pakistan and Saudi Arabia — or were staring at the walls of a jail cell somewhere between Guantánamo Bay and Kabul.

'My nephew came to our wedding; I have to go to his,' I told my wife. `There's really nothing to worry about.'

She looked pale. Three months pregnant, she was more than normally prone to anxiety.

'And look,' I continued, taking her hand, `I'll be there less than twenty-four hours. The bad guys won't even know I'm in Bahrain.' Tears gathered in her eyes.

`I just don't want you to go.'

Then, on the morning of 29 August, three days before the wedding, the groom-to-be called. `Uncle,' he said, sounding less than effusive. 'Dad says hi, but he's had a message. The security services called. They said they understood you were planning to come to Bahrain. There's a threat against your life; they recommend you stay away. They say that in any case they are sending police officers to the wedding.'

It is rare that I am speechless, but for a few moments I said nothing. The combination of the news and my wife's intuition had knocked the wind out of me. It's often at such moments that one notices something trivial and irrelevant. I remember looking out of the window of our apartment towards the Arabian Gulf, and tracing the graceful loops of a hang glider drifting towards the beach.

I turned abruptly to see if my wife was listening. Thankfully, she had gone to lie down.

`It's unbelievable,' I said to my nephew. 'Does your father have any idea who it is?'

'He's been asking questions. He thinks it's Yasser Kamal and his brother Omar. They've been planning it for six weeks.'

Yasser Kamal: part-time fishmonger, full-time jihadi. He had enlisted me in an ambitious al-Qaeda plot back in 2004 to attack US Navy personnel based in Bahrain, the home of the US Fifth Fleet. Ornar was going to be one of the suicide bombers.

I had fed all the details to MI6. When Kamal discovered, years later, that I had been working for British intelligence he had requested the fatwah against me.

'But how does Moheddin know about the plan?' I asked my nephew, still wrestling with my disbelief.

`Well, we can't be sure,' my nephew continued, 'but Omar's wife has kept on asking about the guest list. Were all the uncles coming?'

I made enquiries. The Bahraini police had discovered the plot because they were eavesdropping on Yasser Kamal. He had been stupid enough to talk with his brother about my impending visit; they had discussed following me to the airport after the wedding. In essence I would be carjacked. I was led to understand that they planned to use knives or machetes to dispense with me. They had also discussed filming my last moments as a warning to others who betrayed the cause. The gruesome video would then be uploaded to the Internet to mark the fifteenth anniversary of the 9/11 attacks.

Despite considerable evidence the Bahraini authorities decided not to move against the brothers, a typically pragmatic decision like many others that had allowed militants to operate there with considerable latitude. Firstly, they wanted to continue surveillance on the Kamals in case they were planning something worse than killing me, which was not very comforting. And they didn't want any awkward questions about a former British agent on Bahraini soil.

I decided to tell my wife about the plot rather than just pretend I was giving in to her entreaties. To my surprise she took the news calmly — seeing it as vindication of her female intuition. Needless to say, I have heeded such intuition ever since.

The sudden re-emergence of Yasser Kamal, the discovery that he was at large rather than in jail, gave me pause. But it did not surprise me, nor did I blame him for wanting to kill me. I had betrayed his cause because I had come to see it as an adulteration of Islam and a betrayal of the Prophet's words.

We were on opposite sides of a civil war that has consumed and splintered our religion, a conflict with a long and bloodstained history that appears to have plenty of fuel yet.

In the summer of 2016, the self-declared `Caliphate' of the Islamic State in Iraq and Syria had passed its high-water mark: its many opponents were gathering for final assaults on its last redoubts. But its ideology was less delible than its grip on territory. And al-Qaeda — almost forgotten during the subliminal explosion of ISIS — still brooded menacingly, playing the long game. One generation of jihad was passing on its expertise and belief to the next.

As I write this in the spring of 2018 there are still plenty of men like Yasser Kamal out there, tens of thousands across the globe. Their anger towards the West runs deep. They see Islam under threat. They embrace radical interpretations of their religion that justify violence against anyone they deem not to be a true Muslim. And that includes millions of other Muslims whose interpretation of the Koran or whose customs they denounce as heresy.

I have witnessed that anger and the longing for martyrdom on battlefields in Bosnia. I have heard the narrow definition of the `righteous Muslim' in Afghan camps and safe houses in Pakistan. I have sat in shabby London flats and field hospitals in Syria listening to young men with glistening eyes talk about prophecies that promised battles marking the approach of the end-of-days and a victorious march on Jerusalem. I have seen the thirst for vengeance after US missile attacks in Afghanistan.

I know and understand that mindset because two decades earlier I had shared it. I longed for martyrdom in the service of God; I saw Muslims in an epochal struggle of self-defence. I grasped at the noble ideal of jihad, only to be disgusted at its manipulation and indiscriminate application.

Soon after I was recruited by British intelligence, one of my colleagues joked that I should be called the 'cat' — as I appeared to have nine lives. I have used up every one of those lives fighting on both sides of this generational struggle, neither of which can claim a monopoly on decency or righteousness.

I am thankful for this opportunity to recount those lives and where they have led me, knowing that I may not get another in this world. <>

Decentering European Intellectual Space edited by Marja Jalava, Stefan Nygård, Johan Strang [European Studies, Brill Academic, 9789004364523]

Decentering European Intellectual Space reconsiders the nature of cultural Europe by challenging intellectual historians to pay closer attention to the asymmetries and encounters between Europe's fluctuating cores and peripheries.

Excerpt:

At the Periphery of European Intellectual Space by Stefan Nygård, Johan Strang and Marja Jalava

European intellectual history has in the past two decades been enriched by excellent contributions from transnational or global perspectives. These studies have questioned the national paradigm and sketched an image of Europe as a complex interwoven intellectual space.1 Beyond the European context, the nature of intellectual transnationalism has been explored in pioneering inquiries of the planetary reach of, for instance, literature or the culture industry. These studies relate to the vast field of historical and social scientific scholarship that has emerged out of the sharp increase in border-crossing perspectives, cultural hybridity, and the circulation of people, ideas, and institutions.

Intended as a contribution to this growing literature, our volume asks whether intellectual historians, preoccupied with entanglement and hybridity, run the risk of painting an excessively harmonious picture of Europe as a cultural and intellectual space, reproducing the all too familiar image of a borderless space of texts and ideas where everyone is able to participate on equal grounds. Whereas studies on the geographies of knowledge production have convincingly shown that place, space, and their asymmetrical interrelations deserve careful consideration when assessing the socio-cultural conditions of intellectual life and the circulation of ideas, questions of spatiotemporal hierarchy have not been a major concern in the field of intellectual history. In general, European intellectual history or the history of intellectuals in Europe has focused primarily on relations and entanglements between the dominant nineteenth-century empires and nation-states such as France, Great Britain, Germany, or Russia. Less attention has been paid to the inevitable asymmetries of power that exist between big and small, center and periphery, core and margin, satellite and province—to name only some of the most

frequently used terminologies for analyzing political, economic, or cultural hierarchies. This book is devoted to an examination of precisely such intra- European asymmetries. The aim is to reconsider the nature of European intellectual space and introduce into the debate analyses of the position and strategies of intellectuals, writers, artists, and scholars from non-dominant regions within Europe. If Europe in this period, roughly between the midnineteenth and the late twentieth centuries, was a global center of intellectual life and cultural production, what, then, was the role of its own internal peripheries?

Intra-European and Colonial Relations

The intra-European hierarchies studied in this book were conditioned by largescale political developments such as the rise of competing forms of nationalism, colonial expansionism, social movements contesting the supremacy of the national state, the collapse of empires, the totalizing claims of the state between the world wars, and the rise of the bipolar Cold War constellation where Eastern Central Europe was suddenly provincialized, while Western Europe gradually lost its self-evident cultural centrality to the United States. Such macro-level developments had an important bearing on intellectual hierarchies, but it was never a one-to-one relationship. Sometimes the centers of European intellectual life overlapped geographically with military, political, or economic domination, and sometimes they did not. Moreover, insofar as the book is concerned with the extent to which space and location condition the strategies, outlook and self-understanding of individual and collective actors, we should recognize the specific role played by intellectuals in composing and contesting spatial constructions in the first place, including the notion of national territory. Having achieved some degree of hegemony, such spatial formations tend to take on a life of their own and determine the interaction between intellectuals and ideas, or the way historical actors position themselves in a larger whole.

Rather than systematically assessing the relationship between empirical reality and conceptual representations, the aim of this book is to explore the experience of being outside a dominant core

and the strategies for acting that result from this experience. Perceptions of hierarchy shaped the behavior of intellectuals in the geo-cultural peripheries or "semi-peripheries," and gave rise to a whole spectrum of strategies for dealing with asymmetry, as demonstrated by the individual chapters in this volume. These strategies ranged from struggling for attention, translating modernity, imitating the centers, and stressing the need to catch up on the one hand, and contesting or rejecting intellectual exports from the center and celebrating peripheral "authenticity" on the other hand. Sometimes the relation between geography, politics, and culture was articulated by mobilizing symbolic resources to compensate for geopolitical disadvantage. Typically, this has taken the form of marketing national cultural achievements and emphasizing culture over physical reality.

The aptness of the terms "center" and "periphery" in describing intellectual relations has often been debated and criticized. Today, the conception of the periphery as a passive recipient of ideas developed in the core, or a provider of "raw materials" for the center, has been largely refuted. At the same time, the notions of "center" and "periphery" continue to raise strong emotions for and against. Some of the most important difficulties concern the units of analysis used for spatially defining a "center"—nation, city, region, specific institutions, etc.—and the "centralizing" and "peripheralizing" logics across social fields such as politics, the economy, science and higher education, and art and literature. Continuing this line of inquiry, as it pertains to the relations between intellectual spaces and their conceptualizations by writers, artists, and intellectuals, the contributions in the book suggest that speaking of centers in European intellectual space can refer to something spatial or temporal, and most often a mixture of both. "Europe" is no less ambiguous a term. In this volume, it relates both to the region, with its constantly negotiated borders, cores, and margins, and to the idea of Europe as the cradle of the Enlightenment and the beacon of modernity, with its claims to define the direction of universal progress and accompanying civilizing missions.

Drawing attention to multiple forms of structural and symbolic inequality, postcolonial studies has

significantly contributed to disengaging us from a static center–periphery or "diffusionist" model of cultural interaction. Postcolonial studies has also been an important factor in a more general "spatial turn," highlighting place as being constantly produced and reproduced in interaction with its surroundings. In other words, places are not essences but processes, rooted in social practices, disciplinary power, and ideology. But to what extent is it reasonable to apply theories addressing the inequalities of colonial or racial domination on intra-European conditions? One problem is the extent to which postcolonial studies targets Eurocentrism as a part of Western supremacy in the world. In their search for alternative de-centered visions, accounts inspired by dependency theory, postcolonialism, or subaltern studies have sometimes tended to flatten "Europe" into a single, monolithic entity, leaving out the asymmetrical relations and hegemonic struggles within Europe itself. To paraphrase Dipesh Chakrabarty, it is certainly true that scholars who study Europe are usually free to ignore or compartmentalize the experiences of Asians and Africans, but equally compartmentalized are the experiences of actors from peripheral, marginalized, or "backward" European regions.

While postcolonial readings of intra-European asymmetries have inspired us to analyze forms of dependency and domination, it is a matter of debate how far we can carry the analogy. On the one hand, insofar as we are dealing with spatial asymmetries, one of the hypotheses of the book is, indeed, that the logic of combined and uneven development, in the language of world- systems theory, is more easily observable from the periphery, much in the same way as the dominance of Europe is most aptly seen from the outside. There are entanglements and structural similarities in terms of imperial dependency between the non-European colonies and the fringes of former European empires. To be sure, colonial history is an integrated part of the history of Europe that cannot be separated from the "internal" developments within the region. Moreover, colonial expansionism and colonial discourse impacted on how populations especially in frontier regions within Europe were perceived and treated, as pointed out by Roísín Healy and Enrico Dal Lago. Evidence of

"discursive colonization"—using colonial categories in framing relationships between self and other, often to justify the need to civilize the disadvantaged—can certainly be found within Europe itself. Sometimes these dichotomies, borrowed from a colonial setting and merged with the widespread scholarly and political racism of the nineteenth and early twentieth centuries, led to the subjugation of native populations by the colonizers. In other cases, the hierarchies were more discursive. Violent or discursive, they were expressions of world-ordering within a dominant paradigm of progress and modernity.

If the asymmetrical relations that such world-ordering produces are more tangible at the margins, this follows not necessarily from subjugation but from the fact that "latecomers" or culturally "underdeveloped" regions in the nineteenth and twentieth centuries had to make great efforts to insert themselves into an interconnected global system of nation-states. In doing so, peripheral intellectuals were faced with the power of universalizing discourse emanating from the centers, which they adapted, rejected, or transformed according to local demands. A specific problem for intellectual and cultural historians relates to the complexity of the multidirectional universe in which scientific, literary, and artistic practices are carried out, sometimes described as networks that connect a variety of urban and institutional nodes. The hierarchical dimensions of this universe translate into basic differences between, for example, those who can afford to universalize "local" experience and those who cannot.

On the other hand, insofar as applying postcolonial discourse on intra-European developments means speaking of the European margins in the same breath as of former colonies, there is a risk of denigrating the suffering and the typically categorical outside position of the latter. After all, the European peripheries were in the period studied in this book predominantly considered "European" in the eyes of the centers, not as the "absolute Others of Europe." As such, they belonged to the group of "enlightened" and "civilized" cultures whose intellectuals, in principle, were entitled to participate in the discussion,

although sometimes as "distant relatives," as the Polish exiled poet and essayist Czesław Miłosz suggests from his Polish-Lithuanian perspective: while they may have been acknowledged as Europeans, the peripheries were certainly not considered core "members of the family (quarrelsome but respectable)."

Our volume thus contributes to previous research on Europe as seen from its geographical margins, including important works by Larry Wolff and Iver B. Neumann on Eastern Europe and Russia, Maria Todorova on the Balkans, Roberto Dainotto on Southern Europe, and Peter Davidson on "the North." Rather than focusing on a specific cardinal direction, however, we try to bring together experiences from a selection of "non-dominant" regions in Eastern, Western, Southern, and Northern Europe. The different Europes discussed here can be broadly divided into the central–imperial, the peripheral small states, and the "semi-central" former empires or intermediate countries such as Spain and Sweden. While some chapters look at Europe as an intellectual space from its margins, others provide views from multicultural and multilingual contexts. Yet another group of articles assesses the role of asymmetry within intellectual networks or between intellectual fields. "Asymmetry" is in this context understood as an umbrella term for the mix of temporal and spatial hierarchies, for which historical actors (as well as analysts) have used a cluster of conceptual pairs such as center–periphery, core–margin, modern–backward, East–West, North–South, dominant–dominated, metropolis– satellite, or developed/developing–underdeveloped.

Scales and Borders
One way of dismantling the dichotomy of intra-European versus colonial hierarchies is to look beyond the framework of nation-states, which, despite the transnational turn in historical studies, continues to influence the way we structure our analyses. Moving beyond and across the boundaries of nation-states forces us to reconsider the question: where is the periphery? What kind of borders separate cores and margins? Should we follow the borders that separate nation-states and linguistic or cultural regions? Or should we break up these large-scale, ideological constructions into a

more nuanced picture, take into account the existence of peripheries in the centers, centers in the peripheries, and perhaps shift attention from nationalized states to cities and urban centers, or even more specifically, to universities, publishing houses, or galleries, which after all constitute the main locus of intellectual life? And yet, as the historian Angelika Epple points out, the criticism of a narrowly national and/or state-centric framework does not necessarily mean that the historical significance of nation-states and the differences in local opportunity structures and cultures can be denied. Instead, the issue at stake is that there are multiple relations between different localities and actors, and the national scale is one of many possible spatial dimensions—no doubt an indispensable one when studying Europe in the nineteenth and twentieth centuries. In the period with which our volume is concerned, national(ized) discourses implied constraints that must neither be overlooked nor exaggerated. Hence, our objective is not to undermine nation-states; rather, we emphasize the degree to which such entities are never fixed, but fluid, relational, and historically changing.

Regardless of which spatial scale we choose as our point of departure, however, we should acknowledge that centers and peripheries constitute each other in a mutually enforcing interaction, as this volume demonstrates with respect to non-dominant regions within Europe. There is also a striking similarity in terms of how such mechanisms work on different scales. The same kind of peripheral opposition to the provincial universalism of the self- sufficient core clearly characterizes twentieth-century relations between the Western and the non-Western world as well as the relations between dominant and

non-dominant nation-states within Europe, but also between the centers and peripheries of any individual European country. Conversely, the uniformity of the center is often exaggerated when seen from the periphery, be it "Europe" in postcolonial studies, "France" or "Germany" from the viewpoint of nondominant European countries, or urban centers from a rural or small-town perspective.

Different answers to the question of scale impact on how we describe trans-local relations within an inter-urban, inter-national, or cosmopolitan framework, which needs to be adjusted according to our different objects of study. The contributions in this volume focusing on European "peripheries" thus bring into the discussion a broad variety of scales and spatial dynamics. In most cases, the social field in which intellectual debates are situated transgresses national boundaries. Tensions between overlapping scales are mobilized in multiple ways by individual actors who draw on international references in order to strengthen the national, as in the nineteenth-century idea of a cosmopolitanism of nations, or conversely mobilize internationality in order to undermine locally dominant positions.

While remaining largely within the framework of European nation-states and urban centers, and paying close attention to their interconnections, the contributions in this volume seek to highlight the ways in which intellectuals, writers, and artists manouver in the universe of national and imperial states competing with each other over political, economic, and cultural "progress." The book is both about elucidating how asymmetries are produced and about exploring how they determine the actions of individual and collective actors in the light of the different hierarchies. By reconsidering the premises for studying asymmetrical relations in European intellectual history, it aims at forging a perspective that avoids the tendency sometimes present in transnational intellectual history to overemphasize reciprocity and equality. The aim is also to coin a perspective which avoids the opposite tendency of fighting the injustice of a one-dimensional hierarchy sometimes associated with postcolonial discourse. Discussing examples from Northern, Eastern, and Southern Europe, the chapters analyze the ways in which historical actors in nineteenth- and twentieth-century Europe conceptualized intellectual space and how they dealt with its hierarchical aspects. By paying particular attention to the weaker part in asymmetrical relations, they highlight the extent to which perceptions of hierarchies defined the agendas of historical actors, how asymmetries were used, even instrumentalized, for strategic purposes at "home" and "abroad," how intellectuals managed tensions between local and transnational

space, and how these spaces in themselves were produced and reproduced in continuous interaction with each other.

The Structure of the Book

The book is divided into three parts. The first part, Reconsidering European Intellectual Space, concerns the strategies of peripheral intellectuals around 1900. At that time, Western Europe with metropoles such as Paris, Vienna, Berlin, and London was widely acknowledged as the center of both European and global intellectual space. Although the period between the latter part of the nineteenth century and the First World War has been perceived as leading to the zenith of both global and intra-European interlinkages and structures, it was also a time when European intellectuals could still harbor a belief in European superiority. By and large, the production of national territory in the long nineteenth century—in part as a counterforce to turn-of-the-century globalization—resulted in the emergence of the nation-state in Europe as the dominant strategy for social organization, including intellectual life, although the idea of a borderless republic of letters also continued to be part of the self-understanding of intellectuals. As a result, for instance, literary, artistic, and academic markets only partly overlapped with national territories and borders. The chapters by Narve Fulsås & Tore Rem and Stefan Nygård & Johan Strang examine how these tensions and ambivalences impacted on the transnational strategies of Nordic small-country intellectuals with a strong self-proclaimed peripheral identity, whereas David Cottington's chapter examines the consolidation of a pan-European avant-garde network which contributed greatly to the decentering of Paris as the fulcrum of modernism. The field of avant-garde studies has shifted from a rigid image of international modernism with one undisputed center to a focus on decentered or at least multi-centered networks and to an understanding of notably cubism as "a language with many dialects." Other field-specific asymmetries are examined by Tommaso Giordani in his chapter on the interaction of German, Italian, and French Marxism, highlighting the interplay between two different intellectual fields: a Marxist European one dominated by Germany, and the national ones in France and Italy. Moreover, the

chapter underlines variations in how the relation between the national and the transnational was conceptualized by actors from different contexts—in this case Italy, France, and Germany—as well as the obvious limits of center–periphery modelization for a field such as international Marxism.

The second part of the book, Negotiating the Center, explores European intellectuals coping with dramatically transformed geo-cultural settings that were evident particularly after the First World War. The war brought along the collapse of the Romanov, Hohenzollern, Habsburg, and Ottoman Empires, ushering in an era of disorientation, lack of horizon, and identity crisis in Eastern and Central Europe, but it also led to new forms of international activities and concerns. The hierarchies examined by Diana Mishkova involve comprehensive perceptions and uses of asymmetry in the context of regional and civilizational discourse or national identity politics, the politics of belonging and demarcation with respect to imagined centers and significant others. In her contribution, Emilia Palonen evokes the fluid nature of Europe as a center. She discusses the transnational trajectories of the Budapest School of Marxist humanism, drawing attention to the complex spatiality of a network spread across the globe in the cold-war period, from Melbourne to Moscow, at the same time as many of the key actors remained firmly anchored in European debates. The transformations of the twentieth century had significant implications for the developing world order, with the United States becoming the major challenger to the previously dominant Great Britain, France, and Germany, as discussed from a Spanish point of view in the chapter by José María Rosales. The defeat of Spain in the war with the usa in 1898, along with the loss of its colonial territories, was experienced by Spanish intellectuals as a negative decentering process, whereas the Nordic scholars, studied in the chapter by Marja Jalava & Johanna Rainio-Niemi, seized upon the opportunities that were opened up by America's expanding cultural, academic, and economic influence on Europe. The latter chapter, in particular, emphasizes the flexibility of the peripheries in adjusting to such transformations, sometimes by playing centers against each other. One crucial aspect that sets the intellectual and academic fields of these countries apart is that

while the question of dealing with geopolitical decline was a major concern for intellectuals such as Manuel Azaña and José Ortega y Gasset in Spain, as demonstrated by Rosales, Finnish and Norwegian intellectuals aspired to link their native cultural and scientific spaces to an emerging global academic center. With regard to old and new, progress and decline, these and other chapters reveal diverging combinations of spatial and temporal criteria for defining centrality, between accumulated cultural capital, position in global power-geometry, or promise for the future.

The final part, Cold War Dynamics, discusses the reconfiguration of European intellectual space after the Second World War. This space was solidified by an East–West division along the Iron Curtain, and yet, characterized by a constant blurring of the division and the ensuing fluctuation of center–periphery conceptions. In his chapter, Manolis Patiniotis examines the geopolitical tensions between centers and peripheries arising from cold-war national and transnational interests. He does this by exploring the Greek attempts to outline the dividing line so that the country would stay within the "free world," thus highlighting the role of the margins in the making of centers—Greece asserting its place as "the core of the center"—in twentieth-century transatlantic efforts to outline the borders of Western civilization. In Łukasz Mikołajewski's chapter, the focus is on Polish exiled authors who, with varied strategies and success, wanted to address both broader Western European audiences and readers in communist Poland at the same time. Finally, Zsófia Lóránd's chapter on Yugoslav feminism traces the asymmetries that emerged from the shifting ways in which Yugoslavia was seen in Europe before and after the break-up of the country in the early 1990s. The chapter not only highlights a meta-level asymmetry in terms of the still low number of women featured in intellectual history writing, but also raises the important issue of the non-simultaneity of political, economic, literary, and artistic geometries; when we, in the context of Yugoslav and Western feminism, pose the question of who was considered "advanced" and who needed "to catch up." The answer, of course, depends on the point of emphasis. For Yugoslavian feminists, gender relations may have appeared

more advanced at home, but at the same time they saw themselves as lagging behind their Western colleagues in terms of freedom of expression and level of theorization.

Collectively, the book produces a multi-layered image of Europe by examining the relationships between intellectual spaces, fields, and markets of different size and status. The scale of analysis ranges from conceptualizing the place of nation-states and regions, in the chapter by Mishkova, to the field-specific asymmetries of Marxist theory or Yugoslav feminism examined by Giordani and Lóránd, respectively, and the global reach of the Budapest school of Hungarian intellectuals discussed by Palonen. Each contribution offers a different perspective on our general proposition to think "geometrically" about intellectual practices, by foregrounding asymmetries that operate on different levels and are to a varying degree acknowledged, contested, or challenged by the actors affected by them. While some of them dealt with geocultural asymmetry by mobilizing symbolic capital associated with a center in their own local setting, others sought to nuance the notion of advanced/ backward, act as if the center— periphery dichotomies were meaningless, make use of them for personal gain, or to counterbalance a disadvantageous position by playing competing centers against each other. The key issue is that

the perception or self-perception of geo-cultural position has been and still is a crucial factor in shaping how the individual actors navigate between the local, the national, the regional, and the transnational. It influences their understanding of how "external" events impact on "internal" developments, and their general level of interest in keeping up with, or opposing, developments elsewhere.

Europe through a Kaleidoscope

Taken together, the chapters suggest that investigating Europe as an intellectual space is a kaleidoscopic exercise. Just as with each turn of the kaleidoscopic lens the pattern is significantly modified, European intellectual space naturally varies between points of observation. Moreover, it is constantly reproduced through negotiations that are more hierarchical and biased than they are reciprocal. The situatedness and the role of the

local filter should always be considered when assessing conceptualizations of Europe as an intellectual space, whether they emanate from the core or the periphery. The book therefore stresses the need to look critically at the very logic of producing asymmetries, to recognize the importance of these dynamics for the self-understanding of individual actors with different horizons of expectations, to pay attention to individual actors' strategies for dealing with geo-cultural constraints, and to consider the extent to which asymmetries foster or even force actors into reflectivity and resistance vis-à-vis universalizing tendencies.

On the level of national space, the ideal-typical poles in the transnational process of negotiating cultural Europe are, on the one hand, small latecomer nations such as Finland in the Northern European context, where the actors are characterized by a predominantly peripheral self-understanding. Intellectuals belonging to this group were generally more inclined to instrumentalize "Europe" for specific local purposes than to try and participate in transnational discussions on equal grounds. Then we have the cultural centers, typically constituted by metropoles such as Paris, Berlin, and London in the nineteenth century, with a stronger tendency to universalize local debates, a tendency that was both contested and reinforced by the peripheries. And in between we find such countries as Sweden, Poland, Italy, Hungary, and Spain, where perceptions of geo-cultural position were fundamentally transformed or persistently ambivalent in the period discussed in this book.

In addition to diverse understandings of supranational space, closely connected with notions of time, progress, and modernity, different regions and competing factions within them tended to operate with different "Europes" to begin with. Indeed, the extent to which we can talk about a European intellectual space crucially depends on our acknowledging the intrinsic ambivalences of the concept, the porousness of "borders," the "internal peripheries" of core regions that are obscured when the nation-state is the dominant unit of analysis, and the importance of relations to trans-European spaces.

By focusing on conceptualizations other than those of the centers or of regions subjected to colonial domination in the twentieth century, the volume conveys not only the role of hierarchy but also the multi-directional transfers of ideas between "centers" and "peripheries," the crucial role of mediators, and the complex mechanisms by which asymmetries are produced and reproduced through the behavior and choices made by historical actors in dealing with structural constraints. While the world-systems perspective of combined and uneven development—and the claim that progress in one part of the world is matched by underdevelopment elsewhere—is not irrelevant for understanding how transnational intellectual space works, the chapters included in this book clearly illustrate the difficulties involved in reducing the role of the peripheries to recipients or producers of "raw material" to be processed by the centers.

Exploring different ways of studying intellectual asymmetries and investigating the power of perceptions of centrality and marginality are pertinent tasks for the study of modern European intellectual history today. While it has been a great merit of transnational history to recognize the integral part played by "foreign" references in the creation of national spaces, the passionate critique of methodological nationalism and the focus on hybridity has also served to obscure the hierarchical dimensions of, in our case, intra-European intellectual encounters. With its specific reference to intellectuals—writers, artists, historians, and social theorists—the book speaks to the long-standing debates on the tensions between, on the one hand, the idea of an egalitarian and supranational community of intellectuals, and, on the other hand, local rootedness, national, urban, or linguistic allegiances and discourses, and the symbolic power they continue to entail. <>

The Art of Painting in Colonial Bolivia/ El Arte De Pintura En Bolivia Colonial English and Spanish Edition edited by Suzanne L. Stratton-Pruitt and Antonio Suarez Weise [Early Modern Catholicism and the Visual Arts Series, Saint Joseph's University Press, 9781945402319] 530 pages / index / 9 ³/₄ x 12 ³/₄ / 412 color images

Exceptionally detail-focused, scholarship provides some initial survey of existing Bolivian religious art.

This anthological volume is dedicated to the art of painting in pre-independence Bolivia, prompted by the belief that a compendium of handsomely photographed, full-color images will bring renewed public and scholarly attention to a rich cultural heritage that has not received its due. An ambitious round of new photography has been joined by an international roster of scholarly contributors from the United States, Argentina, Peru, and Bolivia to offer both the general reader and specialists an overview of the art of painting in the region of South America once called "Charcas" and later "Alto Perú." Attention is brought to the role of European subjects and styles in the development of regional forms of expression, as well as the influence of art and artists from Cuzco, Peru. Works by painters active in La Paz, Sucre, and Potosi such as Leonardo Flores, Melchor Pérez Holguin, and Gaspar Miguel de Berrío have received close reading of iconographical themes that were often of particularly local interest.

Excerpt: The Art of Painting in Colonial Bolivia represents a new landmark in the study and appreciation of painting in colonial Bolivia, and for painting in colonial Spanish America in general. Published in a bilingual English and Spanish edition, The Art of Painting in Colonial Bolivia reveals all of the splendor and idiosyncrasies of three centuries of painting in colonial Bolivia. More than 500 of the most important Bolivian colonial paintings from public and private collections in Bolivia, the United States, Spain, and France have been brought together in one volume and reproduced from new color photography. A significant number of the paintings presented here have never been published and they are certain to be a revelation to all audiences. The paintings are examined in depth within their historical, cultural, and religious contexts in fourteen essays and twenty-one iconographical studies prepared by a team of North and South American specialists selected by the editor and distinguished art historian Dr. Suzanne Stratton-Pruitt.

For more than one hundred years The Hispanic Society of America has been dedicated to

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advancing the study of and appreciation for the arts of the Hispanic world. Over the past two decades the Hispanic Society has prioritized the expansion of its holdings in the fine and decorative arts of colonial Spanish America, and in the process has acquired dozens of significant works that now constitute one of the most important museum collections in the United States in this field. With these acquisitions our conservators have encountered new challenges, and to meet these challenges they have collaborated with conservators in other museums to conduct important new research on the indigenous materials and techniques employed in the arts that are unique to colonial Spanish America. The Hispanic Society also has been a prominent collaborator in many of the most important traveling exhibitions on colonial Latin American art over the past decade, from The Arts in Latin America, 1492-1820 (2006-2007) organized by the Philadelphia Museum of Art, up to the recent exhibition Made in the Americas: The New World Discovers Asia (2015-2017), organized by the Museum of Fine Arts, Boston.

The Hispanic Society is proud to serve as the institutional sponsor of The Art of Painting in Colonial Bolivia, a book that will be an invaluable resource for everyone interested in colonial Spanish American art, and it has been our pleasure to collaborate on this project with Saint Joseph's University Press.

The Art of Painting in Colonial Bolivia 1600-1825 by Suzanne Stratton-Pruitt

The geographical boundaries of present-day Bolivia were essentially formed in early colonial times. The region, part of the Vice-royalty of Peru established in 1542, was called Charcas, after the indigenous people of Chuquisaca. Not until the late eighteenth century was Charcas occasionally called Alto Perú, a name that only became widespread thereafter. Charcas comprised the cities of Chuquisaca (later called La Plata, now Sucre), founded in 1538 as the seat of the judicial body called the "Audiencia" and the archbishopric, and the cities of Potosi (established 1545), La Paz, (1548), Santa Cruz de la Sierra (1560) Cochabamba (1571), Tarija (1574), Oruro (1606), and Trinidad (1686). The Audiencia de Charcas also included the missions established in the east

and south of the region. In 1776 Charcas was made part of the newly established Viceroyalty of Rio de la Plata with its capital at Buenos Aires. With independence from Spain, the people of the region declared their wish to also be independent of their neighbors ("Ni con Lima ni con Buenos Aires"). This book about the art of painting in the colonial period respects the geopolitical autonomy of the new country established in 1825 and named after the revolutionary leader Simón Bolívar.

During the early decades of the Spanish presence in Bolivia, as throughout Spanish America, European immigrants needed religious images for their devotional practices, and the clergy needed religious images as tools in the campaign to convert the indigenous people to Catholicism. This need was met initially by the importation of prints, paintings, and sculptures via the galleons that set out annually from Seville for the Americas. A document of 1595 records that the Spanish/Italian painter Mateo Pérez de Alesio, then working in Lima, owed Francisco Lopez for the purchase of fifty retablos with figures that he brought with him from Spain. This small-business arrangement may have been typical of the fledgling art market between Spain and the Viceroyalty of Peru early in the colonial period, but that market expanded until, well into the seventeenth century, some Sevillian painters made their living almost solely by sending works to the Americas.

In 1639 Pedro Ramirez del Aguila described the richly decorated homes of the gentry of La Plata (Sucre, Bolivia) with their treasured textiles (velvets, brocades, taffetas); Persian and Turkish carpets; furniture inlaid with ebony, ivory and tortoise-shell; silver braziers; and "very excellent paintings from Spain and Rome, on copper, wood and canvas ...". European paintings and engravings continued to be imported throughout the colonial period, but the wealthy inhabitants of Charcas, mine owners and merchants, were also evidently open to the mélange of styles that resulted from European models adapted and transformed by a few creole and more numerous indigenous and mestizo artists.

In 1959 the historian Marie Helmer published a series of contracts between artists and artisans and their patrons in Potosí dated between 1603 and 1797. She noted that the artists and artisans were

not necessarily vecinos of Potosí, not natives of the city, but rather residentes, having moved there to work. Paintings from Cuzco workshops made their way to Potosí via the art market, but Cuzco artists themselves were also attracted to that wealthy center of silver mining. Painters and sculptors, silversmiths, ensambladores (the builders of altarpieces), and gilders were established in Potosí and the other cities of present-day Bolivia. They comprised Indians and mestizos (but not black slaves), as well as foreigners from Italy, Spain and Flanders.

Given the varied backgrounds of the painters in colonial Charcas, and the fact that works of art moved around the Vice-royalty of Peru on the art market, we can assume that the paintings illustrated in this book about The Art of Painting in Colonial Bolivia were nearly all in Bolivia by the end of Spanish colonial rule. Whether a painting or an artist was originally from Seville, Antwerp or Cuzco, the result is nevertheless part of the history of art in Bolivia.

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Jazz and the Philosophy of Art by Lee B. Brown
and David Goldblatt [Routledge,
9781138241367]

Co-authored by three prominent philosophers of
art, Jazz and the Philosophy of Art is the first book
in English to be exclusively devoted to philosophical
issues in jazz. It covers such diverse topics as
minstrelsy, bebop, Voodoo, social and tap dancing,
parades, phonography,

musical forgeries, and jazz singing, as well as
Goodman's allographic/autographic distinction,
Adorno's critique of popular music, and what
improvisation is and is not.

The book is organized into three parts. Drawing on
innovative strategies adopted to address
challenges that arise for the project of defining art,
Part I shows how historical definitions of art provide
a blueprint for a historical definition of jazz. Part II
extends the book's commitment to social-historical
contextualism by exploring distinctive ways that
jazz has shaped, and been shaped by, American
culture. It uses the lens of jazz vocals to provide
perspective on racial issues previously unaddressed
in the work. It then examines the broader premise
that jazz was a socially progressive force in
American popular culture. Part III concentrates on a
topic that has entered into the arguments of each
of the previous chapters: what is jazz
improvisation? It outlines a pluralistic framework in
which distinctive performance intentions distinguish
distinctive kinds of jazz improvisation.

This book is a comprehensive and valuable
resource for any reader interested in the
intersections between jazz and philosophy.

Lee Brown: A Recollection

Like a lot of kids of his generation, my husband Lee
Brown grew up with a spinet in the family living
room in Salt Lake City. His brother Wilson, with a
lot of talent and perfect pitch, took summer jobs
playing piano at the El Tovar Hotel at the Grand
Canyon; he became a lifelong musician, teacher,
and arranger. Lee never got beyond Thompson's
Third Grade piano book.

But even without a scintilla of performing talent he
had a highly cultivated ear for music. Catholic in
taste, he liked everything from Mozart to Wagner
to Alban Berg to AC/DC, the Talking Heads, and
Ernesto Lecuona. But most of all, jazz.

Listening to Roy Eldridge perform at Jimmy Ryan's
in the 1970s, he had to collar Eldridge and remind
him of a 1949 performance in Salt Lake City when
Lee was fresh out of high school and tasting live
jazz for the first time. An idyllic couple of years in
San Francisco after he left the Navy in the early
50s introduced him to the Thirsty I and the Brubeck
Quartet. In the 90s, Blossom Dearie at Danny's
Skylight Room would bring him to tears of joy. We
never went to New York City without checking out
the scene at Sweet Basil, The Blue Note, Iridium and
St. Nick's Pub in Harlem, where we'd share a table
with singer Ruth Brisbane and her husband Claude.
We never went anywhere that didn't include jazz,
from Ronnie Scott's in London to the smoky top floor
of El Perron in Cadaques, Spain. No philosophy
conventioneers were safe from a night out with Lee
at local dives in cities all over the U.S.

As my stepson pointed out at Lee's memorial
service in 2014, our basement had (sadly, still has)
the entire history of recorded music, from piano
rolls, cylinder records and 78s through reel-to-reel
tapes, cassettes, vinyl, and CDs. Like a gerbil on an
exercise wheel, he raced to keep his collection up
to date by transferring from one medium to
another and devising one organizing scheme after
another.

Lee studied philosophy under Bill Earle and Erich
Heller at Northwestern University. Under the
influence of his mentors, for many years his
philosophical interests ranged from Kant, Hegel,
and Nietzsche to the French existentialists and to
philosophical questions in the arts and literature.

Strangely, he was late coming to a realization that music, and especially jazz, should be the center of his philosophical enterprise, that there were interesting and complex aesthetic issues around the study of jazz music. It was when he started to write a jazz column for a local alternative paper and discovered the rich jazz scene in Columbus, Ohio, that I think he first realized the philosophical potential in this medium. He tapped into a whole lifetime of deep listening that he had never before mined philosophically.

I remember when he became fascinated with defining the essential elements of jazz, including the role of improvisation. He almost drove me mad playing over and over the opening bars of Louis Armstrong's 1928 performance of "West End Blues," where Armstrong rips into his intro too fast to be able to negotiate the 16th notes that lay in wait. Just as Armstrong reaches the expected cascade of notes, he brilliantly substitutes a series of triplets instead. The knife-edge improv is thrilling. Well, for me maybe not so much the thirtieth or fortieth time. For Lee, of course, the repetition raised even more philosophical questions about phonography and jazz.

He is missed. I am delighted that this book can be his life-extender. Emily Foster

Progress in the philosophy of art in the immediate future is to be made not by theorizing in the grand manner, but by careful and imaginative philosophical scrutiny of the individual arts and their individual problems, seen as somewhat unique, individual problems and not necessarily as instances of common problems of some monolithic thing called "ART." — Peter Kivy

We are now more than a quarter century beyond a Presidential Address at the American Society for Aesthetics at which the late Peter Kivy, one of our most distinguished and insightful philosophers of music, called for a turn away from a unitary philosophy of art in favor of a pluralistic pursuit. Recognizing that art is not a monolith, conceptually or in practice, Kivy proposed that an exploration of differences is more enlightening than a focus on similarities. Unfortunately, not much has changed in the decades since Kivy's proposal. Consulting the indexes of a score of recent books in the philosophy of music, we find no entries — or only incidental ones — for `jazz." For the most part, philosophers continue to theorize about music by talking about Bach and Beethoven and Wagner and, in more adventurous moments, John Cage and perhaps the Beatles. We grant that there are important exceptions, many of which we discuss throughout this book. There are, however, scores of books on jazz by jazz critics, musicians, and historians. And, we acknowledge that this book could not have been written without them. But while there are individual articles appearing in scholarly journals by philosophers, there has not been a full-length book in English devoted to philosophical issues in jazz by philosophers, until now.

What, then, do we believe we have accomplished by bringing philosophical theorizing to bear on jazz? For one thing, we bring together many of the issues on jazz presented in books that have been, for us, excellent sources of historical accounts as well as personal anecdotes from the long history of jazz. Those who have not read much about jazz will appreciate our exploration and synthesis of so much of the literature on jazz and the philosophy of music. For another, we offer our own theories regarding many of the philosophical issues surrounding jazz as it is embedded in the philosophy of music and, more generally, the philosophy of art. Most importantly, we argue that a contextual theory of jazz, which this book offers, has the best chance to clarify, with a certain degree of insight, the muddy waters of many of the issues raised in the broader literature of jazz, that saw jazz as a subject worthy of criticism and analysis. Philosophically, jazz is a dramatically conspicuous example of the poverty of trying to understand any of the arts from a purely synchronic or acontextual point of view.

At the same time, we will, in regard to many of the issues broached in this book, do our best to accept the standard philosophical job-description — that is, to take rough conceptual terrain, map it, and explain where its boundaries, both internal and external, lie. Although philosophical thinking about jazz sometimes mirrors concerns with philosophy of music generally, many aspects of jazz are

aesthetically different from the music that has been treated as paradigmatic within philosophy of art. However, the route historically traced by jazz was not foreordained or fated. Nor was jazz the product of a teleological, goal-oriented historical process. What we see is that jazz has been beset by a set of cultural constraints about the practice of the music that have actually been inconsistent. Furthermore, the essence of its short life, to put the point paradoxically, has consisted almost from the start in its continual struggle with its own past. Jazz still carries its history on its sleeve, so to say, by comparison with European concert music. The dance forms that served as its source materials have been almost completely lost to the ear, through the combined action of artistic transfiguration and the decay of historical memory. Because jazz is preserved for the most part in recordings rather than scores, nothing is lost to the ear — or so it may seem. Nonetheless, jazz has been with us long enough that changes in the social alignment and uses of jazz have encouraged a decay of relevant memory here, as well.

Every art encapsulates a set of evolved skills, practices, and standards of evaluation. From the viewpoint of a participant inside any one of them, the parameters of its practice are fixed. But, imagine a speeded up film, so to say, of any art, from well before the first signs of its appearance on earth, up through its eventual disappearance. Some pass away with the rise of new technologies, some due to cultural quakes within the sphere of aesthetic values assumed for that art form, some from cultural annihilation, and some from just plain boredom. From this hypothetical point of view, commitment to the longevity of the concepts or principles that govern the production and reception practices of the art form would begin to look foolish. The foregoing also holds, as well, for the overall life of the overarching concept, not of this or that art form, but of art in general — a favored if perpetually wearying opening chapter in treatises and textbooks in philosophy of art. However, the general nature of art is not one that we intend to spend our time exploring. We take it for granted that jazz is an art form — a complex and important one that has issues that belong to it alone.

Beyond the inherent interest that we jazz lovers may have in these topics, we think that our analysis of them is an important corrective within philosophy of art. Above all, we think that several of these apparent dichotomies are shown to differ as matters of degree, rather than mutually exclusive categories of activity. It is our hope that many of our detailed discussions of jazz-oriented issues will help to reorganize a reader's thinking about this spirited and moody form of music.

Organization of Jazz and the Philosophy of Art

What follows is an explanation of how we have grouped our chapters and how they relate to one another.

This book is organized into three parts, which pursue three broad ways that philosophizing about jazz intersects with traditional philosophy of art. Part I explores the issue of whether there is an essence of jazz — some set of necessary and sufficient features that constitute its proper definition. Our conclusion, in Chapter 3, is that such a definition can be given, but not by reference to the music's purely musical features.

Chapter 1 makes an inclusive case for understanding dancing to the music of jazz, and the places at or in which the dancing occurred, as essential elements of jazz during one long stretch of its history. Then, sometime around the late 1940s and into the 1950s, there was a reinvention of the social practices surrounding jazz, and these relationships were severed. There is good reason, therefore, to regard subsequent jazz, while still jazz, as a different kind of art. Severing jazz from social dancing and its venues also severed the functional connection between the music and the form of life that shaped it. Its omission would render any explanation of jazz seriously incomplete. We end the chapter with an endorsement of Duke Ellington's claim that jazz fans who never dance to it have a different experience of the music — that the difference for reception theory between bodies in motion and those that are static is a relevant one.

Chapter 2 evaluates the prospects for defining jazz by identifying what is musically distinctive about jazz, apart from the social practices that nurtured

it. We make the case that André Hodeir's theory of jazz is unjustly neglected. Rather than improvisation, the centerpiece of the definition is an analysis of the conditions of swing as an underlying pulsation and a rhythmic overlay that pulls against it. Detailing performance goals rooted in rhythm, Hodeir identifies a plausible essentialist account of jazz in its initial five decades. However, the theory does not extend to some jazz beginning around 1960, and we again find a decisive discontinuity that undercuts an essentialist theory of jazz.

Despite widespread skepticism about the prospects for a unified definition of jazz, Chapter 3 argues that recent philosophy of art has developed a suitable definitional strategy. Historical definitions of art provide a blueprint for a historical definition of jazz. Despite notable discontinuities in musical practice, later jazz styles count as jazz by virtue of reflexive practice, either in the intentional preservation of established jazz styles or in innovation grounded in respect for appreciative practices established in earlier jazz. Although we acknowledge that there will be particular music performances with an ambiguous status, the definition sidesteps the pitfalls of traditional essentialist definitions in order to embrace a plurality of styles and performance goals.

Given our argument that a definition of jazz should recognize that the music is embedded in social-historical developments, we must take account of jazz as an intervention in American culture. And this, in turn, brings us to topics of race and gender. Part II explores these issues within the context of the diachronic, pluralistic analysis established in Part I. However, instead of advancing a single argument that culminates in the third of three chapters, this set proceeds more dialectically. Chapters 4 and 5 use the lens of jazz vocals to provide perspective on racial issues previously set to one side, after which Chapter 6 examines the broader premise that jazz might be a socially progressive force in American culture in the twentieth century.

Chapter 4 examines and offers support for two claims: jazz stands for, or expresses, a certain species of freedom, and jazz is — in the right circumstances — a Dionysian practice that goes beyond the mimetic art of expressive communication. We propose that these claims are best understood in relation to jazz singing. We argue that Nietzsche's interpretation of the ancient Dionysian festivals has significant parallels in nineteenth-century African-American rituals in and around New Orleans. These parallels continue to resonate in jazz, especially in scat vocal performances by African-American women. In opposition to theories of jazz vocal performance that stress the singer's expressive interpretation of song, we argue that the activity of jazz singing is frequently more significant than that, for it can be a liberating activity made possible by a cultural space provided within the jazz tradition.

Chapter 5 considers the charge that American white popular music is pervasively indebted to minstrel theater in a manner that perpetuates racism. White jazz vocalists such as Bing Crosby and dancers such as Fred Astaire built careers on their appropriation from African-American jazz resources. However, we challenge the hypothesis that these and all similar appropriations are to be understood and evaluated as extensions of blackface minstrelsy, a claim put forward by certain scholars. Just as we think that Dionysian practices inform different jazz practices and eras in varying degrees, the legacy of blackface is genuine yet polymorphous.

White appropriation would not merit extended discussion were it not for the way that these appropriations were successfully packaged and sold as mass entertainment. Chapter 6 examines Theodor Adorno's thirty-year engagement with jazz, which he criticizes as a paradigm of deceptive consumer marketing and as a corrosive tool of social conformity and class exploitation. Adorno casts doubt on the positive achievements that we explored in Chapters 4 and 5 by arguing that the commercialization of jazz robs it of the artistic autonomy that characterizes resistive, "difficult," authentic culture. Jazz is highly standardized music, and it produces predictable, standardized responses. After presenting Adorno's critique, we explore typical responses to it, together with his counter-responses. However, as we did with the minstrel hypothesis in Chapter 5, we resist adoption of an overarching historical narrative that imposes uniform evaluative criteria on all jazz. In particular, jazz should not be

evaluated by comparison to the supposed progress of "serious" music. Some of the joyful noise of jazz has a genuine cathartic potential despite its commercialization.

Finally, Part III concentrates on a topic that has entered into the arguments of each of the previous chapters: what is jazz improvisation? Here, the issues are primarily ontological and evaluative. The arc of the argument across the four chapters begins with an exploration of the nature of improvisational music performance, and what this entails for jazz in particular. This position leads us to reject typical assumptions about art and about the nature of musical performance. Next, we pursue further complications that arise from the cultural, historical, and aesthetic importance of recorded jazz — a state of affairs in which the opportunity to hear improvisations from the past is undermined by the repeatability of the very technological process that lets us hear it. Finally, we confront the question of how the ubiquitous musical imperfections and errors in jazz improvisations are to be factored into the evaluation of a jazz performance.

More specifically, Chapter 7 grapples with the issue that a principled analysis of the concept of improvisation has been elusive. Although we explained in Part I why improvisation cannot be regarded as essential to a jazz performance, we also acknowledged that improvisation became increasingly important in jazz performance. We examine and discard some of the most common platitudes about improvisation, especially the idea that it is a mode of musical composition. Specifically, we reject the thesis that a jazz improvisation is necessarily a performance or an instantiation of a musical work. Instead, we recommend a pluralistic framework in which jazz performances range from expressive embellishment during the performance of a musical work to spontaneous performance that is not the performance of any work. Distinctive performance intentions distinguish distinctive kinds of jazz improvisation.

Chapter 8 engages directly with recent theories of artwork identity in order to show that they do not describe what takes place in some jazz improvisations. Specifically, a model that bifurcates art works into two basic kinds — enduring objects and structural types — mispresents some jazz performances by asserting that an improvisation is, in principle, an instantiation of a musical work that can be performed again by other musicians. Nelson Goodman's distinction between autographic art and allographic art serves as an example of the position we reject. Against this model, we defend the intuition that jazz improvisations do not generate works that can be performed again. Otherwise, we would have to regard the appreciative stance lthat jazz fans adopt toward improvisation as a misguided, if not irrational, stance.

Since 1917, recording has been an indispensable tool of jazz's dissemination and reception. Chapter 9 addresses the problem that recorded jazz encourages listening practices that are antithetical to the appreciation of improvisation. The ability to listen repeatedly to the same, recorded improvisation encourages hearing an improvisation as a repeatable, composed structure, reintroducing the model of musical works that we resisted in Chapter 8. We begin by addressing the complaint that repeated playback of recorded music is generally antithetical to music appreciation; we argue that this complaint has limited plausibility. However, we find that the problem is more serious in the case of improvised music, and therefore it is a genuine issue for jazz.

The salient features of jazz are resultants of the intersection of distinct practices and intentions, which become transfigured in the music by their interaction. Given the caveat that not every jazz performance is improvised to the same degree or within the same intentional framework, Chapter 10 examines the idea that jazz improvisations are typically flawed in multiple ways. We separate the unhelpful claim that they are flawed from a Eurocentric standard of good music from the claim that they are typically flawed when evaluated by appropriate standards (e.g., including standards typically applied by jazz musicians). Given the degree of risk taking and forced choices that occur in good improvisation, we recognize that jazz improvisation typically reflects a hierarchy of regulative ideals. Consequently, both the musicians and the audience must accept a significant amount

of musical imperfection for the sake of other aesthetic rewards.

Finally, we acknowledge that there are many important issues and perspectives that we do not have room to address. That much is inevitable, as the history of jazz infiltrates history generally. However, we have provided a framework that should make it clear that we are attracted to jazz, in part, because it provides evidence that it is best to reject essentialisms of every kind in the cultural arena of the arts. Jazz does not sound, essentially, one way. Jazz is not, functionally, all of one piece. Jazz is not performed with any one meaning, goal, or regulative ideal. Perhaps that is the deeper meaning of the many clichés that link jazz and the free spirit of its musicians and audiences.

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Jazz in Available Light: Illuminating the Jazz Greats from the 1960s, '70s and '80s by Veryl Oakland, with Foreword by Quincy Jones [Schiffer, 9780764354830]

A fabulous photographic and personal documentation of mostly westcoast appearances by some of the Jazz Greats. Through both personal stories and stunning photographs captured behind the scenes, lose yourself in this bygone era of jazz that celebrates dozens of the most recognized and formidable jazz artists spanning three decades. As a freelance jazz photojournalist who devoted nearly thirty years in search of the great jazz musicians, Veryl Oakland profiles the music's masters in a wide variety of settings—under the spotlight, in their homes, and far from the stage—in a personalized manner unique for jazz publications. Close followers of the entertainment industry and music lovers everywhere will be enthralled to see more than 340 iconic images of diverse stars—Duke Ellington, Count Basie, Buddy Rich, Dizzy Gillespie, Thelonious Monk, Dexter Gordon, Art Blakey, Stan Getz, Phil Woods, Sun Ra, Cecil Taylor, Paul Bley, Weather Report, and Wynton Marsalis—covering music styles from swing, to bebop, cool, hard bop, free, and beyond.

CONTENTS

Dexter Gorden

Excerpt:

A Professional Starting Point: Rahsaan, Roland Kirk, San Francisco, California

Did it happen for a reason? Was it simply meant to be? Or was it just serendipity?

Why I decided to get up early that Sunday morning in April 1967, and drive more than four hours from my apartment in Reno (Nevada) to San Francisco was, more than anything, curiosity. The week before, I had read that the blind multi-reeds instrumentalist Roland Kirk would be performing at The Jazz Workshop, the popular—but now defunct—North Beach jazz club on Broadway near Columbus.

Although somewhat familiar with Kirk's music through his recordings, I had never before seen him in person. I was fascinated that only a scant number of years earlier, he was mostly surviving by scuffling as a street musician in Chicago. Having made that transition from the street to the stage—primarily through word of mouth—was remarkable.

What had caught my attention in the review was the added note that he would also be doing a special Sunday matinee show. I figured the afternoon session would involve fewer crowds and less hassle, so I packed up my camera equipment and made the long trek to the Bay Area.

At this point, still scuffling in my own way as a relative newcomer to jazz photography, I was just interested in getting as much experience as possible—seeing, hearing, and photographing as many of the top performers as I could. Little did I know that this afternoon would serve as the launching point for a career working amongst the world's greatest musicians. Thank goodness I made that drive.

When the doors opened at 12:30 p.m., I was one of the first to go inside, making my way down to a front row seat adjacent to the stage. As Roland and his quartet made it onstage to start their first set, the club was nearly vacant. But that didn't matter, ás Kirk put on a dazzling show, employing all of the wide and strange arsenal of horns—tenor saxophone, flute, clarinet, manzello, stritch—plus homemade apparatus and other equipment, such as siren whistle and wooden nose flute, attached to his body.

At various points, when he wanted to keep building

One of those images graced the May 18, 1967,

> *His inspired performance was so vibrant and magnetic that I didn't dare move from where I was for two complete sets. I was absolutely blown away.*

on an extended solo for up to minutes at a time without any breaks whatsoever, he executed the art of circular breathing, continuing to play as his neck and cheeks expanded and contracted over and over. Few instrumentalists even have the capability of accomplishing this feat, let alone doing it for so long or so seamlessly.

On another occasion, Kirk performed a flute solo that was nothing short of amazing: after playing the theme and the first of his choruses straight, Roland turned up the heat by simultaneously adding humming and vocalizing to his solo. For the finale, he launched into a series of blistering, double-tongue passages just before ending in a flourish and blowing his siren whistle.

His inspired performance was so vibrant and magnetic that I didn't dare move from where I was for two complete sets. I was absolutely blown away.

It was nearly five o'clock when it all ended. I had shot five rolls of black-and-white film under near-impossible lighting conditions. Honestly, I wasn't even sure if most of my shots had turned out. The Workshop was like being in a cave with meager light—basically, just one less-than-optimum

main spot plus a weak filler. That, and the soft glow from the club doors at the very back of the room, which remained open all afternoon in hopes of attracting more patrons.

Later, in the darkroom, I discovered that despite having to use very slow shutter speeds, a wide open lens (f1.4), and dealing with the overall exuberance of Roland's presentation, there were dozens of very good images.

On a whim, I air-mailed a note, along with copies of my contact sheets, to the editors of Down Beat magazine. Within days—surprisingly—I had received a reply, asking for several enlargements.

cover of Down Beat, becoming my first photograph ever sold.

I was fortunate to catch the man on several other occasions and never once was disappointed. He remained both a solid player and dynamic performer—and, as an individual, one of the most exciting jazz acts imaginable—even after suffering a massive stroke near Thanksgiving of 1975, that permanently paralyzed the entire right side of his body.

Following the crippling setback that made his right arm useless, Kirk underwent months of therapy. During this period, he also had the keys of his horns refitted in order to still be able to play two instruments simultaneously—only this time, just left-handed.

Returning to the scene six months later in his first engagement following the stroke, Rahsaan performed before an excited, much-anticipated crowd at the May 1976 Berkeley (CA) Jazz Festival.

In December of the following year, while headlining at Indiana University, Bloomington, Kirk suffered a final stroke. He was forty-two. <>

The Shadow Emperor: A Biography of Napoléon III by Alan Strauss-Schom [St. Martin's Press, 9781250057785]

A breakout biography of Louis-Napoleon III, whose controversial achievements have polarized historians.
Considered one of the pre-eminent Napoleon Bonaparte experts, Pulitzer Prize-nominated historian Alan Strauss-Schom has turned his sights on another in that dynasty, Napoleon III (Louis-Napoleon) overshadowed for too long by his more romanticized forebear.

In the first full biography of Napoleon III by an American historian, Strauss-Schom uses his years of

primary source research to explore the major cultural, sociological, economical, financial, international, and militaristic long-lasting effects of France's most polarizing emperor. Louis-Napoleon's achievements have been mixed and confusing, even to historians. He completely revolutionized the infrastructure of the state and the economy, but at the price of financial scandals of imperial proportions. In an age when "colonialism" was expanding, Louis-Napoleon's colonial designs were both praised by the emperor's party and the French military and resisted by the socialists.

He expanded the nation's railways to match those of England; created major new transoceanic steamship lines and a new modern navy; introduced a whole new banking sector supported by seemingly unlimited venture capital, while also empowering powerful new state and private banks; and completely rebuilt the heart of Paris, street by street.

Napoleon III wanted to surpass the legacy of his famous uncle, Napoleon I. In The Shadow Emperor, Alan Strauss-Schom sets the record straight on Napoleon III's legacy.

Excerpt: The Shadow Emperor is, I believe, the first major biography of Louis Napoléon to be written in the United States. Largely dismissed by French historians for more than a century after the death of Napoléon I, it has been only in the past few decades that serious research in this field has begun in earnest. The French government is also finally showing interest in having the remains of Louis Napoléon Bonaparte transferred from England to France. Important biographies of key participants of the Second Empire are beginning to appear as well, including those of Napoléon III, Auguste de Morny, and Georges Haussmann. It is to be hoped that many more badly needed serious studies will follow, such as of Eugénie, Achille Fould, Eugène Rouher, Eugène Schneider, Gabriel Delessert, Charles de Flahaut, Léopold Le Hon, Prince [Napoléon] Jérôme Bonaparte, his sister Mathilde, and most important, Louis Napoléon's closest friend and daily companion, Henri Conneau; the list is long.

As a biographer-historian, I am interested in the personalities and their interrelationships, those individuals who create or are involved with, if only indirectly, the events that shape "the outcome of history." My biography of Napoléon I was a composite of just such biographical sketches and the resultant interplay of those individuals.

In the case of Napoléon III, Louis Napoléon Bonaparte, the historian is dealing with a totally different personality from that of Napoléon I. Although carefully groomed in the long shadow of his uncle, indeed he worshipped the great man's name and achievements, Louis Napoléon had his own youthful hopes of emerging one day as a new, very different Bonaparte, a leader worthy in his own right. Ironically, what Louis Napoléon never admitted to himself, however, was his rejection of almost everything his uncle stood for, beginning with the military. Napoléon I was a war-lover, a brilliant military officer who felt adrift, lost, in peacetime. While praising the military, his nephew Louis Napoléon was himself an incompetent military officer, rather thriving instead on peace, in rebuilding, modernizing France, its economy, commerce, and industry, its education, science, urban redevelopment, and agriculture. Over and over again he proclaimed, "The Empire stands for Peace." There would be no "Napoleonic Wars" during his watch. Nevertheless wars and international blunders followed. He committed a militarily unprepared France to the unnecessary Crimean War, which in the end accomplished very little, and the even more senseless invasion of Mexico (against his own better judgment). At the same time, his successful military support of Victor Emmanuel's forces against the Austrians did have the positive result of freeing the country of the Austrian occupation and in creating the modern independent state of Italy. In the final analysis, if Napoléon I wished to be remembered for his great victories on the battlefield, Louis Napoléon wanted to be appreciated and remembered for the sweeping peacetime transformation and projects he planned and achieved for the country.

Napoléon I cut down the nation's forests to build forts and warships, Louis Napoléon reforested the country in order to build homes and commerce. Napoléon I regimented all schools in a rigid, military-run state system to meet his manpower needs for the military and the nation's administration. Louis Napoléon removed this

regimentation and greatly expanded the curricula to meet the needs of the modern new world he was creating, stressing the study of recent history and modern science. Napoléon I virtually drove France into bankruptcy, emptying the treasury and all but destroying the nation's banks and commerce in order to fund his military campaigns (even selling the "Louisiana Purchase" to finance his failed invasion of England). Louis Napoléon instead encouraged the vast expansion of commerce and industry, aided and abetted by the opening of public and private coffers, and new banking systems and credit facilities made available to the wider public. Napoléon I had little interest in agriculture, apart from introducing the sugar beet to replace the regular source cut off from the West Indies by his self-inflicted wars against England. Older breeds of cattle, sheep, and horses were dying out, a process dramatically reversed thanks to intensive programs drafted by Napoléon III. Louis Napoléon introduced recent agricultural methods, creating numerous model farms, and supported Louis Pasteur and other scientists in their research. He also supported the creation of public and private sector banking credit facilities for the advancement and expansion of agriculture. Millions of acres of wasteland and swamp were reclaimed on his orders and turned into agricultural production, this at a time when there was neither public environmental interest in, nor demand for, such government programs. As a result of his determination, corn and wheat production soared, as did the nation's wine output. The living and working conditions of the working class—totally ignored by Napoléon I—became a lifelong preoccupation with Napoléon III. Crowded medieval tenements, contaminated drinking water, and the lack of sanitary facilities and sewage disposal resulted in tens of thousands of deaths in Paris alone every year. Louis Napoléon razed perhaps one-third of Paris, encouraging modern, airy new buildings with clean drinking water and sanitary facilities, although little was done in the way of replacing housing for the working-class families displaced by this transformation of Paris. At the same time, the vast rebuilding of the capital put many tens of thousands of the unemployed to work. Louis Napoléon also introduced farsighted job-creation and old-age pension schemes for the working class, not to mention mandatory education at the primary school level. The physical and chemical sciences were also greatly encouraged with fresh funding and prizes, and new specialist hospitals were built throughout the country.

Louis Napoleon launched an impressive shipbuilding program, introducing the country's first steam-powered ironclad navy, second only to the Royal Navy in strength, while surpassing the British in modern gunnery. He introduced the first nationwide electric telegraph communications. Simultaneously, he enthusiastically supported and encouraged the rapid development of the nation's first comprehensive rail network, linking Paris with the capitals of the rest of Europe not to mention the country's Channel and Mediterranean ports. This in turn supported the launching of the first international French steamship lines providing regular service to America, North Africa, the Middle East, and the burgeoning French colonies in Asia, including Indochina and New Caledonia, at once hastening and expanding the French colonial developments so praised in the nineteenth century. Napoléon I's wars had obliterated most international commerce; Napoléon III instead now gave it his full support, including free-trade pacts with England and his continental neighbors. Although Algeria became the focus of his colonial "dreams," it was to prove a long-term disaster for the Algerians and France, draining its wealth and youth, as a despondent Louis Napoléon followed the continuing monthly casualty reports to the very end. Little did he realize that his standing army of 60,000 men in Algeria would one day be increased to more than half a million, and eventually lead to the complete withdrawal of the French from the whole of North Africa.

Louis Napoléon's misjudgment of international affairs unwittingly brought him into confrontation with England on several occasions, and deliberately with Prussia, whose growing power he feared, and which would ultimately bring down his own empire. And here one encounters another final irony, for the summer of 1870 was the last time when Bismarck was in a position to launch his long-anticipated invasion of France, which depended on the close cooperation of three men—Bismarck, Moltke, and Roon. Without all three such a war

could not have taken place, but as Bismarck pointed out in a letter to his son, Herbert, Field Marshal Roon was very weak and ill even now, barely able to get to Berlin to attend their last war council in July 1870 when the decision was made to attack France. These circumstances coincided with a complacent Kaiser Wilhelm playing a passive, hapless role, surrendering to Bismarck's incessant bullying, while also accepting his editorial finagling of the "Ems Telegram," and of course the kaiser alone had the authority to declare war on France. This then was the last time when all the basic elements were in place enabling Bismarck to act. If the Prussian army had to stand down and demobilize now, there would not be another "propitious moment" for at least another year, by which time "old Roon" would have been too weak and feeble to play his critical role as war minister. Bismarck for his part could not have hoped for history conveniently repeating itself, providing another precisely similar set of circumstances, another opportunity, with the kaiser in a continuing compliant mood, and Napoléon III badgered by Foreign Minister Gramont, and foolish and weak enough to play into Bismarck's hands. One year later the situation would inevitably have been quite different and "a justified war" and the invasion of France would most likely have been quite impossible. For a most desperate Otto von Bismarck, July 1870 was the last time to strike. It was now or never, and without this war he could never have united all the German states in creating the Prussian Empire. Without this Germany could never have declared war and invaded France in 1914. Individual actions count and History is relentless.

A very dynamic and demanding Napoléon I had dominated the empire he created, while a far less vigorous and egotistical Louis Napoléon happily remained in the shadows of the very empire he in turn created. And yet despite some errors of judgment, obvious lack of organizational skills, and sometimes maddening indecision, beneath that quiet, good-humored exterior, Louis Napoléon achieved vastly much more in the long run for France than did the brilliant, swaggering soldier Napoléon I. His Second Empire now left France one of the most prosperous, modern, and progressive states in Europe. Rarely in the history of any country does it fall to one head of state to so completely alter the face and future of his civilization, to bring one's country and its infrastructure out of an older traditional century into a thriving modern age. This most unlikely Louis Napoléon Bonaparte was just such a man. <>

[Feast: Food of the Islamic World](#) by Anissa Helou [Ecco, 9780062363039]

Named a most anticipated cookbook of Spring 2018 by Bon Appetit, Food & Wine, Epicurious, Tasting Table, Esquire, Globe & Mail, and Publishers Weekly
"[Helou's] range of knowledge and unparalleled authority make her just the kind of cook you want by your side when baking a Moroccan flatbread, preparing an Indonesian satay and anything else along the way."— Yotam Ottolenghi

A richly colorful and exceptionally varied cookbook of timeless recipes from across the Islamic world
In Feast, award-winning chef Anissa Helou—an authority on the cooking of North Africa, the Mediterranean, and the Middle East—shares her extraordinary range of beloved, time-tested recipes and stories from cuisines throughout the Muslim world.

Helou has lived and traveled widely in this region, from Egypt to Syria, Iran to Indonesia, gathering some of its finest and most flavorful recipes for bread, rice, meats, fish, spices, and sweets. With sweeping knowledge and vision, Helou delves into the enormous variety of dishes associated with Arab, Persian, Mughal (or South Asian), and North African cooking, collecting favorites like biryani or Turkish kebabs along with lesser known specialties such as Zanzibari grilled fish in coconut sauce or Tunisian chickpea soup. Suffused with history, brought to life with stunning photographs, and inflected by Helou's humor, charm, and sophistication, Feast is an indispensable addition to the culinary canon featuring some of the world's most inventive cultures and peoples.

A collection of well-tested celebratory and staple recipes from the Islamic Diaspora.

"Telling a genuine food story that covers a quarter of the world's population is a mighty task if there ever was one. One person who can wrestle with such a challenge is Anissa Helou. Her range of knowledge and unparalleled authority make her just the kind of cook you want by your side when baking a Moroccan flatbread, preparing an Indonesian satay, and tackling anything else along the way." —YOTAM OTTOLENGHI

Excerpt: Islam was born at the beginning of the seventh century in one of the world's harshest climates, in Mecca in Saudi Arabia around the year 610 AD, when the Prophet Muhammad began receiving divine revelations from the angel Gabriel. However, it wasn't until the year 622 AD or 1 AH (after Hijrah, or exile) that the Islamic calendar marks the official start of the religion when, after a dispute with his tribe, the Prophet Muhammad fled Mecca to the city of Yathrib, now known as Medina.

Medina was and still is an oasis in the desert, but though there was water, there wouldn't have been much variety available to the early Muslims in terms of food, and their diet was mainly limited to dates from the palm trees growing in the oasis; meat and dairy from their flocks of sheep, camel, and goat; and bread from grain they either grew or imported in their trade caravans from the fertile countries of the Levant and beyond. The Prophet's favorite meal is said to have been tharid, a composite dish made of layers of dry bread topped with a stew of meat and vegetables, which still exists in one form or another, under different names, throughout the Middle East and North Africa, and even as far as Indonesia, where some curries are served over roti.

The Arabs have always been great traders, from even before the advent of Islam. They controlled lucrative trade routes along the Silk Road, and in the early days of Islam, they spread their religion not only through war conquests but also by peacefully converting the people they traded with. The goods they traded included spices as well as dry ingredients such as rice and legumes, although it is unlikely that they traded any fresh produce given how long the camel caravans took to cross the desert from lands where fruits and vegetables grew in abundance.

Even today the Muslim world whose recipes I have included follows the same arc more or less as that of the conquests during the expansion of Islam: Morocco, Algeria, Tunisia, and Egypt in North Africa, finishing in Afghanistan, Bangladesh, Pakistan, and India in South Asia, and Xinjiang province and Uzbekistan in Central Asia. In between are Lebanon, Syria, Palestine, Jordan, Turkey, and Iran in the Levant; the United Arab Emirates, Oman, Saudi Arabia, and Qatar in the Arabian Gulf. On the fringes are countries where the influences are more diffuse, such as Zanzibar, Somalia, Senegal, Nigeria, Malaysia, and Indonesia, the world's most populous Muslim country.

After the Prophet Muhammad died in 632, the Rashidun (wise guides) established a caliphate, with Medina as its capital, to continue spreading the Prophet's word. They took Islam to the Levant and North Africa to the west and Persia, Afghanistan, and Iraq to the east, but it wasn't until the Ummayads founded their own dynasty (661-750 AD), moving the capital to Damascus in Syria, that Muslims began to live in splendor. They expanded their culinary repertoire because of easy access to more varied produce—part of Syria is desert but much of the country is fertile with the fruit growing around Damascus famous throughout the Middle East and beyond; as are the pistachio and olive groves around Aleppo. The Muslims also acquired new culinary knowledge from the locals they ruled over, which they absorbed into their own cuisine.

The Ummayads established one of the largest empires the world had yet seen, continuing Islamic conquests further west onto the Iberian peninsula, and east into Central Asia to create the fifth-largest contiguous empire ever. However, it wasn't until the Abbasid Caliphate (750-1258 and 1261-1517), when the capital moved to Baghdad, that Muslims started to develop a rich culinary tradition.

The Abbasid caliphs favored Persian chefs—the Persians already had splendid courts and a rich culinary tradition—who brought a whole new culinary knowledge with them, which they then adapted to the taste of their new masters.

Food became an important element of Abbasid culture and, in the tenth century, a scribe named Abu Muhammad ibn Sayyar wrote the first Arab cookbook, Kitab al-Tabikh (The Book of Cooking) for an unnamed patron who may have been Saif al-Dawlah al-Hamdani, a cultivated prince of Aleppo. The book contained a collection of recipes from the court of ninth-century Baghdad. The scribe himself descended from the old Muslim aristocracy and, as such, he was in a good position to faithfully transcribe the court's recipes, which he gleaned from the personal collection of individual caliphs, such as al-Mandi, who died in 785 AD, and al-Mutawakkil, who died in 861 AD, among others.

Many of the dishes that are today typically associated with Arab, Persian, or North African cooking, such as hummus, tabbouleh, kibbeh, baklava, pilaf, or couscous, do not appear in this book. Still, there are dishes from that time such as hariisah (meat and grain "porridge") or qataa'if (pancakes folded over a filling of nuts, fried, and dipped in syrup) that are prepared today even if slightly differently and with different names. The medieval lavish use of herbs continues to this day.

The Abbasids allowed several autonomous caliphates like the Fatimids in the Maghreb and Egypt and the Seljuks in Turkey to prosper, and each developed its own distinct cuisine based on local know-how and ingredients, but all remained rooted in the tradition of Persian cooking. It was also during the reign of the Abbasids that Sufism rose as a mystical trend with a particular emphasis on the kitchen as a place of spiritual development.

The next great Muslim empire was that of the Ottomans (1299-1922/1923) who established Istanbul as the capital; and with them, a new culinary influence was born. Ottoman cooks introduced many innovations and were among the first to quickly adopt New World ingredients.

They took inspiration from the different regional cuisines of the empire, which they refined in the Topkapi Palace kitchens in Istanbul where hundreds of chefs cooked for up to four thousand people. Each group of chefs concentrated on one specialty with some groups, like the sweets-makers, having their own separate kitchens. All the chefs were hired on the basis of one test, which was how well they cooked rice, a simple task but a good indicator of skill. Eventually, the Ottoman palace cuisine filtered to the population during Ramadan events when food from the palace was distributed to the poor, and through the cooking in the yalis of the pashas, which was directly influenced by palace cooking.

The Mughals were the last great Muslim dynasty and, at the height of their reign in the seventeenth century, their empire spread over large parts of the Indian subcontinent and Afghanistan. The Mughal emperors belonged to the Timurid dynasty, direct descendants of both Genghis Khan and Timur. The former in particular was famous for his pitiless conquests, destroying conquered cities such as Damascus and Baghdad, with mass slaughter of the citizens. But the Mughals founded a refined dynasty that owed a debt to Persian culture. This was evident in their art and literature and in their cooking, which they made their own by using local ingredients and techniques, and using an impressive number of spices, which they almost always toasted before use.

The recipes I have included in this book are mostly from countries where these three great culinary traditions have developed. There are more than three hundred recipes, but even with this number, I have had to limit the selection to classics as well as personal favorites. For a comprehensive selection, I would have needed more than one volume. And I have divided the book into chapters concentrating on ingredients or types of food that are essential to the foods of Islam, with the two largest chapters devoted to the two main staples of the Muslim world—bread and rice.

The Date

The date is the most important fruit in Islam. It was important in the early days of Islam and it remains important today, at least in the parts of the Islamic world where it grows, which is mainly the Middle East and North Africa. In many places, the date palm is known as the tree of trees, also known as "the mother and aunt of Arabs," as their lives depended on it. Long before oil riches, dates were the main staple of Gulf Arabs, both in terms of diet and trade (the date palm sap is used to make palm sugar), as well as construction (its wood, although not very hard, is used in building), and they were also Gulf Arabs' main sustenance along

with bread, meat, and milk. Dates were a commodity used to barter with neighboring tribes.

It is not easy to pinpoint the exact origins of the date palm. According to one myth, the tree was first planted in Medina by the descendants of Noah after the Flood. But if not in Medina, then in an equally hot place with plenty of water. As the Arabs say: "The date palm needs its feet in water and its head in the fire of the sky." It is therefore probable that the date palm first appeared in the oases of the Arabian desert. And that is still where most date palms are grown. Saudi Arabia is the second largest grower in the world after Iraq, and the Saudi's coat of arms is a date palm over crossed swords.

The date palm is also grown on the coasts of Africa, in Spain—in the east, a reminder of the time of Muslim rule—in western Asia, and in California. The soldiers of Alexander the Great are said to have introduced it to northern India by spitting the pits from their date ration around the camp, so that, over the course of time, palm groves grew there.

There are three main types of date: soft, hard, and semi-dry. The semi-dry is most popular in the West, commonly sold in long boxes with a plastic stem between the rows of fruit as they do in Tunisia. Soft dates are grown in the Middle East mainly to eat fresh, although they are also dried and compressed into blocks to be used in a range of sweets. As for hard dates, also called camel dates, they are dry and fibrous even when fresh. When dried, they become extremely hard and sweet and keep for years. They remain the staple food of Arab nomads.

The fruit goes through different stages of ripening, with each stage described by an Arabic term that is used universally in all languages. Khalal describes the date when it is full size and has taken on its characteristic color depending on the variety—red or orange for Deglet Noor, dull yellow for Halawi, greenish for Khadrawi, yellow for Zahidi, and rich brown for Medjool. Rutab is the stage at which the fruit softens considerably and becomes darker, and tamr is when it is fully dry and ready for packing.

The date stilt figures prominently in the diet of Gulf Arabs. It is the first food people eat when they break the long day's fast during the month of Ramadan, the tradition being to eat only three, to emulate the Prophet Muhammad who broke his fast with three dates. The date's high sugar content makes it an ideal breakfast after so many hours without any food or water, supplying the necessary rush of energy while being easy on the empty stomach. Some people eat it plain, others dip it in tahini, and others have it with yogurt or cheese, and particularly a homemade curd called yiggit.

The date also features prominently in the Gulf Arabs' regular diet, both in savory and sweet dishes; and date syrup is used to make a drink called jellab, which is sold on the street packed with crushed ice and garnished with pine nuts and golden raisins.

Ramadan and Other Important Occasions in Islam

From the birth of a child to the circumcision of boys to marriage to burying the dead, every occasion in Islam is marked with special dishes that celebrate, commemorate, or comfort, as the case may be.

The month of Ramadan is the most important time of the year for Muslims, a time for fasting and feasting when Muslims throughout the world change their ways to show their devotion to God. No food or drink is allowed to pass their lips from sunrise to sundown, but as soon as the sun sets, people gather with family and friends to break their fast, whether at home or in restaurants and cafés, or simply on the street if they happen to be working and have nowhere to go to break the fast. The menu changes according to where you are. In the Arabian Gulf the fast is first broken with dates and water before moving on to the main meal, known in Arabic as iftar. Then people pray before sitting at the table to partake of their first meal of the day. In the Levant, people break their fast with apricot leather juice, fattoush (a mixed herb and bread salad), and/or lentil soup. In the Maghreb, soup is the first thing people eat after sunset, whereas in Indonesia they break their fast (called buka puasa there) with sweet snacks and drinks known as takjil. During Ramadan, Indonesian restaurants serve their whole menu at each table and charge diners only for the dishes they consume before taking away those that

remain untouched to stack them again in the restaurant window.

Lailat al-Bara'a (the night of innocence), on 15 Sha'ban, is the night of the full moon preceding the beginning of Ramadan, when sins are forgiven and fates are determined for the year ahead and when mosques are illuminated and special sweets are distributed.

The two main feasts in Islam are Eid el-Fitr (the feast of breaking the fast), which celebrates the end of Ramadan, and Eid al-Adha (the feast of the sacrifice), which signals the end of Hajj (Muslim pilgrimage to Mecca) and is the most important festival in Islam. Eid al-Adha is also known as Baqri-Eid (the "Cow Festival") because its most important feature is the sacrifice of an animal in commemoration of the ram sacrificed by Abraham in place of his son. In Muhammad's time, a camel normally would have been sacrificed.

Ashura, which falls on the tenth day of the month of Muharram (which means "forbidden"), is a time of mourning for Shi'ite Muslims to commemorate the massacre of Muhammad's grandson Hussain and his band of followers at Karbala. A perfect place to witness the rituals associated with Ashura is Iran, which is predominantly Shi'ite, as well as South Lebanon, the stronghold of Shi'ite Hezbollah (the oarty of God). Most Shi'ites follow the ancient Persian tradition of nazr (distributing free foods among the people) and cook nazri (charity food) during the month.

Turkey is one of the places to witness the holy nights called kandili: Mevlid Kandili (the birth of Prophet Muhammad), Regaip Kandili (the beginning of the pregnancy of Prophet Muhammad's mother), Miraç Kandili (Prophet Muhammad's ascension into heaven and into the presence of God), Berat Kandili (when the Qur'an was made available to the Muslims in its entirety), and Kadir Gecesi (the Qur'an's first appearance to Prophet Muhammad). The word kandil (from the Arabic kindil) means candle in Turkish, and some trace the application of this word to the five holy nights back in the reign of the Ottoman sultan Selim II (1566-1574) who gave orders to light up the minarets of the mosques for these occasions.

Saints' days are also widely observed in the Muslim world, but the two Eids and the holy nights are the great festivals, and they are the only ones universally observed by all Muslims without any question as to the worthiness of the occasion.

And there are of course the celebrations for important life occasions such as circumcision and marriage, with rich Gulf Arabs roasting whole baby camels for weddings while Moroccans prepare lavish feasts called diffa (hospitality) where pretty much the whole of the Moroccan repertoire is served, starting with b'stilla, a sweet-savory pigeon pie, and finishing with a seven-vegetable couscous to make sure no guest is left hungry. In between are the mechoui (whole roasted lamb), a selection of tagines (both savory and sweet-savory), and salads. Moroccan and Indian weddings last up to three days, although the latter can, in some cases, last up to a week, with biryani, a multilayered rice dish, taking pride of place at the wedding buffet, in particular on the night of the wedding.

I had planned to devote a separate chapter to celebratory dishes, but I feared this would be repetitive, not to mention confusing. Instead, I single out these dishes in the chapters they belong to, explaining in the headnote which special occasion they are associated with. <>

[Planet Funny: How Comedy Took Over Our Culture](#) by Ken Jennings [Scribner, 9781501100581]

From the brilliantly witty and exuberant New York Times bestselling author Ken Jennings, a history of humor—from fart jokes on clay Sumerian tablets all the way up to the latest Twitter gags and Facebook memes—that tells the story of how comedy came to rule the modern world.

For millennia of human history, the future belonged to the strong. To the parent who could kill the most animals with sticks and to the child who could survive the winter or the epidemic. When the Industrial Revolution came, masters of business efficiency prospered instead, and after that we placed our hope in scientific visionaries. Today, in a clear sign of evolution totally sliding off the rails, our most coveted trait is not strength or productivity or even innovation, but being funny. Yes, funniness.

Consider: presidential candidates now have to prepare funny "zingers" for debates. Newspaper headlines and church marquees, once fairly staid affairs, must now be "clever," stuffed with puns and winks. Airline safety tutorials—those terrifying laminated cards about the possibilities of fire, explosion, depressurization, and drowning—have been replaced by joke-filled videos with multimillion-dollar budgets and dance routines.

In Planet Funny, Ken Jennings explores this brave new comedic world and what it means—or doesn't—to be funny in it now. Tracing the evolution of humor from the caveman days to the bawdy middle-class antics of Chaucer to Monty Python's game-changing silliness to the fast-paced meta-humor of The Simpsons, Jennings explains how we built our humor-saturated modern age, where lots of us get our news from comedy shows and a comic figure can even be elected President of the United States purely on showmanship. Entertaining, astounding, and completely head-scratching, Planet Funny is a full taxonomy of what spawned and defines the modern sense of humor.

Excerpt:

A Stranger Here Myself

The world that has been delivered to us now seems to have the goal of packing in as many laughs into every second of the day as possible. "There were more jokes written in one minute on the web today than were written in all of the twentieth century," the Onion's Joe Randazzo has observed, only halfway joking. Once you start noticing it, funny is everywhere—even the tiniest, dumbest places. The last time I waited on the phone for a corporate conference call to begin, the recorded hold music wasn't Vivaldi or smooth jazz; it was a faux-earnest novelty ditty about ... the travails of being placed on hold. "Yes, I'm waiting on this conference call all alone / And I'm on hold, yes I'm on hold ... I hope it's not all day!"* The yoga studio up the street from my house added a laughter yoga class. The corner drugstore has replaced its "Video Surveillance in Use" security notice with a sign that says "Smile! You're on Candid Camera!" The bag of organic dried mangoes sitting on my desk right now has "Tropical Humor!" as a label slogan. Not only has this company decided that the biggest selling point of dried mango snacks is how funny

they are, they've decided to advertise the fact with a confusing pun!

So life is now a never-ending barrage of little micro-jokes, most so fleeting that they don't even register. One thing you don't see much is people wondering if they should make every joke that they can, if there are cases where humor might be pointless or even counterproductive. That kind of introspection usually only happens after a brand makes a joke that it shouldn't have and gets dragged for it online./ Online culture in particular seems to demand an even higher comedy quotient than real life. In 2014 I saw a New York Times story about an experimental new technique to save the life of trauma patients by injecting them with freezing salt water and inducing hypothermia—not a particularly hilarious topic, obviously. The headline in the print edition read, "Killing a Patient to Save His Life." On social media, the headline was, "A Chilling Medical Trial." Funnier! You have to admit, it's funnier.

I am not, generationally speaking, a Comedy Native. I'm an immigrant here. I come from a strange, topsy-turvy time when comedy had already acquired its cool cultural cachet, but—if you can imagine such a thing—there wasn't actually enough of it. We had to hoard what little of it we had on albums and cassettes and videotapes. The very first movie I ever saw on video (Betamax, specifically) was a comedy: Airplane!, at Michael Brewer's birthday party in third grade.* I grew up rewatching the same worn VHS comedy tapes over and over: RaisingArizona, Ferris Bueller's Day Off UHF, David Letterman anniversary specials, Tracey Ullman episodes so we could fast-forward to the Simpsons sketches. I snuck Mad magazine home from friends' houses where it wasn't contraband. I reread Peanuts treasuries until the pages fell out. We weren't allowed to stay up late enough for Saturday Night Live for much of my youth, so my brother and I taped it and watched it the following day after church. (Once, my dad got wind at church that Robin Williams's monologue from the previous night's show had been particularly saucy, and the tape went missing when we got home. It's still the only episode from that season that I've never seen.) The scarcity of comedy meant that we watched or listened to things until

we knew them letter-perfect. To this day, if you need an emergency transcript of anything from This Is Spinal Tap, Monty Python Sings, or the first season of In Living Color, I am your man. To this day, I can't even hear the word "lemonade" without mentally adding Eddie Murphy's brief Elvis impression from his Comedian record: "Lemonade! That cool, refreshing drink!" Sometimes people forget Eddie was a great impressionist.

I was a comedy geek. Not a first-generation one—those would be the kids about ten years older than me with George Carlin records and subscriptions to the National Lampoon. But our parents didn't understand what we were laughing at, so it felt like we were breaking new ground. That was all that mattered.

This is largely hindsight, by the way. I don't remember ever identifying as a comedy geek at the time. Things were on; you watched them. If they were good, you taped them so you could watch them over and over. But being a funny kid was a big part of my identity, almost as far back as I can remember. Bothering grown-ups with riddles, asking them to explain the jokes you still didn't understand. Do you remember? Making an adult genuinely laugh is a huge thrill when you're five or six and nobody really pays much attention to you.

I was the Smart Kid too, but it doesn't take long before reasonably self-aware Smart Kids start to see the ambivalence with which the world regards them, not just peers but adults as well. Funny Kid is a lot less lonely, as identities go. Not everyone can make people laugh, and children figure out pretty quickly who has the knack and egg them on. Not a week goes by when I don't think about Eric R., the kid in my kindergarten class who leaned over to me during the Pledge of Allegiance on the morning of May 19, 1980, and stage-whispered, "Mount St. Helens blew its penis yesterday!" This is still one of the top four or five funniest jokes I've ever heard. As George Carlin pointed out on his Class Clown record, elementary school classrooms are an amazing comedy venue, because "suppressed laughter is the easiest to get." The research bears out my childhood intuition on the benefits of being the Funny Kid. When psychologists ask fourth-graders to rate their class members on humor and popularity ("classroom social distance" is the nicer

way to say this in the literature), the two variables are always closely linked—and the pattern of variances strongly suggests that popularity is predicted by funniness, not the other way around.

If you've met a few grade-school Smart Kids—turned—class clowns, or are one yourself, you won't be surprised to learn that this was also a preemptive measure for me. I wasn't the biggest kid in class or the best soccer player; I was quiet and full of crippling self-doubt. That's not a great trade-off. In that situation, where all might be lost for others, at least the Funny Kid can tell jokes. You joke about your own bad haircut. Your bad skin. Your airball. The clothes your mom thought looked "sharp" at Mervyn's. Tell the joke you fear others might tell about you. It's a vaccination; you might get cowpox but you probably won't die of smallpox. You can also deflect by joking about literally anything else: the girls, the teacher, the bully trying to destroy you. As Harry Shearer once said to Marc Maron, "Comedy is controlling the reason people are laughing at you."

I never went anywhere close to comedy as a profession (see "crippling self-doubt," above) but I was always in its orbit. Nobody was quicker than me to jump into an argument over the worst "Weekend Update" anchor or the most underrated Judd Apatow movie (Kevin Nealon, Walk Hard, duh).* And after I became a professional ex—game show contestant and started to write for a living, I suddenly had a little online venue (blogs, then social media) to post things that cracked me up instead of just annoying my family and friends with them. The Internet is a seductive mistress for would-be comedians: personal enough for lots of strangers to tell you how funny they think you are, but impersonal enough that there's no humiliating silence (or silence-with-a-single-cough) when a joke misses. It's also a great place to buddy up to comedy writers and performers you have long admired, pretending to be one of the cool kids.

On paper, it seems like the modern funnying-up of America would be a golden age for a guy like me. Who doesn't like to laugh? Who would rather sit through an earnest, awkward sex ed class than a funny one? Who wants to go back to a time when if there was nothing funny on any of the three TV

channels, our only options were a Dave Barry book or Caddyshack on video for the fiftieth time?

And yet, even in the midst of this embarrassment of riches, I have my doubts. In recent years, I have often found myself more bemused than delighted to find an endless stream of jokes everywhere I look, from politics to upscale dining to my kids' sex education. And it's made me think seriously about what this change might be doing to our institutions, our social relationships, our very brain chemistry.

Everything is funny now. Shouldn't we be happier?

Giggling Toward Gomorrah

In his 1985 book Amusing Ourselves to Death, Neil Postman worried that the trivialities of mass media were going to be the death knell for American culture. In his view, the West had successfully avoided the authoritarian dystopia of 1984 only to embrace the narcotized "soma" culture of Aldous Huxley's Brave New World. "An Orwellian world is much easier to recognize, and to oppose, than a Huxleyan," he wrote. "Everything in our background has prepared us to know and resist a prison when the gates begin to close around us ... [but] who is prepared to take arms against a sea of amusements?" Postman, presciently describing information overload even before the dawn of the Internet, blamed our plight on a glut of celebrity culture, television commercials, and dumbed-down news. He longed for television that would stay in its lane, sticking harmlessly to "junk entertainment." Couldn't it leave commerce, news, culture, and education alone?

Decades later, we live in the exact culture Postman predicted. (He died in 2003, having seen his worst fears unfold before his eyes.) But even he underestimated the degree to which the thing that would "amuse us to death" would be amusement itself—laughter, comedy. Life is full of p0ssible trivial distractions, but we have increasingly decided to while away our hours with the funny ones. Reality television is often just the dumbest excesses of Postman's celebrity culture, n0w molded into the shape of the classic sitcom. Television commercials once praised products; now that's almost incidental to telling jokes. On the Internet, with all of human knowledge at last available democratically to all, the most popular aggregation sites are usually topped by short-attention-span laughs: viral memes, TV screengrabs, funny animal videos. The smiling mannequins reading news and making light chitchat about it have been replaced, for millions of people, by actual comedians. If you can't get one of those comedy-news jobs—if you quit Saturday Night Live in 1995, for example, because you got passed over for the "Weekend Update" desk—you can still become a United States senator for nine years. If you get dropped from your reality show, but the crowds hoot and holler loudly enough at your campaign antics, you can even be elected president.

We are in uncharted waters here. No one really knows how a comedy-first culture might change comedy or culture. I agreed instinctively with Greg Smallidge's maxim, "Something can be important without being serious," but that doesn't mean that nothing should be taken seriously. I object to the nihilism of that, but I also object to the comedy construction. What would be our benchmark for comparison in a world where everything was funny?

My favorite part of Khlebnikov's "Incantation by Laughter" is the neologism that the translator renders as "laughterhood." It seems to encompass everything about a culture's funniness: not just the voice of its comedy, but its social clusters and media and genres and fan bases, its techniques and tr0pes, its lineage and influence. We don't really have a word like that in English. But even when they don't know what to call it, groups always have a laughterhood. Families have one, offices have one, online communities have one, ethnic groups have one. Zoom out and civilizations have one.

This book is an attempt to capture something ineffable: the comic mood of a moment. Today's jokes aren't just ubiquitous; they're also a new breed: faster, weirder, more complex, more self-aware than ever before. How did we get here? How is the new sensibility changing our laughterhood? How is it changing us? It seems to me that these are questions worth asking because we're not living through just any comic moment, subject to the usual shifting winds of fashion and circumstance. After a century of rising comedy

saturation, our present society feels more like a culmination. In the same way that ecological doomsayers predict "peak oil," a point beyond which decline is inevitable, it may be that we are fast approaching "peak funny," the singularity of our current dizzying spiral toward never-ending hilarity. There's something foreboding about all the funny buildings and desserts, the fifty new Twitter jokes per minute on my phone. Don't get me wrong, I'm still laughing, but it feels unsustainable, the same way tourists often feel amid the splendid excess of someplace like Vegas or Dubai. This can't go on, right?

When someone's telling a joke, you can usually sense when the punch line is coming. <>

[Performing Arts as High-Impact Practice](#) edited by Michelle Hayford, Susan Kattwinkel [The Arts in Higher Education Palgrave Macmillan, 9783319729435]

This book investigates how the performing arts in higher education nationally contribute to the "high impact practices," as identified by the Association of American Colleges and Universities (AACU). Using the well-known map of the HIPs for illustrating the centrality of performing arts practices in higher education, the editors and authors of this volume call for increased participation by performing arts programs in general education and campus initiatives, with specific case studies as a guide. Performing arts contribute to the efforts of their institution in delivering a strong liberal arts education that uniquely serves students to meet the careers of the future. This is the first book to explicitly link the performing arts to the HIPs, and will result in the implementation of best practices to better meet the educational needs of students. At stake is the viability of performing arts programs to continue to serve students in their pursuit of a liberal arts education.

Excerpt:

From Plato to LEAP: How The Arts are Still Being Left Out of the Conversation

Ever since Plato denied art's ability to convey truth, and Immanuel Kant decided that anything aesthetic cannot be considered rationally, the arts have suffered from a crisis of legitimacy in higher education. Rehabilitating the role of the arts in liberal education has been an ongoing project, and one that is presently urgent. Kevin Moll questions how selected art forms could ever have been removed from the "Great Books" movement in Prolegomena to Any Future Great Books of Music: Reconsidering Liberal-Arts Paradigms in a Postmodern Age:

> [I]f we are prepared to concede (as many educators evidently are unwilling to do) that some sort of liberal-arts paradigm might be worth perpetuating within our sec0ndary and tertiary curricula, then the content of that program must be broadened to include the study of substantial contributions to the visual and sounding arts, as well as theatre, dance, and cinema. The essential point here is that a grounding in the fine arts must constitute an integral part of any curricular program that calls itself "liberal." Indeed, those disciplines should never have been allowed to become marginalized through the presumptive view expressed by a single body of educationalists, namely, that such fields of endeavor do not participate sufficiently in its Platonic constellation of "great ideas"—

notwithstanding the specious aura of objectivity by which that claim was derived.

The editors of the Great Books collections, which were first published in 1952 and are touted as the foundation of a liberal education, are indicted here for promoting their narrow view of "great ideas" that made the cut in the "Great Books" series. That the performing arts can be so sweepingly discredited is not new, but the scorn the liberal arts are facing today holds the academy responsible in new ways that are affecting operating budgets, program cuts, elimination of majors, and threats to all disciplines considered impractical in times of economic hardship. The wars over what constitutes a liberal arts education are not over, as Moll conveys:

> At this time, it is inconceivable that any single paradigm of liberal studies could be proposed that would be acceptable universally. We may even be reaching the end of the era in which it is acceptable at all. If the liberal arts are to survive in our postmodern—globalist—relativist intellectual milieu, and in the face of the utilitarian preoccupation with preprofessional majors that now prevails, it must be the task of faculty at each individual institution to develop a vision of what such an education is to be. And that is the way it seems to be working out at the college level, with a wide range of schemes being implemented. In any case, I believe it is a categorical imperative that the option of pursuing a broad-based agenda of study centered on the humanities be retained in our curricula of higher education, and that the fine arts should comprise an integral component of any such program.

It is precisely Moll's observation of the various visions of liberal arts being played out at each institution that compels us to publish this book. Each of us at our own institution will play a vital role in determining how the performing arts are, or are not, included in the vision of the liberal arts. We would like to take for granted that our colleagues in all disciplines have come around to understand what Bennett Reimer calls "the special cognitive status of the arts and the authentic, essential ways they involve people in intelligent, reasoned, mindful

experiences that yield a powerful form of knowledge of their outer and inner worlds."24 But economic crises have taken their toll, legislatures have utilized their power to dictate scarcity, and threatened colleagues can take on a less enlightened view when faced with cuts to their own programs and agendas. We cannot put our guard down, and need to remind administrators at every turn why the performing arts are foundational to a liberal arts education.

The arts in general, and the performing arts in particular, are rarely included in discussions of efficacious pedagogies or skills necessary for a well-rounded education. This despite the wide-spread calls from business leaders for higher education graduates with skills that would be considered more central to the arts than any other discipline. In 2012, David Oxtoby published the article "The Place of the Arts in a Liberal Education" about the AAC&U's Liberal Education and America's Promise (LEAP) initiative in Liberal Education. He noted that "`Study' of the arts is mentioned in LEAP rubrics, but not creation or performance; `teamwork' is another LEAP outcome, but it appears as a generic goal that one could apply not only to a group of students performing a play or ensemble music, but also to everything from group classroom presentations to laboratory work. The rest of the LEAP initiative barely connects to the arts." The LEAP initiative has not addressed this lacuna in the intervening years. Although one of the LEAP Essential Learning Outcomes is Critical and Creative Thinking, the VALUE rubric on Creative Thinking doesn't emphasize doing art. The introduction notes that "[c]reative

thinking in higher education can only be expressed productively within a particular domain. The student must have a strong foundation in the strategies and skills of the domain in order to make connections and synthesize." This statement implies that creativity must be disciplinary and not attempted until a student has acquired an intellectual understanding of creation within the discipline. That goes against prevailing views of creativity that insist creativity in the arts can be introduced without a foundation, unlike in the sciences. It also seems to suggest that creative thinking cannot arise out of

interdisciplinary work, and must be a destination rather than an investigative process.

The AAC&U's most recent strategic plan states: "Science and the other STEM fields are important to Americans' global future. But rich learning about history, diverse cultures, languages and literatures, the creative and performing arts, philosophical traditions, religions, and political systems is equally fundamental to Americans' global future and success." Once again, this includes the arts as a subject of study, not as a practice. Similarly, the 2015 AAC&U survey of CAOs on trends in general education lists learning outcomes that address skills and knowledge, none of which include creativity skills. The list of skills they asked about includes public speaking, but no other skill explicitly involving creating thinking. When so many institutions are paying attention to calls from American businesses for graduates with creative and innovation skills, why were those learning outcomes not included in the survey of CAOs? One explanation may be that the AAC&U, like many institutions of higher education and individual academics, still conceive of the arts as a subset of the humanities, with the same practices and occasional innovative forms of scholarship. In a letter to the authors, responding to questions about the place of the arts in AAC&U studies and projects, President Lynn Pasquerella wrote, "I am convinced that the future of the humanities, including the arts, lies in the cultivation of humanities practice, both in traditional and innovative ways." She lauded artists who engage humanistic questions and others "whose work makes a connection between humanities questions and endeavors and the products of cultural expression." Referring to the age-old criticism of the humanities as a pursuit for the elite, Pasquerella warned that public institutions of higher education—the schools that serve the broadest range of the population—will have to increase their public practice and "be a visible force in the lives of the broadest possible segments of society" President Pasquerella's references to "practice" are welcome, because it is through practice—both pedagogical and public—that the performing arts have the most to offer the academy.

In terms of pedagogical and research practice, the performing arts have about as much in common with the humanities as the sciences do. The arts in general, and the performing arts in particular, approach research and pedagogy in fundamentally different ways from the traditional humanities. Certainly there is humanities-style pedagogy and research in the performing arts, where we investigate human endeavors and artifacts in traditional formats and publish our research for narrow audiences of fellow scholars. But in our classrooms it is far more common to see embodied pedagogy that incorporates subjective response, and the publication of our research most often takes the form of public performance in front of live audiences made up of non-expert fellow citizens. Because the very basis of our work is the interaction of human bodies and ideas, our teaching and research is, and has always been, public practice.

The public nature of our teaching and research is not only about format, but also intention. Although arts practice may be seen inside higher education as a merely aesthetic examination of humanistic questions, the arts, and performing arts in particular, have always had direct interaction with and impact on, the wider society. Even at its most conservative and traditional, performing arts research has always been presented to the public with the purpose of changing society for the better. This goal has become even more focused in the last half century with the rise of the arts as civic practice, in which artists take their skills into the community in order to facilitate the civic-minded work of public partners. The work of artists, often trained and working in institutions of higher education, having a direct impact on civic life, can be found in the writing and practice of Augusto Boal (theatre), Liz Lerman (dance), and Brynjulf Stige (music), to name only a few examples. Current activity of artists in public practice can be found by looking at the web pages of professional organizations such as The Center for Performance and Civic Practice, as well as in the wide range of literature on arts therapies. However, institutions of higher education have been slower to catch on to this shift to more direct civic engagement in the arts. But the number of degree programs that focus on art in public practice is growing every year, and

relevant courses are appearing in traditional studio-oriented programs at an even higher rate. We are ahead of the curve in being "a visible force in the lives of the broadest possible segments of society." But it is incumbent upon performing arts departments to cultivate such work by acquiring the professional development to teach and model ethical creative collaborations in communities, and to share our methodologies and long history of public service with our institutions.

Fortunately, there has been some progress in the recognition of the arts as both important subject matter and relevant practice. In 2015, the AAC&U added "knowledge of the arts" to the list of "knowledge areas" addressed by learning outcomes in a survey of higher education administrators. In the previous survey, conducted in 2008, institutions were not asked about the arts. Clearly the addition was needed, because in the 2015 survey, 85% of institutions reporting a common set of learning outcomes for all students claimed to have learning outcomes addressing "knowledge of the arts," placing the arts in the middle of all subject areas listed.33 Also, the new approach to general education being championed by AAC&U includes experiential education that is "[r]equired, sustained, assessed," and calls for expanding HIPS so that they are "required, sustained, included in all general education pathways," directions that provide an open door for the performing arts to take a central role in general education.

These signs of progress, set against the continued bias against the arts and the lack of knowledge about the real-world applications of our work, are just some of the reasons why departments of performing arts must assert ourselves in HIPS. The conflation of the arts with the humanities will be dangerous for the arts as attacks on the humanities increase and as each discipline must justify its continued existence in the university setting. The performing arts are not simply humanities disciplines with fun forms of scholarship and unique ways of considering human activity. The performing arts have long-established relationships with the community outside the university, and time-tested pedagogies that are uniquely suited for training students for the growing creative economy. We

must learn to articulate our research goals, showcase our successes in impacting society, and demonstrate the power of our pedagogies. We must show institutions and organizations of higher education that we have unique skills and structures that are vital to the future of higher education.

The arts in general exist in a perilous place within higher education. While some administrators and faculty may see them as traditional liberal arts and sciences educational disciplines, others see them as living outside that tradition. While that outsider status may work well for disciplines such as business, education, architecture, or engineering, all of which often occupy central locations in undergraduate institutions, the performing arts do not share those disciplines' enjoyment of acceptance and value by society at large. Schools of the above-mentioned disciplines may continue to co-exist happily in institutions with new general education programs, benefitting from the well-rounded educations their majors are achieving and justifying their continued existence through public support, but performing arts disciplines (despite the evidence that our graduates succeed, thrive, and are content post-graduation)35 may find themselves having an even more difficult time justifying faculty lines and attracting students if we do not find our way into skills-based general education programs and HIPS.

It is incumbent on performing arts departments to take action by involving themselves directly in general education initiatives and by putting forward their pedagogies and programs as models of HIP best practices. We need to assert the relevance of the performing arts to the AAC&U HIPs, widely recognized as the gold standard for college campuses nationwide for the following urgent reasons: (1) to advocate for the performing arts as a thriving contributor to the goals of liberal arts education; (2) to encourage performing arts departments to participate as fully as possible within the realm of general education and to provide models to help them increase that participation; and (3) to ensure the attendant creative capacity and cultural literacy attained by students via their explorations in the performing arts, regardless of major.

A Call to Action

This book is a call to action. There is a call to action in each chapter regarding implementing the respective HIPs at your institution. The call to action is for higher education administrators and organizations to include the performing arts in their considerations of the HIPs in general education and learning outcomes. It is a call to performing arts departments, programs, and faculty to advocate for themselves as valuable contributors to HIPS, general education, and the learning outcomes desired for all college students. And it is a call to performing arts faculty to use the HIPs with their own majors in intentional ways, to better prepare them for life after college. All of these groups can benefit from the vast amount of literature that exists on HIPS, and from the ongoing theorization and research being done by the AAC&U and other organizations working to improve higher education. One specific tool that may be helpful is the AAC&U "High-Impact Practices for Administrators Tool." Administrators and performing arts faculty need to make sure that the performing arts are included in all areas possible, and reach out to inquire into how they can contribute both to the HIPs as they are practiced on our campuses and to general education reforms as they are instituted.

This call to action comes at a precarious time for the liberal arts, but it could be a particularly fortuitous time for the performing arts. In times of crises, there is an opportunity to better position ourselves in the shakeup. Many colleges and universities are taking inventory, and determining that radical change needs to occur within general education, student learning outcomes, and assessment. The performing arts can put our best foot forward into the fray and make the case for the centrality of our disciplines in delivering the most prized educational practices. In his provocatively titled article Strategy for American Humanities: Blow Them Up and Start Again, Toby Miller argues for all the disciplines in the humanities to integrate vocational training into curriculum. The performing arts are ahead of this message: we already integrate professional practice into our disciplines, and we only need to be more intentional about the delivery and messaging of this merge. We also need to be explicit about how the performing arts align with institutional mission. The

revision of general education is a prime time to make this alignment clear, and to seize the resultant broader student exposure and engagement.

Too often, performing arts departments leave ourselves out of the conversation. The arts have historically been discounted as frivolous so their skills have been ignored, and some arts faculty prefer to be left alone, accustomed to, and finding comfort in, the isolation. Furthermore, during times of prosperity some arts educators have prioritized educating professional artists, and there is the impression that using our skills in the business world or in communities for civic practice is demeaning the art. Sometimes arts programs are resistant to participating in general education and want only to be training future artists. When asked to perform at VIP university events, yet wounded in territorial curriculum wars, arts faculty are understandably wary of being perceived as service-only departments without intrinsic disciplinary merit. But we cannot retreat our way out of this predicament. We must be our own champions until conceptions of the liberal arts promote the performing arts as self-evident to a comprehensive education.

What follows are ten chapters, one for each HIP, that contain an introductory review of the literature and research and case studies demonstrating the ways in which the performing arts contribute to the particular HIP in question throughout colleges and universities nationally, and internationally (in a couple of cases). Chapter 2 looks at First-Year Seminars and Experiences, and common First-Year Experience learning outcomes and how they line up with common performing arts learning outcomes, necessitating greater participation by performing arts faculty. Chapter 3 is about Common Intellectual Experiences, and discusses how the performing arts are finding their way into general education curricula and experiences. Chapter 4 is on Learning Communities, and examines how performing arts pedagogies enrich those of other disciplines. The performing arts can add embodiment and practice to any discipline, and the combination is beneficial in a transdisciplinary integration. Writing Intensive Courses are the subject of Chapter 5, which explores how we teach creativity. Why are students of all majors not encouraged to take courses that teach writing in

artistic forms in (partial) fulfillment of their writing-intensive course requirements?

Chapter 6 is about Collaborative Assignments and Projects and describes how these projects are at the heart of what the performing arts do all the time—and promote the same skills being pushed so much in contemporary higher education. Although the humanities feel excluded by the new emphasis on skills, performing arts programs should not. We already teach team building and communication skills. Undergraduate Research is the subject of Chapter 7, which advocates that our students involved in creative scholarship need to be acknowledged for their contributions to the institution's research profile. This is important for equity reasons, as the perception of what "counts" as undergraduate research relates to the distribution of grant funds, visibility, and overall support on campuses. The HIP of Diversity/Global Learning is discussed in Chapter 8, which details how performing artists wrestle with issues of diversity and global learning constantly, from the historical context of creative works, to casting, to presentation, and beyond. How are the performing arts poised to engage students in self-reflexivity and increase their cultural competence? Chapter 9 covers Service Learning and Community-Based Learning in the performing arts and details how students engage with communities in numerous ways during their undergraduate years. With the rise of applied performing arts companies and the increasing visibility of applied performing arts practices, academic performing arts programs are beginning to embrace service and community-based learning with community and non-profit partners in the social service sector. Chapter 10 is about Internships in the performing arts as practical and experiential learning that leads to viable career paths. Finally, Chapter 11 looks at Capstone Courses and Projects and considers how we are preparing our performing arts majors as they near graduation. How do we build capstone outcomes into courses throughout a student's matriculation, so that they can demonstrate longitudinal progress in their learning? Taken together, the case studies presented in each chapter point the way toward a full integration of the performing arts in our students' liberal education, and answer our urgent call with

innovations that articulate the performing arts as high-impact educational practices. <>

[The Oxford Handbook of Algorithmic Music](#) edited by Alex Mclean and Roger T. Dean [Oxford Handbooks, Oxford University Press, 9783211999158]

With the ongoing development of algorithmic composition programs and communities of practice expanding, algorithmic music faces a turning point. Joining dozens of emerging and established scholars alongside leading practitioners in the field, chapters in this Handbook both describe the state of algorithmic composition and also set the agenda for critical research on and analysis of algorithmic music. Organized into four sections, chapters explore the music's history, utility, community, politics, and potential for mass consumption. Contributors address such issues as the role of algorithms as co-performers, live coding practices, and discussions of the algorithmic culture as it currently exists and what it can potentially contribute society, education, and ecommerce. Chapters engage particularly with post-human perspectives - what new musics are now being found through algorithmic means which humans could not otherwise have made - and, in reciprocation, how algorithmic music is being assimilated back into human culture and what meanings it subsequently takes. Blending technical, artistic, cultural, and scientific viewpoints, this Handbook positions algorithmic music making as an essentially human activity.

CONTENTS

Excerpt:

Musical Algorithms as Tools, Languages, and Partners

In this chapter we introduce the landscape of algorithmic music, and point to some of its burning issues and future possibilities. We also use the chapter to provide some guidance as to how we have organized the book, and where major topics are discussed: we summarize the structure in the next paragraph, and comments on individual articles in the book are made throughout this chapter. The book has been arranged to provide contrasting views on core topics, on the one hand, from theorists and analysts and, on the other, from practitioners. Happily for us, in many cases our authors pursue both types of involvement. But we have asked another group of authors (who contribute the Perspectives on Practice chapters) to foreground their own thoughts about algorith¬mic music and how they make it. At the same time, we have encouraged all authors too give specific musical examples of what they discuss, and to feel free to mention their own work.

Our volume brings together a diverse range of authors to explore algorithmic music in the large. We engage with meta- and post-human perspectives—pointing to the question of what new musics are now being found through algorithmic means which humans could not otherwise have made. In reciprocation with this, we also explore

cultural aspects—how is algorithmic music being assimilated back into human culture, and what is its social function or meaning? Over the chapters we will gradually widen our scope, first grounding the topic and introducing its terms by exploring its artefacts, philosophies, and histories. We then survey the range (so far!) of technical approaches to composing algorithmic music, and the metaphors used that seek to install those approaches in human understanding. Then practical aspects are explored in some depth: the role of the algorithm as co-performer, and in supporting musical coordination between human performers. Finally, we explore wider cultural aspects, such as the role of algorithmic music in society, education, and commerce.

Perspectives on Practice sections (PoPs) are interspersed throughout the book as short interjections outside the main flow. But they provide prime value to the reader, connecting issues in the text with direct reflections on musical activity. PoPs provide introspection by authors on their own practice, as opposed to introductions to and analysis of the field provided by the other chapters. Authorship of chapters and PoPs divides roughly along the lines of researchers and practitioners, but not strictly; we include some practitioners who are independent researchers amongst chapter authors, and invite some respected researchers to reflect upon their practice. We have included ourselves amongst the PoPs in the form of a joint article at the end of the book: amongst other things, this serves to indicate why we came together to catalyse this volume (supported by the encouragement and enthusiasm of our OUP editor, Norm Hirschy).

This brief introduction may seem quite episodic, even sometimes temporarily taking surprising directions. But we hope it will sensitize readers to the wide range of topics to be addressed, and that after reading the book they will be left with practical understanding both of how algorithmic music is made and of what makes this activity musical.

Background

An algorithm, essentially, is a finite sequence or structure of instructions, and we will elaborate on this terminologically in the next section. We note

here that our emphasis is on algorithmic music-making, and on primarily digital computational approaches. The histories of manual and analog algorithms (mainly addressed in this chapter and by Collins in chapter 4), include experimental process music, from the 1960s in particular (by Brecht, Wolff, Glass, Stockhausen, and others), in which a piece was constructed from a precise or vague process description. But they also include musical and musicological theory (from Ancient Greece to Hiller, Ligeti, Xenakis, and beyond) and its algorithmic embodiments, including musical style modelling (Cope, Ebcioglu, and onwards).

Leigh Landy has elaborated the often useful distinction between note-based and sound-based musics (Landy 2009). Note-based music involves a conception of discrete sequences of events, largely capable of being described in symbols (such as score notation), and most usually characterized in part by pitches: such music permits tonal, harmonic, and rhythmic hierarchies. On the other hand, sound-based music puts more emphasis on the spectral content of sounds, which may be slowly transforming, with relatively fewer discrete events and little emphasis on pitch (and usually no spectral hierarchy, but rather in-depth spectral organization). Sound-based music may also depend

less on rhythmic pattern than note-based. Using this framework, we can summarize by saying that the book deals primarily with the process of creating tonal, post-tonal and sound-based music, and any other forms of music in which innovative and individual works can result from algorithmic approaches. We do not seek to provide anything more than pointers to the major algorithmic composers of the period up to about 1990, since our emphasis is on process, methods, ideas, and developments. We put little focus on work directed towards recreating earlier styles. Similarly, we try to distinguish music which is mainly an overt fulfilment of the algorithm (which might be primarily of academic interest) from that which can be musically creative.

Gerhard Nierhaus in Algorithmic Composition: Paradigms of Automated Music Generation [Springer, 9783211999158] mentions these issues,

and considers that most approaches he discerns are primarily about algorithmic `imitation. He covers substantially this imitative or recreative aspect and aspects concerning practical procedures. So we resurvey these aspects relatively briefly but adequately, and with a different perspective: essentially, whether and how any particular algorithmic approach might provide a path to music which is really new.

A related general question within or behind several chapters is: has there been any evaluation of the algorithm and of its products? We argue this needs to be done both by non-experts and by expert musicians, and that the field at large could usefully study features present in both the most and the least favourably evaluated works. This relates to the question of the relevance of algorithmic generation methods to perception and cognition, and the argument that syntax is either not a relevant concept in much music or it is a consistency created perhaps transiently, and in any case locally to a work.

We are now well placed in the development of algorithmic music to build upon the technical and evaluative issues to discuss cultural issues. There are a great many subcultures supporting the development of algorithmic music in diverse situations, from the close rituals of performance to the mass-market activity of smartphone and tablet `apps: We therefore round off the book with a section rich with viewpoints on the social function and cultural value of algorithmic music; where we use algorithms to reach for the post-human, how do cultures grow and adjust to bring the music back into the human realm?

Terminology and Current Usage

Defining a term such as algorithmic music is not straightforward. For one thing, it includes the word music, which stands for an unfathomable diversity of approaches, cultures, techniques, forms, and activities. Alone, the word algorithm can be understood as a well-defined set of operations or rules, but this definition is not of great use in understanding algorithmic music. This is because the range of structures which can be considered algorithmic is extremely broad, encompassing all computer programs (or according to some definitions, all computer programs which eventually

terminate), and perhaps even all musical scores. Indeed, we could say that all music making involves exploration of rules or procedures, applied, made, or broken. Taken together, though, the words `algorithmic music' stand for a rich field of activity, defined by the urge to explore and/or extend musical thinking through formalized abstractions. In the process of making music as (or if you prefer, via) algorithms, we express music through formal systems of notation, taking a view of music as the higher order interplay of ideas.

Over the past few decades, algorithmic music communities have formed around a number of continuing approaches, which we can arrange according to the relationship between human and algorithm. At one extreme lies the claim of the independently intelligent algorithm, in the form of computational agents which are deemed to be creative (see chapter 15 by Wiggins and Forth, for example). At the other extreme, algorithms are treated more like musical notations, which humans work with and adapt as vehicles for their own creativity. In music, the field of live algorithms (see chapter 13 by Eldridge and Bown) is situated towards the former extreme, and that of live coding (cf. chapter 16 by Roberts and Wakefield) towards the latter. The independence of live algorithms allows them to be presented as non-human musicians, often as co-performers which incorporate machine listening in order to respond to human musicians, in live interaction. On the other hand, the live coding tradition does not give an algorithm such agency, but foregrounds the human authorship of algorithms as the fundamental musical activity at play. In live coding, the algorithm may run deterministically, but this determinism is broken through live modifications by the human musician, who shapes the music through modifications to its code.

What the current traditions of live algorithms and live coding have in common is an emphasis on musical improvisation. However, it is important to note that algorithmic music practice extends far beyond improvisation and the performance of music. Indeed, throughout the early development of algorithmic music, real-time digital synthesis was challenging or even impossible, due to the lack of processing power in early computers. Accordingly,

the algorithmic music heritage lies very much in music composition. Composers are often less visible than performers and improvisers, but we should bear in mind that the majority of algorithmic music making takes place in private. Indeed, algorithmic composition allows us to work with abstractions of musical time while not being subjected to the very real constraints imposed by a listening audience. So we recognize here that a core aim of many algorithmic composers is to produce works which are fixed and reproducible, but which may sometimes reach beyond the human imagination.

Chapter 34 by Levtov in this volume introduces alternative terminology from the perspective of an end-user who has purchased, or otherwise acquired, a musical algorithm to enjoy. In particular, he distinguishes between generative algorithmic music, which runs without user input; reactive algorithmic music, which responds to environmental input; and interactive algorithmic music, which end-users interact with directly to influence the music. In these terms, live coding and live algorithms are both interactive uses of algorithms in music performance, while generative and reactive forms are generally listened to in a similar way to recorded music.

A recurring theme through several of the following chapters is of the affordance of algorithms. This again relates to the relationship between an algorithm and its user, and the opportunities for action that the algorithm suggests or even provides. For example, affordance is core to chapter 12 by Fiebrink and Caramiaux on machine-learning algorithms, where their consideration of the musical activities suggested by machine-learning algorithms gives a practical perspective on algorithm design. Exploring the design of algorithms as a form of user interface in this way is a radical departure from the more standard purist conception of machine learning.

Issues of computational creativity and of audience perception of the source of musical ideas in a piece are discussed in some depth throughout the book. And the sociological and educational contexts in which algorithmic music is considered, for itself or incidentally, are also evaluated in the book: a diversity of attitudes continues to be present.

Origins

Ideas about what we now call `algorithms' can be found at least as early as 900 AD, and in many different cultures, from Arabic and Greek to Indian. Clearly the word has relationships to algebra, and there is a sense in which a contemporary piece of algorithmic music has access to the whole codification of mathematics, as well as programming languages. Gerhard Nierhaus in Algorithmic Composition: Paradigms of Automated Music Generation [Springer, 9783211999158] has again provided many useful perspectives on these technical aspects and their application.

We set the stage of algorithmic music with this chapter. There is then a fascinating description (Collins, chapter 4) of a series of machines that link the early ideas to contemporary algorithmic thought, by way of a range of automata. One of the striking things discussed in that chapter is an analysis by Riley of the eighteenth and nineteenth-century `overestimation' of the novelty of automata, notably musical ones (Riley 2009). It seems that automata have been treated in some cultures and periods with a kind of reverence, in others with the demonization we tend to associate with Frankenstein's monster, and in yet others with virtual indifference. Nevertheless, in the early days of computing in the middle 1950s, toy computers such as the Geniac were sold (as the name suggests) as almost magical machines capable of making music, however simple they really were musically, or in retrospect. Even when the Geniac's producers parted company amicably, one went on to make a similar machine sold as the Brainiac. Edwards (2011) puts this machine nicely into con¬text in his article on the development of algorithmic music. Collins points out in his chapter the salutary concern that we may still be prone to aggrandize the potential of algorithmic music.

Most of the chapters in the book take off where Collins leaves the history, and elaborate on personal compositional and communal research trends. One aspect that is worth flagging here, also mentioned by Simoni (chapter 30), is that many works that will be discussed are not necessarily or generally appreciated as being algorithmic. This, counterbalancing the risk of exaggerating the influence of algorithmic thinking in music, points out

that in some respects we may tend to underestimate it.

Early Algorithmic Music

We had intended that a chapter (to come immediately after this introduction) be devoted to introducing and discussing some `canonical' algorithmic music, such as Hiller's work, some minimal music of Reich, and some music by Ligeti; however, contractual difficulties precluded this. Consequently, we offer a brief general summary here, to link Collins's chapter to the more contemporary aspects of algorithmic music, reflected both in the personal PoP sections and in the research discussion chapters. Note again that the book is not intended to catalogue composers/improvisers and their musical outputs, but to address the context of ideas, processes, and developments. Indeed, reflection on this earlier idea of a `canon' of algorithmic music made us question whether we are yet in a position to delineate such a canon, and even whether the idea itself is relevant. For example, the diffusion or, more importantly, understanding and analysis of algorithmic music from Africa is slight. Similarly, the role of women in algorithmic music is certainly underestimated, under researched, and possibly also under developed, an issue raised in Simoni's chapter in the preceding Oxford Handbook of Computer Music. As an example, consider some of the fascinating electronic and electroacoustic work by Daphne Oram or Éliane Radigue: we know all too little of their use of algorithmic processes at present.

Several authors, including Collins, point out that there is an extremely long history attached to algorithmic music. Probably the earliest parts of this used algorithms which terminated (that is, that were fulfilled): if there was a goal, it could be achieved. Here we want to link this via the practices of the 1950s on to the present. The idea of an algorithm which can terminate remained relevant in some parts of the 196os' artistic turmoil (Banes 1993), as in some of the `process' works, found in music, dance, theatre, and text writing. Consider George Brecht, several of whose texts describing algorithms for (sound) events are entirely feasible, if sometimes exceedingly long. For example, his Drip Music (for single or multiple performance) requires

that 'A source of dripping water and an empty vessel are arranged so that the water falls into the vessel: A single performance with a finite source would clearly terminate; multiple performances or a performance with a natural source might continue to infinity. Likewise, Jackson Mac Low, a key interface between sound and text, has produced many significant text works using such algorithmic processes, and also provided process scores for music performers. Several of his diastics are intended for improvisatory interpretation by both musicians and text performers, usually with finite duration. Similarly, LaMonte Young's X for Henry Flynt is a piece whose process is simple to initiate, but which may proceed for a finite time or essentially to infinity: a chosen event is to be repeated x times.

This raises the contrast between those composers who wished to initiate a process with no explicit termination condition and those expecting completion of their process. Stockhausen's Setz die Segel zur Sonn (Set sail for the sun) is a text composition amongst the set Aus den sieben Tagen (From the seven days): each musician is instructed to play 'a tone for s0 long until you hear its individual vibrations', and then after listening to the others, `slowly move your tone' until there is `complete harmony' and all the sounds become `pure, gently shimmering fire'. It is difficult to achieve this. Compare this with the procedures of Xenakis, whose computational algorithmic control of elements or complete works was more pragmatic, open to termination, and applicable to the generation of both electroacoustic music in the studio and scores for instrumental perform¬ers (Harley 2004; Xenakis 1971). On the other hand, Xenakis also routinely transformed some aspects of the outputs of his algorithms, both in the electroacoustic and instrumental domain, while still intending that their product be finite in duration.

Minimal music from the 196os onwards, in the sense of the rhythmically repetitive work of Reich, Glass, Riley, and others, is normally clearly algorithmic, though mostly manually composed and often providing a process whose completion can be identi¬fied: for example, the progressive deviation and final return of two patterns which start in unison, progressively deviate, and finally return to the original state (as in Clapping Music, Piano Phase). Similarly, from the pioneering works of US algorithmic music by Hiller, through those involving Laurie Spiegel, Max Mathews, James Tenney, and Larry Polansky, there were often clear target states which terminated each algorithmic section. Particularly also where improvisers were involved, as sometimes with Spiegel, there were mechanisms for them to initiate an almost Schenkerian `prolongation' of the algorithm and process. Later, postminimalist ideas (such as those of William Duckworth) extended the range of applications of minimalist procedures, for example transforming pitch structures rather more, and they have often been used computationally in more recent times. Ligeti, on the other hand, without using a computer, employed particularly rigorous algorithmic procedures on the pitch and rhythmic structures in some of his instrumental works, such as Continuum for harpsichord (1968) and Désordre for piano (1985), permitting complex rhythmic juxtapositions and transformations. Michael Edwards provides an appealing and accessible introduction to the ideas of algorithmic music through the past, the works of Xenakis and Ligeti, and the computational approaches of Hiller, Koenig, and later composers.

Much of the music mentioned so far has been intended for performance by instrumentalists (and vocalists in the case of Jackson Mac Low and some others). Some was still note-based, but exploited synthetic sounds. Xenakis is probably the central figure in triggering the application of algorithmic processes to sound-based music, through the painstaking work in his crucial body of electro-acoustic works (Hoffmann 2002), and through the rigorous yet metaphoric and stimulating expositions in his book Formalized Music (Xenakis 1971). Most subsequent algorithmic musicians recognize a significant debt to him, and his work has been duly assessed in depth in several previous books.

After Xenakis, we should mention the US League of Automatic Composers, and their outgrowths such as the network ensemble The Hub, and Voyager, George Lewis's fascinating co-improviser set of algorithms. One of the key ideas of the Hub was that their sonic material (and sometimes musical process per se) should be passed around their networked computers, sometimes emerging as a

more complex shared process (Brown, Bischoff, and Perkis 1996). Lewis, on the other hand, was primarily concerned with his Voyager software as a partner for improvisers, single or multiple (Lewis 2009). Lewis

foregrounded what we would now call `machine listening', and the use by the algorithms of the attended information, and these topics emerge continually in the present book. Lewis himself also provides some typically sophisticated and challenging perspectives in his contribution here (chapter 9).

Issues in Algorithmic Music

Throughout the book, there is discussion of the utility of algorithmic processes both for offline composition (as mentioned, by this we mean composition in private) and for live performance (with an audience, in public). Amongst the key issues that unite these two aspects are: (1) what benefit the algorithm, especially when computational (deterministic or stochastic), provides to the music creator; (2) whether the algorithm can become a genuine partner in the creative process; (3) whether it can make contributions which are equivalent in utility to those potentially emanating from another (human) music creator; and finally, (4) whether it can provide meta-human outputs, which we ourselves currently could not achieve but which may in the short to medium time frame become just as accessible cognitively and socially as musical outputs that we can make now. Later, it may perhaps also become possible for a human creator to produce such currently meta-human music (and hence it would no longer be meta-human). Acceptability and utility (expressed in musical and social terms) are mutable aspects of any music genre, and of any innovation or retrospection, algorithmic music included. A key question is how to endow the algorithmic creation with the humanoid power of self-evaluation, and ultimately self-evaluation that can change in nature with time (see in particular chapter 15 by Wiggins and Forth).

At the process and functional levels of making music, there are other layers of issues. For example, consider electroacoustic music since about 1950, and particularly acousmatic music (in which there

are no live acoustic instrument performers involved in the presentation of a piece, and usually not in its realization and recording either). Here the previously quite distinct roles of composer and performer have been largely fused, and the level of control the initiating music creator can achieve is enhanced because it is not necessary to allocate elements of control to a separate performer. By extension, we can also observe algorithmic computational mechanisms taking over functions such as mixing, sound projection, sound spatialization, all discussed to various degrees later in the book (particularly by Schacher). In other words, algorithms in principle may contribute to all stages of music making, to what historically has been a highly differentiated series of activities: composition, performance, acoustic spatialization, recording, editing, mixing, mastering. As colleague Greg White puts it, the overall process may tend towards `maximal convergence' in the locale of control of the separable activities. Sometimes improvisation takes the place of the first two of that series.

We do not imply that algorithms should take over any of these steps, rather that they may do so or may contribute. To the degree that this occurs, the algorithms may be manually or automatically driven. Perhaps the strongest appeal of the automatic application of such algorithms from a creative perspective is as part of an algorithmic collaborator, with whom a human creator performs (or composes). But of course from a commercial and practical perspective for example in relation to film and tv music, the use of those automatic processes may provide more economical and efficient outputs than manual application, and hence contribute to commercial value as well as to the accessibility of creative play in music.

This brings us to a critical question: how is algorithmic music appreciated and diffused? Simoni's chapter illustrates some of the main features of the uptake and perception of such music. For example, many listeners, even with musical training, are not particularly aware of the algorithmic contribution. This is probably encouraging from the perspective that is often raised, that without physical gesture on the part of a performer that is tied to sound generation, a

musical event is lacking (even boring) and requires supplement. The supplement may be a display of live code (essentially, a display of the algorithm) or a complementary dynamic visual imagery sequence. Here the editors support a diversity of views that range from a purist stance, that the code and algorithm are secondary and need not be overt in any way, to the view that we may celebrate the algorithm by making it in some way apparent, through to the idea that the algorithm in some sense is the work and should be appreciated in itself.

It seems that the main communities of algorithmic music are centred on the creators, such as the Live Algorithms in Music grouping, the Live Coding field, and its estab-lished TOPLAP community and new conference (initiated in 2015 by editor AM with Thor Magnusson), and several antecedent groups. Groupings of consumers of algorithmic music are sparse, with the possible exception of those who regularly participate in Algorave events (electronic dance music created by live coding and other algorithmic means) and precursors. The penetration to audiences of other varieties of algorithmic music, as illustrated by Simoni and in other chapters, seems to be largely as a subcomponent (overt or not) of composition and computer-interactive improvisation.

As Wiggins and Forth argue, we do not want algorithmic music to be evaluated by something akin to a Turing test, which simply asks whether an algorithmic piece seems to be plausibly a reasonable competent human creation. Rather, we want to allow for meta-human outputs and for systems which develop their own evaluation frameworks, potentially novel. The listener may or may not transform their perceptions of such music into a cognitive framework that corresponds to the algorithm's own methods, but in either case they may gradually assimilate the music into a meaningful whole. Similarly, a (human) co-performer working with a live algorithm can transform the prospective and retrospective meaning of a piece as a result of what they choose to play: the ulti¬mate evaluation of such an algorithmic co-performer will always involve factors beyond those the algorithm itself uses. So it is perhaps fortuitously positive that much

algorithmic music is simply assimilated in a context in which its nature and bounds are not transparent to most listeners (and sometimes, not to the creators either).

Nevertheless, we hope that educationalists' involvement in live music making including algorithmic music will increase alongside the desirable (indeed inevitable) rise in computational literary throughout the world. The advent of the low-cost Raspberry Pi computer has stimulated the diffusion of cheap and accessible computing machinery more widely around the world, and if this (ideally) eventually elicits a virtually universal basic literacy in programming, then algorithmic music can become accessible to almost everyone as both producer and consumer, since there will be minimal cost or cultural barriers.

Contemporary Directions
We have taken care to ground this book in historical perspectives, particularly through Collins's chapter on the origins of algorithmic thinking in music. This grounding provides sure knowledge that there is nothing fundamentally new in the basic conception of algorithmic music, as we have known it for hundreds of years. However, in terms of the activity of algorithmic music, everything is new: the speed of modern computation allowed by microprocessors, their plummeting cost, their proliferation in handheld devices, and social shifts too; free/open source culture and online social spaces; and in much of the world, an increasingly computer-literate populus. All this means that algorithmic music is now transforming from a niche activity, shared in fringe festivals and academic conferences, into a more inclusive music culture sometimes finding large audiences, end-users, and communities of practice.

Linguists and computer scientists keenly point out that programming languages and natural languages are very different categories. Nonetheless, programming languages have always been designed for human use, and are now increasingly designed for human expression, supporting the rise of creative coding as an actual career choice for many working in art and design fields. There are now many programming languages and environments designed specifically for the expression of algorithmic music and/ or

visual art, with the classic Music-N (e.g. C-Sound), Lisp (e.g. Symbolic Composer), and Patcher languages (e.g. Max/MSP, PureData) joined now by SuperCollider 3, Extempore, Gibber, Sonic Pi, Tidal, and many more. Where refinements to programming language environments are designed for human expression, we argue that they become more like the written form of natural languages. In the following, we pick out a few directions in which this new expressivity is taking us.

The foray of algorithmic music into music education is well signposted by Andrew Brown (chapter 32). As he relates, there is a long history of bringing computational media into education, but it feels as though there is a surge of interest in creative computing that can bring all this research into new fruition. The recent success of the Sonic Pi environment, designed for teaching both music and computer science, as well as supporting music practice, is particularly encouraging. While the push for computer science education in schools may at times be motivated by economic and business interests, it is also an exciting cultural experiment. What cultural shifts will algorithmic music take when our young programmers grow up, and computational literacy really takes hold? We are already seeing the growth of chiptune, a `retro' digital music commu¬nity celebrating early 8-bit computer sounds; is algorithmic folk music next?

The phrase `paradigm shift' has certainly been overused, but some do argue that major changes to how we think about computation and human creativity are about to take place. Bret Victor, responsible for the early user interface design of the iPad, now rejects contemporary notions of `touch' interfaces, and even the notion of technology and design, instead reaching for computational media as a means to `think the unthinkable' (Victor 2013). Victor urges us to look beyond current practices of computer programming, towards a way of using computational representations to think through and communicate ideas. This will be familiar to many algorithmic musicians who compose music through a creative process of exploration through code, but Victor advocates finding far better representations for thinking about systems. This echoes the long-expressed motivations of the visual programming

community, and indeed Victor draws much from the unconstrained early work from the 1960s and 1970s.

A recent development in algorithmic music has found large audiences at electronic music festivals largely outside the academic context of computer music. This could be attributed to 'post-club' electronic music, which may literally be listened to after attending a nightclub, therefore taking the repetitive, timbre-focussed structures of dance music as a starting point for experiment. Autechre is a key example, generating its alien rhythms and sounds from procedures defined in software such as Max, with fans struggling to recreate patches from screenshots found in magazines. Another key example from the United Kingdom is Leafcutter John, leading club culture into unfamiliar territory through automatic remix tools and live algorithms. Elsewhere in Europe, the Viennese scene and in particular record label Mego became a strong centre for algorithmic noise and glitch, including the prolific audiovisual collective Farmers Manual (FM), which has released DVDs containing several days' worth of recordings from live performances with its handmade software. In Denmark, Goodiepal has worked more explicitly in opposition to academia, developing a post-human approach of Radical Computer Music. More recently several artists have grouped together under the Death of Rave label, taking an often heavily process-based approach to taking apart dance music and amplifying its structure and sound to an extreme degree. The focus for all this work is the release and performance of music, and the production methods are rarely discussed, and often form only part of a range of techniques. However, Mark Fell's work connects with this contemporary context in a multitude of ways, and he describes his approach to algorithmic music in generous detail in this volume (chapter 18).

For now though, and paradoxically, the excitement around algorithmic music is in how it is becoming everyday. Observing children build musical systems inside the hugely popular game Minecraft, and seeing the increasingly enthusiastic audience response to Algorave events, are amongst many experiences that indicate algorithmic music is beginning to enrich our lives in a multitude of

possibly surprising, but fundamentally human ways. As often happens with technological shifts, from the invention of the piano to the harsh noises of the industrial revolution, the human response to mechanization is to embrace it, as a jumping-off point for creating new means of human expression. Just as the often oppressive forces of industrialization provided cultural ground and source material for astonishing new musics, the perceived threat of software automation gives way to musical compositions which reach beyond what we could do with pen and paper (or even tape and scalpel) alone.

We should be careful however not to be seduced by the idea that the future of algorithmic music is in unimaginable complexity. Algorithms also afford simplicity, and current developments lead towards new algorithmic composition environments which are accessible to anyone with sufficient curiosity. More than anything, now is the time for algorithmic music to break from perceptions of difficulty. Yes, it gives access to a rich, unfathomable creative space, but the means of access—the composition of words into code—should be thrown open to all.

CONCLUSION

We have minimized the discussion of algorithmic techniques per se in this introduction. They will be detailed when appropriate later in the book, though the core concern is the ideas and musical achievements of the field. For the reader interested in details of some of the principal historic techniques, Nierhaus's book is valuable. For a thorough survey and typology of techniques, with a particular emphasis on artificial intelligence, there is an extensive review (Fernández and Vico 2013). These two sources can be placed in a broad perspective by inspection of the timeline of computer music history developed by Paul Doornbusch. This timeline is maintained online at http://www.doornbusch.net/chronology/.

What we have tried to do here is to point to the many flavours of algorithmic music and its wide-ranging potential. We hope that the reader will find what follows illuminates these rather deeply. <>

The Oxford Handbook of Dance and Reenactment edited by Mark Franko [Oxford Handbooks, Oxford University Press, 9780199314201]

The Oxford Handbook of Dance and Reenactment brings together a cross-section of artists and scholars engaged with the phenomenon of reenactment in dance from a practical and theoretical standpoint. Synthesizing myriad views on danced reenactment and the manner in which this branch of choreographic performance intersects with important cultural concerns around appropriation this Handbook addresses originality, plagiarism, historicity, and spatiality as it relates to cultural geography. Other topics treated include transmission as a heuristic device, the notion of the archive as it relates to dance and as it is frequently contrasted with embodied cultural memory, pedagogy, theory of history, reconstruction as a methodology, testimony and witnessing, theories of history as narrative and the impact of dance on modernist literature, and relations of reenactment to historical knowledge and new media. Excerpt:

The Power of Recall in a Post-Ephemeral Era

It is not easy to say with certainty when and where reenactment as a distinctly new choreographic strategy and dramaturgical modality first made its appearance on the dance concert stage.' It may have been Susanne Linke's reconstruction of Dore Hoyer's Affectos Humanos, which drew my attention in 1988 for containing a new self-critical attitude toward reconstruction. Although Linke was performing the solo cycle Affectos Humanos (1962) of her predecessor Dore Hoyer (1911-1967), Linke's performance stood apart from conventional reconstructions of earlier work through its unusual framing device, which forecast a fundamental shift in the way the dancer positioned herself with respect to the historical material she had reconstructed. The concern was no longer to demonstrate how the dance could be redone by simulating the original dance and the dancer's appearance; the emphasis was rather on what it was like to do it again. Linke dramatized this experience on stage by distancing herself from the illusion of the past dance in between its sections, as she changed in full view of the audience before a cos¬tume rack at the back of the stage. This

seemingly simple but, in 1988, unprecedented gesture signaled a dynamic shift by virtue of the acknowledgment of distance over the desire for and pretension toward proximity that can mark impersonation and/or failed identification.

Hoyer herself was formed as a dancer by the teaching of Mary Wigman (1886-1973) in Germany, but in the postwar and postmodern era Hoyer herself cut an anachronistic figure. As a belated exponent of German Ausdruckstanz (German expressionist dance), Hoyer's work did not meet with cultural acceptance in postwar Germany given the sympathies between Nazism and Ausdruckstanz during the Hitler era and the subsequent upsurge of ballet in postwar Germany. As Jens Richard Giersdorf has described, Arila Siegert also reconstructed Affectos Humanos in East Germany in 1988, and there too, albeit for different reasons, a return to dance modernism had not previously been well received (Giersdorf 2013, 85-87). Hence, the return to Hoyer's work in the 1980s raised complex political issues around German dance that, as Giersdorf has remarked, were not always being addressed. More recently, Martin Nachbar has also taken up Hoyer's Affectos Humanos in his Urheben/Aufheben, which is discussed at length in this volume by a number of contributors, Nachbar and myself included. The point is not necessarily to locate the origin of danced reenactment in historical time, but to ask whether the choice of Hoyer—an artist performing in the aftermath of modernism and hence one whose very presence was already displaced in historical time during the end of her own lifetime in the late twentieth century—might not inform the entire tendency of reenactment in dance today.

This is because the case of Hoyer, in my view, reveals a double displacement, or a double quality of being out of place: first, her work was out of place in the moment of the late 1980s when it was reenacted in both East and West Germany; second, it was always already out of place at the time of its premiere in 1962.7 In other words, to grasp Hoyer's historical out-of-placement, one has to grasp her historical displacement, and it is the general significance of this very fact that could be said to characterize the reenactment effect that reverberates in the present moment. The

reenactment of dance is always already enmeshed in overlapping temporalities, thanks to which the notion of historical time as chronicle time becomes destabilized by an uncertain historicity hinging on gesture. One of the hallmarks of danced reenactment is that historicity is always invested in complex temporalities whose modalities are those of spatiality rather than narrative.

One commonality of all the Hoyer reenactments is that all drew on a film of the dance. The importance of media to the accessibility of earlier work, as well as media's role in the felt necessity to return to the past, is also undeniable in reenactment (see Bleeker, Chapter 10; Siegmund, Chapter 23), yet it should be added that the temporal phenomena of reenactment in dance can themselves be uncovered in early modern choreographic poetics (Changanti, Chapter 25). That dance plays with our per¬ception of time in a variety of contexts, thanks to its unique investments in corporeality and space, may be a structural possibility always susceptible to be mined, but it is one that reenactment highlights and brings urgently to our attention in the present moment. The ontology of historical displacement is at the core of a contemporary dance that is no longer mesmerized by presence. In fact, the present itself can be decentralized as a warrant of contemporaneity.' Hence, the whole subject of dance and reenactment is taken up in this handbook largely from the perspectives of historicities, temporalities, and spatialities.

The point is frequently made that reenactment is an act in the present, and this point is meant to show that the present, from the perspective of the historian, is historically defective. When it comes to dance, let us emphasize that it is also an act that reclaims space for movement. Because of the prominence of gesture in dance, space also has certain claims on historicity. The carving of space in particular choreographic actions cannot be identified uniquely with the present, no matter when the actions are performed, because formally defined uses of space do not evoke a temporal so much as a rhythmically shaped dimension. Further, the idea of remains or the remainder is based on materiality, and hence cannot do without space and spatiality. Any remainder is a proposition for space

and, if it is a performative remainder, for spatial practice. The reader should be attentive throughout the following chapters to the relative weight given to space and time by the contributors in their specific analyses. Temporal displacement of choreographic thought may work with, but also against, the spatial mise en scène of the choreographic act. Reenactment uses space and time in intentional counterpoint. The subject of reenactment is an occasion to elaborate and nuance dance theory with respect to the tried and true—but until now somewhat overly abstract—categories of time and space. It is the potential of this new field of study not only for dance practice as such, but also for critical dance theory, that has been the principal impetus for bringing this volume into existence.

Examples of dance reenactments explored in the chapters to follow are Fabian Barba's A Mary Wigman Dance Evening, Olga de Soto's Débords: Reflections on The Green Table; Philippe Decouflé's Panorama; Christina Ciupke and Anna Till's undo, redo and repeat, the reconstruction of Merce Cunningham's Crises; Richard Move's Martha@; recreations of the dances of Rudolf Laban; Olivia Grandville's Le Cabaret Discrépant; the Kirov Ballet's 1999 reconstruction of The Sleeping Beauty; Trajal Harrell's Antigone Sr./Twenty Looks or Paris Is Burning at The Judson Church (L); Wim Vandekeybus's Booty Looting; Beyoncé's Countdown; Janez Jansa's reconstructions; Of a Faun (fragments) by the Knust Quartet; Rani Nair's Future Memory; and the reconstruction of Yvonne Rainer's Continuous Project/Altered Daily. The general traits that emerge from the iconic example of Hoyer, however, can be outlined as follows: (a) the sense of a primary displacement in the non-contemporaneity of the past with itself; (b) the evocation of complex historical temporalities and the choreographic situation whereby these temporalities enter into the present of performance (the historicity of performative temporalities), creating a complex sense of historicity interacting with the present; (c) dissatisfaction and/or call for reinterpretation and reconceptualization of past art in light of the present creative agenda, which gives the emergence of these temporalities and historicities the aspect of a contemporary intervention.

In sum, danced reenactment places the dance work in a configuration of asymmetrical historical temporalities; it is hence likely to unsettle our assumed grounding in a linearly progressive past, or to unsettle the notion of modernity and/or contemporaneity as something achieved by virtue of the overcoming of a past in a geographical location understood as occupying the global center.12 These are all signs that reenactment as a general phenomenon has seriously compromised the notion of periodicity, as well as that of the cultural-geographic center and periphery. Need it be stressed that the authors of this volume do not envisage preservation per se as the ultimate goal of reenactment? The fact that reenactment transcends issues of preservation alone is indicated by the evident extensions of the problematic beyond concert dance into areas such as plagiarism (see Kraut, Chapter 18), the inherent contradiction in attempts to preserve the avantgarde (see Noland 2013), the heuristic and pedagogic value of reenactment (Jakovljevie, Chapter ii; Hardt, Chapter 12), choreographic interventions in literary texts that raise questions and ideas about the historicity of danced reenactments and the nature of the production of the narrative voice in literary modernism (Jones, Chapter 22), the problem of reproducing a distributed body in an altered physical environment (Banerji, Chapter 21), the entwinement of reenactment with religious belief (Banerji, Chapter 21; Katrak and Ratnam, Chapter 15), the relation of the canon to cultural geography (Barba, Chapter 20), the dialectic between reenactment and the image (Soussloff, Chapter 29; Staelpart 2011), the role of reenactment in spectatorship and research (Skantze, Chapter 16; Preston, Chapter 14), and, ultimately, the question of the relationship of reenactment to historiography itself (Pakes, Chapter 5; Siegmund, Chapter 23; Franko, Chapter 24; Thurner, Chapter 26) as well as to the politics of dance's circulation in a globalized world (Burt, Chapter 17; Kraut, Chapter 18; Staelpart, Chapter 19; Barba, Chapter 20; Giersdorf, Chapter 27; Martin, Chapter 28). Rather, it seems to us that beyond the effects of preservation and/or reinterpretation of dances past, reenactment engages more fundamentally with a critical, polemical, and philosophical reflection on

temporality and spatiality in relation to dance's pasts.

Danced reenactment leads us into the historical investigation of the relation of dance to pastness at many different levels. The year 1980 was named Heritage Year (L'Année du Patrimoine) in France, which brought about significant funding for an important historical dance company, Ris et danseries. The work of the Albrecht Knust Quartet in France experimented with danced reenactment in the early 1990s (see Launay 2012). There has since been significant financial support in Western Europe (particularly in Germany) for creative work on the dance heritage of the twentieth century, particularly through the Tanzfonds Erbe (Dance Heritage Fund) established by the Kulturstiftung des Bundes (The German Federal Cultural Foundation) after the Tanzplan ended in 2011 (Siegmund, Hushka). Chapter 23 in this volume, by Gerald Siegmund, contains a good deal of information on work and initiatives in Germany during the decade of the 1990s. A significant number of artists discussed in these pages are for this reason either German or have worked in Germany. But danced reenactment is not presented here exclusively as a response to state funding or as an exclusively European phenomenon. The UNESCO initiatives of the 199os, which included dance as immaterial culture, identified movement and gesture as valued and endangered aspects of world heritage: dance was central to this initiative globally. The Handbook includes chapters on East and South India and South America.

The Handbook of Dance and Reenactment explores how the preoccupation of contemporary choreographers with the dances of predecessors has emerged in the new millennium at the vanguard of contemporary dance. Although this phenomenon has wide-ranging implications for dance in relation to concepts of the past, historicity, and memory, the handbook is not intended to convey a definitive viewpoint on the subject, which at the time of this writing proves to be as diverse as the protagonists—dancers, choreographers, and scholars—individually and collectively engaged with it. The term reenactment is one of many other terms used in the chapters that follow: reperformance, remake, citation, the distributed

body, alternative histories, acheiropoietics, restructuring touch, re-actualization, the derivative, cover, and so on. The category of reenactment itself, while it has been explored in performance art, film, and photography (Soussloff, Chapter 29), extends in the case of dance beyond dance history per se to questions of practice as research, archival phenomenology, spectatorship, legacy, heritage, plagiarism, singularity, and political action, as well as to historiography, pedagogy, witness-hood, transmission, cultural geography, and the experience of inter- and hetero-temporalities. Each part of this Handbook attempts to define the major concerns that relate chapters to one another under a given rubric. Yet, despite these rubrics, which impose thematic categories on the wealth of material reflected upon in these chapters, all of the authors represented here engage in a vigorous theorization of the significance of danced reenactment for contemporary culture, a theorization that militates against self-enclosed categories. It is this theorization of a new field of contemporary creative activity and its relationship to scholarship—an unprecedented relationship bringing performance and research together—that is analyzed here.

Scholars of performance art have underlined the relation to reenactment of the document—most particularly of the photographic document—as a major axis of inquiry and theorization. As Boris Groys has noted, "Increasingly, in art space today we are confronted not just with artworks but with art documentation". Groys goes on to explain that it is actually the document that is the living art or "life form," whereas the work of art itself is a documentation of the image. That dance and dance studies have not accorded comparable attention to the photographic document is due to the particularity of dance practice or, one might say, its medium specificity, wherein (unlike performance art) research into corporeality plays a crucial role for which the still image is inadequate, and where before the question of the work can arise, the question of a technique of repetition must be examined. So, for example, Fabián Barbas reenactment of Mary Wigman's dance evening for her 1929-1930 tour of the United States took research into corporeality as "a crucial addition to archival and textual sources." In addition, a set of

modalities already exists in the dance field with a preexisting relationship to reenactment. Here, I refer to activities such as revival, reconstruction and/or reinvention, and adaptation or reworking. For example, a revival implies the return to a work that has ceased being performed but within an institutional context, such as a ballet company, that is able to provide institutional and personal memory; reconstruction implies, to the contrary, a return to work whose performative traditions have been essentially lost; whereas reinvention, reworking, and/ or adaptation imply other sorts of strategies for and theories of historical evocation. Because of this already fairly complex layering of possibilities for historical reflection in danced performance, crucial issues of the artist's identity, the work's identity, and historical consciousness tend to take precedence over the instrumentality of the visual document per se in dance.

After Ephemerality

In many ways, reenactments tell us the past is not over: the past is unfinished business. By insisting upon the return to actions following precise aesthetic procedures, reenactment troubles our sense of what is past in the past. By bringing back movements that were thought to have expired with their inaugural contexts—movements that are both strange and familiar, forgotten and recalled—danced reenactment unsettles the closure of history, the conviction that new movements do effectively supersede earlier ones. The notion of the work is not only recalled but also destabilized; the belief in authenticity is both confirmed and turned on its head; the return to the past becomes an avant-garde gesture; the notion of tradition is invoked, but also criticized; references to time past are multiplied and only understood as a constellation (Christina Thurner, Chapter 26 in this volume, also calls it a network); the tools of time and space essential to dance composition are intellectually retooled.

Nothing militates more against the claim of dance over its own history than the notion that dance is fundamentally ephemeral. Were we to accept the ephemerality of dance, then the history of dance itself becomes unnamable. Reenactment in dance testifies to the overturning of a long-standing trope of dance history and theory: dance has been much

vaunted, but also subtlety maligned, as the quintessential art form of the immediate, transient, and vanishing present. Movement and vanishing are both contained in the phrase "the moment." But many dancers are now actively engaged with reclaiming their past rather than flying from it, and in this process they challenge the irremediable nature of dance's storied transience. What has reenactment done to ephemerality? The aura that ephemerality has cast on the dance work in modernity is perhaps finally succumbing to its own intellectual and artistic mortality because of reenactment. This death of ephemerality opens a space for recalling—in the sense both of remembering (or wishing to remember) and summoning back. For these reasons, reenactment should be understood as post-ephemeral: it may emphasize the presence of the dancing subject in dialogue with history, but the dancing subject herself is not presented in a "before"; the status of the lost past and that of the vanishing present are equally under erasure: a double disappearance is revoked. In their place, the stage is filled with inter-temporal gestures wherein the spatial positions necessary to this operation can be dramatized and hence rendered visible and understandable. This is the imaginary choreographic template that many reenactments engage us with. Intertemporal relationality of gesture is the spatial grid (Kraus 1985) that militates against progressive change, characterized by modernism; it is thus not by chance that modernists themselves are frequently the subjects of reenactment. This is why danced reenactment is not strictly a heritage activity, even if it has been funded under these auspices. And this is also why our subject does not fit neatly into François Hartog's framework of presentism.

Reconstruction/Reenactment

Reenactment and cognate activities referred to and conceptualized in these pages constitute a challenge to the mode of presentation of dance as traditionally reconstructed in the twentieth century. This refers not to the method of reconstruction per se, but to the mode of theatrical presentation that the reconstructive method lends itself to. The distinction and overlap between reconstruction and reenactment reside in the difference between reconstruction as methodology of recovery and reenactment as dramaturgy of presentation.

Reconstruction is the activity necessary to restore the movements of a dance in their completeness through the strict decoding of notation (if there is any) and the requisite filling in of knowledge gaps where they occur (reconstruction as methodology); reenactment encompasses the theatrical and dramaturgical devices with which the effect of the dance as a representation of itself in the past is shaped and manifested in performance. Reconstruction, despite its uncertainties of interpretation, remains a core discipline unless it is not entirely rejected as irrelevant (Siegmund, Chapter 23); reenactment has fundamentally reformulated how to stage reconstructive results.

The goal of reconstruction was to create a "dance museum," a way to view the past accomplishments of dance as if preserved within the medium of live performance. But the notion of movement preservation was in conflict with the phenomenology of dance that affirmed dance's immediate appearance in the present—its phenomenality—as an unavoidable requirement of its power. Indeed, one could go so far as to say that the very medium of dance was thought of as the present body, also called the lived body.

Reconstructions were always afflicted by a double vision: they were live performances reproducing a transpired past in the present. Perceived in this way, they were unable to fully realize the immediacy of dance in its phenomenal presence. Consequently, they engendered a gap between themselves and the very terms in which the original had embodied its originality. Reconstruction, in other words, unwittingly presented dance as always already historical. Although it developed a methodology for the historical reconstitution of choreography, it faced by that very fact a contradiction inherent in its theatrical mode of reproduction, a contradiction whose focal point was the dancer's body. In its valiant attempt to save dance from oblivion, reconstruction struck at the very corporeal heart of dance itself. The main critique was that, despite the rigor of the research undergirding it, reconstruction came across as a simulacrum rather than as a historical experience. This may be due to what Simone Willeit has called "the historical positivism" implied in reconstruction considered as a "historiography of practice". This

positivism consists in the assumption that only textual evidence can suffice to fill the gaps in knowledge and that no other form of reflection might be useful. What is rarely taken into consideration is that the passage of time, in itself, has wrought changes in the dancer's bodily morphology, technique, and aesthetics, as well as in the spectator's expectations. Unable to account for these, the reconstructed work appeared to exist outside of time—time here understood as the medium within which dance transpires—despite claims for the value of the reconstructed work as timeless, eternal, and hence highly valuable: worthy of being remembered. Reconstructions lacked persuasive presence in the visceral terms of dance itself.

Reenactment represents a significant corrective to reconstruction's undertheorized theatricality that was also beset with assumptions about authenticity. It is worth recalling to mind here the critique of immediacy in modern art by Georg Lukács, who wrote of the modern literary schools: "[T]hey all remain frozen in their own immediacy; they fail to pierce the surface and to discover the underlying essence, i.e. the real factors that relate their experience to the hidden social forces that produce them". While it is not evident that reenactment is a new form of realism enabling us to free ourselves of modernism's frozen immediacy, it is clear that reenactment actually replaces the frozenness of reconstruction with the immediacy of the present in such a way that a critical dimension is able to arise from the ruins of impersonation and under-theorized reproduction.

Reenactments generally manage to uphold the claims to historicity that cannot be reasonably abandoned in the dance field, while at the same time relinquishing the pretense to the reproduction of the past as a copy. Reenactments do this by treating the past dance as something that exists in the present. Although not entirely divorced from reconstruction as a methodology, the current phenomenon of reenactment in the dance field intrepidly alters what we dare call the ideology of reconstruction as the possibility of witnessing the past again as past. The conceit of the museum has disappeared, inasmuch as a contemporary dancer now reconstructs earlier work as part of his or her

contemporary creative activity, rather than as removed from it by historical reflection. Furthermore, the distinctions between history and memory bifurcating the reconstructive field have splintered. The re-enactor of a past dance is no longer necessarily a dance scholar, first of all, and the relation of the re-enactor to personal memory is no longer that of the eyewitness/participant, as the dancer frequently works through the memory of a custodian of the work or through other types of training. Where the reconstructor assumed distance from the past through recourse to documents, the re-enactor assumes closeness to the past through the body itself as archive; where the reconstructor assumed closeness to the past through witness-hood, the reenactor assumes distance from the past through temporal estrangement. This would particularly be the case with Martin Nachbar's reenactment of Dore Hoyer. Yet, in Fabián Barba's relation to Mary Wigman through his expressionist dance training in Ecuador and in Richard Move's relation to Martha Graham by virtue of a very personal sense of channeling, there are varying scenarios of affinity and kinship also at work.

Perhaps this explains how and why the issues broached here under the aegis of reenactment extend well beyond those normally associated with reconstruction and preservation. Throughout the chapters to follow, connections are made between what is happening on the concert stage and elsewhere in the global "performative" environment: commercial performance, ritual performance, pedagogy, the financial and art markets, spectatorial reception, visual art, the phenomenology of archival research, and the field of history as an academic discipline. Despite this, some very familiar issues are still apparent: What counts as a document? What is an archive with respect to embodied memory? How do memory and memory transference operate in the absence of first-person experience? What is a score? What are the limits of interpretation, and why? What is the relationship of past dance to futurity? Just as reenactment overhauls the reconstructive project by way of asking new questions and devising new responses, so the breadth and depth of questions surrounding reconstruction and authenticity are opened up to wider inquiry regarding repeatability and reproduction.

Dance, as a time-based art, exists within a historical temporality that comprises historically determined conditions of reception, styles and modes of gesturality, tastes with their concomitant cultural contexts, and technologies of display, all of which are productive of uniquely defined aesthetic experiences. With its emphasis on the recovery of movement vocabulary, sequence, and music of the original work, reconstruction could not incorporate the conditions of production and reception within which the work made its claim to time as historically present. Yet, what reconstruction can accomplish is irreplaceable. Many reenactments subsume reconstruction within a dramaturgical and conceptual frame that removes the implicit claim to authenticity from the reconstructed dance.

In reversing the ideological premises of reconstruction while conserving its methodology, re-enactive dancers have taken the representation of the past into their own hands, and accordingly have transformed it. This appropriation of the historical function can be interpreted in a number of ways: (1) as the "right of return" to earlier work; (2) the use of performance as a historiographical medium with a discursive dimension; and (3) self-staging as a contemporary agent in confrontation with this project, hence a willful theatricalization of the entire situation.

Historicity, Temporality, and Work Within Work

The questions of time and space, long the staple terms with which dance has been discussed in formal terms, are now the very terms engaging actively with what François Hartog has called "regimes of historicity." For Hartog, a regime of historicity or temporality is "ultimately a way of expressing and organizing—that is, ways of articulating the past, the present, and the future— and investing them with sense: The displacement of reconstruction by reenactment in dance history signals a change in regimes of historicity at the level of how the past of dance can be understood to occur as dance again. Reenactments are related not only to the rediscovery and restaging of particular past works, but also to the relationship of those works to the present in which they are reproduced. What is (re)produced by many reenactments is not only a work per se, but also the

knowledge of history necessary to the work's very reappearance. The presence of knowledge production in performance can be related to the lecture-performance format prevalent in many reenactments. As Maaike Bleeker has remarked,

> [L]ecture performances emerge as a genre that gives expression to an understanding of dance as a form of knowledge production—knowledge not (or not only) about dance but also dance as a specific form of knowledge that raises questions about the nature of knowledge and about practices of doing research.
> The problematic of dance as historical research into dance, of dance production as the performance of a research product, and of the set of relationships that ensue between present and past that can also be said to constitute knowledge or conscious reflection—all this differentiates reenactment in dance from reenactment in other media.

One of the particular qualities of a reenactment is that the past of dance is no longer apprehended as irrevocably past, and the present no longer apprehended as uniquely phenomenal. When Hartog speaks of the presentism of our regime of historicity since the 1980s, he defines presentism as "the present's immediate self-historicization". A close analysis of reenactment in dance nevertheless reveals spatiotemporal processes at work in dance that are more complex than self-historicization. In reenactment, dance historical material is being treated as the object of knowledge, rather than as a mechanism of self-historicization. Therefore, it is not the present that historicizes itself in danced reenactments, but the past that "presentifies" itself through particular protocols of research and the theatrical manipulation of time and space in that dramaturgical process. Indeed, reenactments engender an awareness that dance occupies a unique time and space between past and present. Just as there is variability within historical time, as Reinhart Koselleck has shown, so there is variability in the experience of his¬torical time or the experience of time within performance as historical. To experience time as historical in performance is not equivalent to reading historical narrative: It is to be engaged with an experience in/of the present, which contains pastness in actu. Areas of inter-temporality are germane to our subject when

it comes to dance. On behalf of the authors of this Handbook, I am gesturing here toward their intervention into the theory of history from the perspective of dance theory. This is, first of all, because the notion of history as it is performed in danced reenactment is not founded on the necessity for narrative or for a visual artifact because such dance knowledge makes the claim to embodiment. In this sense, the use of the document by dancers is closer to what Paul Ricoeur referred to with the document as trace. "[T]he notion of documentary proof, placed at the forefront of the investigation refers directly to the problem that concerns us, that of knowledge through traces". Ricoeur goes on to explain that documents are the trace of the "inside" of events, which when correlated to the "outside" of events leads to action:

> The twofold delimitation of the concept of "historical evidence" by means of the notion of the "inside" of the event and that of the "thought" of the historical agent leads directly to that of re-enactment.

Reenacted dance presents us with a history of dance in its own terms—a dimension of self-reflexivity, rather than the pretense toward reproduction of the "outside" alone, and existing in the mode of present performance as an action with this twofold dimension. With no textual or material artifact upon which to ground its relationship to history, dance requires the body itself as a mediator of knowledge: it is both historical agent and bearer of historical action. Reenactments shift the history of dance into the present as performances that appropriate the project of historiography by acting on that which seemed heretofore to belong only to the register of language (the writing of history).

Reenactments reintroduce lived experience of the event into what would otherwise be a historical representation—a representation of the past as "history," resulting in the sta¬tus of representation as history.

This understanding of reenactment in relation to history has been, of course, controversial. When historian Vanessa Agnew makes the distinction between historical reenactment and history proper, she challenges us to understand how this distinction operates in relation to choreography. In her article

"What Is Reenactment?" Agnew states, "Reenactment's central epistemological claim that experience furthers historical understanding is clearly problematic: body-based testimony tells us more about the present than the collective past" (Agnew 2004, 335). It should be considered, how¬ever, that when dance itself is the historical "object," body-based testimony at the level of savoir faire, to use Barba's term, is crucial to research and complementary to textual and visual sources. Moreover, research into corporeality cannot be dismissed so easily as "body-based testimony" precisely because it is research. In dance, the presence of scores and/or documents that constitute traces, in Ricoeur's sense, can be reanimated by "techniques of repetition," one of Derrida's requirements for the very existence of the archive. In this sense, the position of the re-enactor, like that of the historian, is in the present. As Michel Foucault has noted, "Historians take unusual pains to erase the elements in their work which reveal their grounding in a particular time and place .... " (1977, 156). But what is significant about this present, as Ricoeur points out with respect to Collingwood, is that reenactment abolishes "the temporal distance between the past and the present by the very act of rethinking what was once thought" (Ricoeur 1984, 10). And, one could add, by the very act of re-dancing what was once danced, with the pro¬viso that the choreographic and performative logic of a particular dance (in Chapter 10, Maaike Bleeker, following Collingwood, speaks of "the logic of thought embodied in the dance") has been retrieved in following the trace of documentary evidence and by further understanding that trace in the context of the corporeal logic that makes it redoable. This is precisely where the importance of dance's medium specificity as practice becomes salient. A dance is itself a specific kind of event. Reenactment, unlike bodily testimony, is the recalling (in the active sense of summoning) of a past action as a particular event in the present. In this sense, one can say that memory remains not in the body, but in the event as it becomes accessible by doing. In dance, to reenact is to relive eventfulness in/as the work. But, by "work" is meant here two things: the work of dance itself, understood as the labor that makes up the dance;

and the dance itself as a work of art, the product of that labor. In other words, danced reenactment is the reestablishment of the live artwork as the work within the work. As work remains visible within the work, the work of reenactment produces dance as self-reflexively performative knowledge of itself for an audience, and hence, as historically in the present moment, rather than as a reproduction of ephemerality outside of time. The way in which this conceit is conveyed to an audience as "historically in the present moment" (which I consider to be significantly different from in the present moment tout court) constitutes danced reenactment as both theatrical modality and political strategy.

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[Intellectual Property and the New International Economic Order: Oligopoly, Regulation, and Wealth Redistribution in the Global Knowledge Economy](#) by Sam F. Halabi [Cambridge University Press, 978-1316629161]

In economic sectors crucial to human welfare - agriculture, education, and medicine - a small number of firms control global markets, primarily by enforcing intellectual property (IP) rights incorporated into trade agreements made in the 1980s onward. Such rights include patents on seeds and medicines, copyrights for educational texts, and trademarks in consumer products. According to conventional wisdom, these agreements likewise ended hopes for a 'New International Economic Order,' under which wealth would be redistributed from rich countries to poor. Sam F. Halabi turns this conventional wisdom on its head by demonstrating that the New International Economic Order never faded, but rather was redirected by other treaties, formed outside the nominally economic sphere, that protected poor countries' interests in education, health, and nutrition and resulted in redistribution and regulation. This illuminating work should be read by anyone seeking a nuanced view of how IP is shaping the global knowledge economy.

Excerpt: This is a book about the nature and distribution of global wealth as it has been shaped by the changing dynamics of international political and economic relations over the last 150 years. The

end of the ages of formal colonization and empire, accompanied by rapid technological change, have altered the balance between tangible and intangible sources of wealth, the division between public and private spheres in which wealth is created and managed, and the use of international versus national tools 0f policy to shape the flow of wealth. As the twentieth century neared its end, intangible forms of wealth in the form of intellectual property such as patents, trademarks, and copyrights assumed an unprecedented place in the wealth hierarchy. Derivative and related legal protections such as trade secrets and exclusivity for data submitted for regulatory approvals expanded the potential value of proprietary knowledge traditionally embodied in intellectual property rights. As a result of these trends, international disputes over intellectual property — as with other forms of wealth that preceded them — are now common, increasing, and high-stakes. This book explores those disputes and situates them within the much longer human history of the creation, distribution, and conflict over wealth.

While historically relevant primarily around "technology transfer" debates during most of the twentieth-century discussions about global wealth disparity, intellectual property protection is now at the core of wealth distribution controversies. Intellectual property protection has dominated international trade and investment negotiations for the last thirty years, playing a critical role in the success, delay, controversy, or termination of agreements such as the World Trade Organization (WTO), the Trans-Pacific Partnership Agreement, and the AntiCounterfeiting Trade Agreement, to name only the broadest multilateral agreements.' Industrialized states successfully tied intellectual property protections they

to the US GDP alone." "Across a broad range of industries and geographies, intellectual property rights now constitute a significant fraction of enterprise value." Approximately 70-80 percent of firms' market capitalization is in the form of intangible assets, which include "patents, trademarks, copyrights, and other business knowledge and know-how." The increasing relevance of intellectual property to firm value has resulted in a corresponding effort by those firms to

strengthen intellectual property protections in bilateral, regional, and multilateral trade and investment agreements.

While there is a large and growing body of mostly disputed and inconclusive evidence that strong intellectual property protections benefit low- and middle-income countries as well, their overall position toward stronger intellectual property protections has been to a significant extent antagonistic. Strong intellectual property protections for products and processes relevant to agricultural production, access to medicines, and public health measures have generated acrimonious disputes from the beginning of the modern free trade regime that, from 1995, has incorporated strong intellectual property protections. In 1998, pharmaceutical firms holding patents for HIV/AIDS medications brought suit against the South African government for its efforts to use parallel imports and price controls to expand access to treatment for its exploding HIV/AIDS population. Their suit was based in significant part on the failure of the government to duly regard intellectual property provisions of the new international trade law. Agriculture and seed companies based in the United States and Europe have regularly clashed with both farmers in developing countries and their governments over attempts to interrupt agricultural practices with patent infringement claims. In 2007, Indonesia withheld samples of a highly infectious avian influenza strain from the World Health Organization on the basis that it was the practice of developing countries to share their biological resources only to have them exploited, patented, and generated into commercial products priced out of the reach of consumers in the originating country, a particular problem in the context of medicines and vaccines.' Activist Vandana Shiva declared of the international intellectual property protection regime that "the seed wars, trade wars, patent protection, and intellectual property rights [at the World Trade Organization] are claims to ownership through separation and fragmentation. If the regime of rights being demanded ... is implemented, the transfer of funds from poor to rich countries will exacerbate the Third World crisis ten times Over."

While a wide range of activists, advocates, scholars, and critics have analyzed the bilateral and multilateral trade and investment treaties responsible for the expansion of international intellectual property rights worldwide, they have neglected to fully appreciate the strength and form that opposition to international intellectual property expansion has taken. This book argues that while low- and middle-income countries have mounted resistance from within the agreements that expanded and strengthened intellectual property rights worldwide, they have also adopted a parallel effort to redistribute intellectual property-related gains through international agreements ostensibly aimed at expanding access to medicines, preserving biodiversity, protecting the rights of indigenous peoples, establishing evidence in support of public health policies, and facilitating access to nutritious food. This book is the first to argue that these international agreements — what are herein described as "International Intellectual Property Shelters," often couched within the language of biodiversity, public health, and food security — represent a body of international economic law that should be understood as a single, cohesive phenomenon that has emerged in response to intellectual property protections expanding through trade and investment agreements. More specifically, that body of law has developed in order to regulate the firms that promoted the incorporation of intellectual property rights into investment and trade agreements and now aggressively assert claims under them.

Within the context of international economic history, the latter agreements are the newest wave of developed countries' efforts to establish, expand, and protect the flow of wealth from poorer countries to richer ones while international public interest agreements aim to reduce or even reverse their impact. From the Doha Declaration on TRIPS and Public Health to the World Health Organization's Pandemic Influenza Preparedness Standard Material Transfer Agreements, to the Framework Convention on Tobacco Control, to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization, international intellectual property shelters put at their core the fundamental distributive questions strong

intellectual property rights raise. These agreements fundamentally restructure the relationship between innovation, intellectual property, and access otherwise envisioned in international trade and investment agreements. They effectively call for the redistribution of wealth from richer countries to poorer ones.

Their redistributive objectives are only half their purpose. While low- and middle-income countries have successfully advocated establishment of international intellectual property shelters in the food security and population health fields, they have also done so through mechanisms that target sectors where a small number of knowledge-intensive firms dominate global markets. The WHO Pandemic Influenza Preparedness Framework, for example, is directly supported by the dominant manufacturers 0f seasonal influenza vaccines who must also promise to make either intellectual property or end-use products available to poor countries. The Framework Convention on Tobacco Control implicitly authorizes the invalidation of certain classes of trademarks — tobacco firms' overwhelmingly most important asset — and explicitly authorizes measures that curtail the others held by five firms that control global markets outside China. The UNICEF-WHO International Code of Marketing of Breastmilk Substitutes similarly restricts the trademarks of the world's five major infant formula producers and in particular its leader, Nestlé.

International intellectual property shelters are not, therefore, only redistributive efforts led by low- and middle-income countries; they are a nascent and increasingly effective form of supranational regulation over firms that dominate markets closely tied to key redistributive objectives such as improvement of population health. In the class of approaches identified and analyzed in this book, negotiators from developed and low- and middle-income countries target areas of overreach or defectiveness in existing intellectual property protections and draft entirely new agreements that aim to curtail expansive intellectual property rights or impose more rigid regimes to force sharing of innovations and other benefits.

This book endeavors to identify a cycle in the political-economic movements behind global wealth

creation, flow, and redistribution, rather than build a normative case for any particular analytical or even policy approach to national or global growth and redistribution questions. That cycle is fundamentally shaped by the primacy of the European-style nation-state as the unit by which global wealth is measured. As of this writing, populist waves across the globe suggest the model remains robust: British voters demanded the reprioritization of state prerogatives over those issued by the EU (so-called Brexit), while US voters similarly (at least under the archaic rules of its presidential election system) installed Donald J. Trump in substantial measure for his promises to reconstruct the relationship between patriotism and economic policy.

The analysis elaborated herein is aimed at enriching the academic debate in two overlapping disciplines: international relations and economics. With respect to the former, the book demonstrates that popular and scholarly declarations that the New International Economic Order failed or disappeared are wrong. Relatedly, the conflict over distribution of global wealth remains a critical factor explaining international diplomatic and economic relations. Multinational firms (which broadly share capital and governance features no matter where established), for decades at the center of a wide range of disputes between wealthy and poor countries, remain so. While the relationship between those firms and their supporting governments has been made more complicated by the rise of intellectual property's role in firm value (the manipulation of intellectual property assets' domicile and transfer pricing for tax minimization purposes has pitted many firms against both their own and foreign governments), the relationship between the formal, public sphere attributed to "the state" and the commercial, enterprising drive of the "firm" in the private sphere has, at least since the time of the chartered company, ebbed and flowed. Assertions or implications that at some point in time (the 1950s, the 1970s, the 1990s, etc.) either the "state" or the "firm" retreated were only inflection points in a more complex system of agents that endeavor to write, influence, or revoke international rules for their own benefit. The international competitive states' system means that states and firms will always work as agents for each other under circumstances that may change rapidly.

With respect to economics, at least since Schumpeter, there has been a robust if unresolved debate as to the relationship between research-and-development-intensive industries and market concentration. While that debate has largely centered on the conditions most likely to promote innovation, it has inevitably implicated the reach and importance of competition (or antitrust) law to regulate markets. This book suggests two possibilities for enriching the analysis of this question. First, the variable of the competitive states' system has been infrequently factored into analyses of the innovation-concentration question. As this book explains, international competition between states may need to be a central, starting point of analysis rather than a marginal, infrequently considered variable. Concentration in global markets for broad classes of agrochemical products and seeds and narrower product categories of pharmaceuticals and consumer goods discussed in this book began with efforts by state foreign policy and commerce bureaucracies endeavoring to secure markets against one another (even if influenced by firms). Second, the structure of regulatory regime likely to emerge as a result of conclusions about this question (even if made under conditions of uncertainty) is too narrow both as to the source of regulatory regime and to its scope. As markets concentrate at the global level in research-and-development-intensive industries, the source of regulation is as likely to be supranational as national and involve redistribution of noncompetitively produced products as much or more than market-shaping management.

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The New International Economic Order reflected the drastic gap between global rich and poor that followed decolonization and, as many poorer countries argued, was directly traceable to distortionary and destructive colonial policies. Focused on global wealth redistribution, technology transfer, and the behavior of global firms based in Europe and North America, the New International Economic Order was channeled into the confrontation between expanding intellectual property rights and the development interests of

low- and middle-income states during the 1980s and 1990s.' The system of international intellectual property protection that commenced with disputes over technology transfer in the 1970s and morphed into a trade issue after 1986 has attracted a great deal of attention from scholars, some of whom have given the topic extensive, multi-volume treatment.

Many of these analyses tied the establishment of the new international intellectual property regime with the far less extensive literature on the politics of global regulation of private firms.' Yet even within this latter literature, the depiction of the current state of intellectual property and development is overwhelmingly focused on the "ratcheting up" of intellectual property to the detriment of developing countries' interests. No doubt, those claims are well supported. But those analyses have missed at least part of the inevitable response undertaken by developing countries.

Agreements and treaties negotiated in contexts as diverse as staple crop seed protection, access to influenza vaccines, and regulation of infant formula trademarks represent a cohesive effort to redistribute intellectual property monopoly rents back to poor populations in poor countries. Moreover, these agreements, termed herein "international intellectual property shelters," emerged not only as geopolitical responses but as regulatory responses, in many cases explicitly so, to market failures in the same way that regulatory structures are understood to emerge in national economies.

As forms of regulation, international intellectual property shelters' design will ultimately determine how well they achieve their objectives, whether those are protection of global public welfare or merely efforts to redistribute wealth from rich to poor or vice versa, and in which contexts additional shelters are likely to emerge. This book has endeavored to take the first of these steps by identifying a heretofore unrecognized phenomenon at work in international economic law. <>

When the Center Held: Gerald Ford and the Rescue of the American Presidency by Donald Rumsfeld [Free Press, 9781501172939]

A revealing political memoir of the presidency of Gerald Ford as seen through the eyes of Donald Rumsfeld—the New York Times bestselling author, and Ford's former Secretary of Defense and Chief of Staff, and longtime personal confidant.

In the wake of Watergate, it seemed the United States was coming apart. America had experienced a decade of horrifying assassinations; the unprecedented resignation of first a vice president and then a president of the United States; intense cultural and social change; and a new mood of cynicism sweeping the country—a mood that, in some ways, lingers today.

Into that divided atmosphere stepped an unexpected, unelected, and largely unknown American—Gerald R. Ford. In contrast to every other individual who had ever occupied the Oval Office, he had never appeared on any ballot either for the presidency or the vice presidency; he had issued no policy statements nor had he ever run for national office. Now, he was being thrust into a chaotic environment in which our very future as a functioning democracy was being seriously questioned.

Gerald Ford simply and humbly performed his duty to the best of his considerable ability. By the end of his 895 days as president, he would in fact have restored balance to our country, steadied the ship of state, and led his fellow Americans out of the national trauma of Watergate. And yet, Gerald Ford remains one of the least studied and least understood individuals to have held the office of the President of the United States. In turn, his legacy also remains severely underappreciated.

In When the Center Held, Ford's Secretary of Defense Donald Rumsfeld candidly shares his personal observations of the man himself, and provides a sweeping examination of his crucial years in office. It is a rare and fascinating look behind the closed doors of the Oval Office, including never-before-seen photos, memos, and anecdotes, from a unique insider's perspective—essential reading for any fan of presidential history.

Excerpt: The great gray hull of steel rose twenty-five stories before us. We gathered in front to pay

our respects at the waterline. Above us, the flight deck of America's newest and largest naval vessel covered a full five acres. Deep within the one hundred thousand tons of metal were two nuclear reactors ready to surge to life. The ship spanned the length of three football fields, territory her namesake had known well.

On hand to commemorate the christening of the USS Gerald R. Ford on November 9, 2013, were his four children, with his daughter Susan taking a lead role in the proceedings. Henry Kissinger was there—his notable German accent no less prominent with age. Ford's two former White House Chiefs of Staff—former Vice President Dick Cheney and I—were in attendance as well. Filling out the crowd of naval personnel and dignitaries were a good many of President Ford's former Cabinet, staff, colleagues from his years in government, and friends.

When Cheney spoke, he invoked the Watergate scandal that had propelled Ford into the presidency, affirming that President Ford had handled the unprecedented challenge of preserving the union and healing the nation "better than anybody else could have."

In his remarks, Dr. Kissinger, who had earned Ford's greatest respect for his skillful foreign policy leadership, attested he "loved" Ford, pointedly noting that this was "a feeling not every President inspires."

President Ford had been gone for nearly seven years when the formidable naval vessel that bears his name was christened. I did not have to wonder what he would have thought about that impressive occasion, the military bands and crisp uniforms of hundreds of military personnel arrayed around him. Over the Thanksgiving holiday in 2006, while serving my second tour as Secretary of Defense, this time in the administration of George W. Bush, I had called former President Gerald R. Ford just to visit. He had sounded frail on the phone. At ninety-three, he had become the longest-living former U.S. President in American history.

Since we had each left Washington, D.C., back in 1977 after spending a good many years serving together, first in the Congress and then in the White House, our lives had taken distinctly different paths.

Ford had settled into the comfortable but active life of an elder statesman, while making time for some well-deserved hours on the golf course. I had gone on to spend more than two decades in the business world, and then went back into government to join my old colleague and friend Dick Cheney in the administration of George W. Bush.

Over the intervening years, Ford and I had talked on the phone and been together in person periodically. But at the time of my call in 2006, I had not seen him for some time. I came away from our conversation concerned about his health, so Joyce and I decided to leave our home in New Mexico and head west to Ford's home in Rancho Mirage, California, to pay him a visit.

As we were greeted at the front door, I heard the President shout, "Rummy!" His voice was booming—however frail he might have been, that much was still indomitable. He was in his living room, just down from the front hall, sitting back in a reclining armchair on wheels and giving us his big warm smile.

Though the ship to bear his name was still many years away from construction, I had been able to bring with me a rendition of what the USS Gerald R. Ford would look like once completed, and handed him a baseball cap with the ship's name emblazoned on the front, which he immediately put on. The aircraft carrier—based World War II veteran was deeply moved by his country's tribute.

It was a tribute well deserved. That the ship would be an aircraft carrier was particularly fitting, and not just because he had served on an aircraft carrier in the Pacific—the USS Monterey—during World War II. The new nuclear-powered vessel would carry the Ford name and the American flag across the oceans of the world as a massive, floating symbol of American strength and will—qualities that, fortunately for our country, the ship's namesake had demonstrated in his long service.

As the thirty-eighth President of the United States, Gerald Ford had restored the balance of our faltering republic in what was its most divisive moment since the Civil War. His was a historic accomplishment, not fully appreciated even then. This book is most certainly not a biography of his life. Rather, what I have hoped to do with this book

is give a sense of what it was like to be there, during one of our nation's most tempestuous times, at Gerald Ford's side. He, along with those who served with him, tried mightily to right America's ship of state. In the end, it can be said that is what his leadership was able to achieve.

Of course, it didn't always feel that way for those in the Ford administration. Policy debates are in some ways inevitable challenges whenever a collection of strong-willed personalities find themselves packed together. And nobody should be surprised at the fact that Washington, D.C., can be a magnet for sizable personalities.

Gerald Ford's saving grace, however, was that he was not a big personality—not when he was in Congress, not when he moved through the ranks of leadership in the U.S. House of Representatives, not as the Vice President, and not when serving as President of the United States. His calm, thoughtful, and steadfast nature was remarkable in Washington, D.C., even in his own day, and some might assert even more so now. That may well have been how he was able to keep a strong hand on the wheel throughout the tumultuous years he led the nation.

While our country seemed to lurch from crisis to crisis at home and abroad, and those in the Ford administration did their best to stay ahead of problems and deal with those as they came up, Ford himself remained steady. When faced with a difficult decision, he sought and took the counsel of all sides and ultimately made the decision that he believed would be best for his country, regardless of his or anyone else's personal feelings. We always knew we could count on him for that.

Aside from the natural humility that was ingrained in him as a product of the American heartland and likely from his experiences in World War II, there was, I think, another wellspring for the modest, prudent nature that Ford brought to the Oval Office. He was the "accidental President," and he remembered that.

It is common in inaugural addresses for new presidents to declare—possibly with varying degrees of conviction—that they are going to be a President not simply in the service of the party that elected them, but in the service of all Americans.

Though Gerald Ford did not have the opportunity to make a proper inaugural address, he made this promise, too—and in his case he meant every word.

He understood from the beginning that he had taken the reins during an emergency, a constitutional crisis unlike anything our country had faced before. He was President, but he did not have a mandate from voters who had endorsed him in an election. But he understood the American people and their desire and indeed need for stable, competent leadership, and that was to be Ford's priority—not scoring partisan points.

"I am acutely aware," Ford told the American people after being sworn in by Chief Justice Berger in the East Room of the White House, "that you have not elected me as your President by your ballots, and so I ask you to confirm me as your President with your prayers.

"I have not campaigned either for the presidency or the vice presidency," Ford reminded the nation. "I have not subscribed to any partisan platform." From the outset, Ford looked at his presidency not as a time to further a political agenda but as a mission to bring trust and confidence back to the American government at a time when much of the public was convinced Washington had given up on both.

At the same time, Ford never lost touch with his personal convictions. These remained as strong as they had been when he had helped navigate the Civil Rights Act through Congress back in the 1960s. Whether he was dealing with Soviet leaders on his terms, concluding the nation's involvement in Vietnam, or finding ways to strengthen the economy at home, Ford was guided by the principles that had sustained him throughout his personal and professional life.

Perhaps the greatest source of that sustenance, though, was his wife. Betty Ford was open and honest, and understood better than most that all of us are human, and all of us have flaws. That made her a steadfast pillar of support for a husband who valued it every single day.

As much as Vice President Ford had never expected to find himself thrust into the role of President, Betty Ford had not expected to be the

First Lady, either. But she didn't let it change her in any way. She continued to provide advice to her husband and to those of us who served him—and whether we had asked for it or not, we always appreciated it. She never held back, and President Ford valued her counsel above anyone else's.

Given these qualities, it surprised none of us that Betty Ford went on to make such a name for herself helping millions of people around the country. She never met the vast majority, but she didn't have to meet people personally to understand their struggles. She understood that no human being was broken beyond repair, and her faith in that simple principle sustained an institution that in turn has saved lives and is still doing so today.

The Ford children—Mike, Jack, Steve, and Susan—brought a liveliness to the White House and helped to keep their dad grounded. A family man to the core, Jerry Ford, with his pipe and sweaters and penchant for plaid pants, projected the image of the quintessential "American dad" at a time when the country needed something so familiar and so comforting. Indeed, for a brief period he led our country out of his suburban home on Crown View Drive in Alexandria, Virginia. That house is now on the National Register of Historic Places, which describes it as "typical of middle-class housing in the northern Virginia suburbs of Washington," a "prosperous but unpretentious house and neighborhood."

That was Gerald Ford. As a neighbor of mine put it, as we were discussing the former President shortly after his death, "He was one of us." Despite his holding the highest office in the land, pretension never once clouded his mind. Even though never elected to the vice presidency or the presidency, he knew he owed his best work to all of the folks in the middle-class suburbs, on the farms of the Great Plains, and in the inner cities. They hadn't chosen him, hut they were still counting on him. And around the world, our allies and our enemies waited to see what this unassuming man would do with the smoldering wreckage of America's prestige he had inherited after Watergate.

Ford understood this calling from the moment he took office, and it sustained him through every day of his presidential service. President Kennedy's term is nostalgically referred to as "the thousand days"—President Ford had fewer than nine hundred. But each one of those days was spent working toward the goal of getting his country back on the right track and restoring the faith of its people.

That was why Gerald Ford never shied away from opportunities to meet our country's Cold War adversaries—to show them that America hadn't been hobbled by internal chaos and was as strong and ready to face the Communist threat as it had ever been. It was why he aggressively attacked inflation and worked to create more jobs and opportunities for American workers struggling in the tough economy of the 1970s.

Knowing Gerald Ford's dedication firsthand made the 1976 presidential campaign season especially tough for me. Gerald Ford was a good man who deserved to be elected President in his own right. His narrow victory in the Republican primary and his razor's-width loss to Governor Carter after the polls had narrowed dramatically before the general election were outcomes disappointing for the man who had served so well. But, that's politics—and even in defeat, Gerald Ford's graciousness proved an example for us all.

His humility was with him to the end, as it had been from his days as a star center on the University of Michigan Wolverines' football team. On the college gridiron, Ford proved that you didn't have to play one of the crowd-pleasing positions like quarterback or running back or wide receiver in order to be voted team captain. Even a humble center could earn that honor if he was good at his job, earned the trust of his teammates, and inspired his team to victory.

Decades later, Ford proved that you didn't have to have an outsized personality, movie-star charisma, or even Machiavellian cunning to be a truly great political leader at a most challenging time. You simply had to earn the people's trust and inspire and lead them in their hour of need. And once again, the center held. <>

The Road to Dawn: Josiah Henson and the Story That Sparked the Civil War by Jared A. Brock [PublicAffairs, 9781541773929]

This sweeping biography immortalizes the man who was the inspiration for Harriet Beecher Stowe's Uncle Tom's Cabin in an epic tale of courage and bravery in the face of unimaginable trials.

Josiah Henson overcame incredible odds to escape from slavery and improve the lives of hundreds of freedmen throughout his long life. He found international fame--including visits to Windsor Castle and the White House--as the real "Uncle Tom" in the novel that fueled the abolitionist movement and ignited the Civil War. But his story has been mostly lost to history, until now.

A dynamic, driven man with exceptional intelligence and unyielding principles, Henson spent forty-one years in bondage before he was finally able to escape with his wife and four children, carrying the youngest two on his broken shoulders for 600 miles. He eventually settled with his family as a free man across the border in Canada. Once there, Henson agitated for racial equality, raised millions for the abolitionist cause, won a medal at the first World's Fair in London, and became a beloved preacher. He returned to America and rescued 118 more slaves, including his own brother, and helped purchase land to build what would become one of the final stops on the Underground Railroad, a 500-person freedman settlement called Dawn.

The Road to Dawn retraces Henson's improbable journey from slavery to freedom and restores a hero of the abolitionist movement to his rightful place in history.

Excerpt: In February 2014, I was perusing a bookshop in Florida when I came across a copy of Uncle Tom's Cabin by Harriet Beecher Stowe. My wife, Michelle, had been wanting the novel for a while, so I purchased a copy and stuffed it in her Christmas stocking. She read it and was moved by it, and I decided to do a little more research.

I knew that Stowe's novel had often been credited with influencing the debate at the heart of the Civil War. But I was surprised to discover that her novel was based on the life of a real man, named Josiah Henson. Did this man's story spark the Civil War?

When I found out Josiah's cabin was just a few short hours from my own home, I had to visit. We drove to Dresden, Ontario, on a blazing hot summer day, and Michelle read me Josiah's humble little memoir on the return ride.

We learned that the prime minister of Great Britain had thrown a surprise banquet in his honor, and that Earl Grey had offered him a job. The archbishop of Canterbury had wept after hearing his story. This man had been feted by queens and presidents, and he had won a medal at the first World's Fair in London. He had rescued 118 slaves, including his own brother, and helped build a five-hundred-person freeman settlement, Dawn, that was known as one of the final stops on the Underground Railroad. How had I never heard of Josiah Henson?

I spent the next few years of my life immersed in Josiah's story, and the result is in your hands. I traveled to multiple countries, visited libraries and museums, interviewed dozens of experts, pored over thousands of documents, and produced a documentary wherein I retraced Father Henson's three-thousand-mile journey from Maryland to Washington to New Orleans to Kentucky to Canada. I have shared meals with his descendants, visited his gravesite, and I have begun taking steps to start a foundation to ensure his legacy is never lost again.

This is the story of a man who spent more than forty years in slavery, vowed to use his freedom well, and made good on that promise. As with every slave narrative, there are gaps in the story that we may never be able to fill with anything more than speculation. And because Josiah never learned to write, and his story was filtered through the perspectives of those who recorded his story, some of the intimate details of his vocation and family life remain a mystery.

Our story's hero was, of course, complicated and flawed. Yet he still deserves a place in the pantheon amid Frederick Douglass, Harriet Tubman, Solomon Northup, and others. This is a man whose life in microcosm represents both the history and the fate of America. It is my great privilege and pleasure to introduce you to one of our greatest lost figures, the Reverend Josiah Henson.

An Interview with Jared Brock, author of
[The Road to Dawn](#)

Q: Josiah Henson was a man who spent more than 40 years of his life in slavery but escaped with his family to become one of the great abolitionists of his time. Why do so few of us know about him?

A: Given enough time, history becomes a mystery. Without story stewards, narratives simply get lost. Now imagine a group of people under constant siege, where their oppressors systematically destroy every trace of their existence - think of Jews at the hands of Nazi Germany, or Natives in the face of American expansionism, or blacks in the antebellum, Jim Crow, and modern eras. Having spent several years on Josiah's life, I can tell you that there are gaps in the narrative, deep questions I wish I had answers for that simply may never surface. Gratefully, there's plenty to keep the flame going and spread his life lessons to hearts around the globe.

Q: How did you discover Josiah?

A: In February 2014, I was perusing a bookshop in Florida when I came across a copy of Uncle Tom's Cabin by Harriet Beecher Stowe. My wife, Michelle, had been wanting the novel for a while, so I purchased a copy and stuffed it in her Christmas stocking. She read it, was moved by it, and I decided to do a little more research. I knew that Stowe's novel had often been credited with influencing the debate at the heart of the Civil War. But I was surprised to discover that her novel was based on the life of a real man, named Josiah Henson.

Q: Why did you decide it was important for you to tell his story?

A: When I found out Josiah's cabin was just a few short hours from my own home, I had to visit. We drove to Dresden, Ontario, on a blazing hot summer day, and Michelle read me Josiah's humble little memoir on the return ride. We learned that the prime minister of Great Britain had thrown a surprise banquet in his honor, and that Lord Grey had offered him a job. The archbishop of Canterbury had wept after hearing his story.

This man had been feted by queens and presidents, and he had won a medal at the first

World's Fair in London. He had rescued 118 slaves, including his own brother, and helped build a five-hundred- person freeman settlement, called Dawn, that was known as one of the final stops on the Underground Railroad. How had I never heard of Josiah Henson?

Basically, my curiosity led me to discover this amazing African-American hero. His life lessons—of compassion, leadership, and stewardship—were too great to ignore.

Q: In addition to being an author you're also a documentary filmmaker, and to accompany The Road to Dawn you're simultaneously releasing a film about Josiah's life. How did you balance telling the story on the page versus on the screen? Why did you decide to add a film component?

A: We're very excited about the documentary. It's called JOSIAH, and it tells his story from birth to freedom in Canada. I believe in the power of film and was so honored when actor Danny Glover agreed to narrate the voice of Josiah Henson. We're hoping the doc will serve as a gateway to dive deeper into Josiah's story, and the greater historical context, in The Road to Dawn.

Q: You've additionally set up a foundation in Josiah's name. Can you tell us about it?

A: We're waiting on charity status, but we're excited about what the Josiah Henson Foundation could become. Without preservation and conservation, we could lose him again. There are so many unknowns about Josiah's life, let alone the greater story of slavery. Our goal is to make known the life and legacy of Josiah so that future generations can benefit from his lessons and leadership.

Q: You traveled 3,000 miles researching Josiah's story. Can you tell us a bit about your journey—what you learned about yourself and what you learned about Josiah along the way?

A: A big lesson was never to travel to New Orleans in July without air conditioning! It was a very memorable trip. In addition to spending time in his actual home in Dresden, Ontario, I got to visit the Isaac Riley plantation in Maryland and the Francis Newman plantation where he was born. To think that such beautiful farms once were lands of

torture, rape, and slavery is almost unfathomable. The trip really brought home the reminder of what each of us is capable of if we allow evil to manifest.

Q: Did anything unexpected happen during your research?

A: The Amos Riley plantation in Kentucky—the place from which Josiah and his family escaped across the Ohio River—is still owned by the slave owner's descendants. No one had been allowed to tour the property in nearly forty years, but they kindly welcomed me to film for more than two hours. That was a gift. I know it sounds naive and strange, but I attended the Henson family reunion in Michigan and was quite surprised to see...white people. The Henson family— like Josiah's school nearly two hundred years ago—is wonderfully diverse. Science suggests we're all, at most, fifty-fifth cousins, but we often forget the fact that we're literally all one family. The brotherhood of man should be taught in classrooms above perhaps all else.

Q: What would people be most surprised to learn about Josiah?

A: An overseer used a six-foot fence post to break Josiah's arm and shatter his shoulder blades when Josiah was in his early twenties. Josiah could never raise his hands above head from that moment on. He had to stoop forward to put his hat on. Another interesting fact: there's a very high probability that his huge list of descendants includes Matthew Henson (co-discoverer of the North Pole) and Taraji P. Henson (an amazing Hollywood actress.) I'd love to shoot a feature film about Josiah's life in which she plays Josiah's wife.

Q: A major part of Josiah's story involves the novel Uncle Tom's Cabin by Harriet Beecher Stowe—a novel that Lincoln somewhat jokingly stated sparked the Civil War. What did Josiah think when he learned he was the inspiration for the title character?

A: The novel made Josiah internationally famous. He traveled constantly and spoke hundreds of times on behalf of Dawn and the abolitionist movement. It was a role he was glad to play. Josiah wrote in his memoir: "From that time to the present, I have been called Uncle Tom. And I feel proud of the title. If my humble words, in any way

inspired that gifted lady to write, I have not lived in vain. For I believe that her book was the beginning of the glorious end."

Q: [The Road to Dawn](#) casts Uncle Tom's Cabin in a new light and challenges us to question our perception of Uncle Tom. How can we change the way Uncle Tom is interpreted in modern times?

A: Today the term "Uncle Tom" has a very derogatory meaning due in no small part to the racist blackface plays of the late nineteenth and early twentieth centuries. But at the time the book was written, Uncle Tom was Superman. He was willing to stand up to injustice, even to the point of martyrdom, to realize the freedom of others. As modern readers learn the history of this horrible literary bastardization, I hope we reject its inherent racism and return to Stow's original intention.

Q: How does Josiah's life resonate today, more than 130 years after his death? What lesson(s) do you hope readers/viewers take away after learning about him?

A: When Josiah reached the Buffalo side of the Niagara River, a Scottish captain paid to ferry the Henson family across to Canada. But he asked him a question first: are you going to be a good man? Josiah replied "I will use my freedom well." Knowing his industriousness and entrepreneurial wiring, I'm certain that Josiah could have settled into a white picket fence Canadian dream lifestyle and lived out his days in comfort. Instead, he stewarded his freedom—and risked it again and again— to rescue others and fight for freedom in the political, economic, and educational arenas. It's a call for all of us to use our freedom well. <>

[On Gravity: A Brief Tour of a Weighty Subject](#) by A. Zee [Princeton University Press, 9780691174389]

A brief introduction to gravity through Einstein's general theory of relativity
Of the four fundamental forces of nature, gravity might be the least understood and yet the one with which we are most intimate. From the months each of us spent suspended in the womb anticipating birth to the moments when we wait for sleep to transport us to other realities, we are always aware of gravity. In [On Gravity](#), physicist A. Zee

combines profound depth with incisive accessibility to take us on an original and compelling tour of Einstein's general theory of relativity.

Inspired by Einstein's audacious suggestion that spacetime could ripple, Zee begins with the stunning discovery of gravity waves. He goes on to explain how gravity can be understood in comparison to other classical field theories, presents the idea of curved spacetime and the action principle, and explores cutting-edge topics, including black holes and Hawking radiation. Zee travels as far as the theory reaches, leaving us with tantalizing hints of the utterly unknown, from the intransigence of quantum gravity to the mysteries of dark matter and energy.

Concise and precise, and infused with Zee's signature warmth and freshness of style, On Gravity opens a unique pathway to comprehending relativity and gaining deep insight into gravity, spacetime, and the workings of the universe.

Excerpt: After writing a massive textbook on Einstein gravity, called appropriately enough Einstein Gravity in a Nutshell and referred to henceforth as GNut, I was a bit stung by a native of the Amazon who jokingly said that, while he liked the book, he had to ask a friend to carry it for him. (What a weakling! Don't physics students go to the gym any more? Bring back the compulsory gym of my undergrad years!) Of course, the book's weight' reflects the innate beauty and importance of the subject it covers.

In any case, my lamentations to Ingrid Gnerlich, my longtime editor at Princeton University Press, led to the thought of writing a short book for a change. I felt that, since I had written a long book on Einstein gravity, I had a license to write a short book on Einstein gravity.

I had also published in 1989 a popular book about Einstein gravity titled An Old Man's Toy and later republished as Einstein's Universe: Gravity at Work and Play, referred to henceforth as Toy. Thus, I think of this book as between a toy and a nutshell.

One motivation for this book is to help people bridge the gap between popular books and textbooks on Einstein gravity. You could read popular books until you are blue in the face, but if you want to have a true understanding of Einstein gravity, there is no getting around tackling a serious textbook. From the emails I receive, I know that many would like to cross that gap. So consider this book as a stepping stone toward GNut.

Actually, Einstein gravity is much less demanding mathematically than quantum mechanics. I have placed some of the mathematics involved, mainly that needed to describe curved spacetime, into an appendix. That appendix provides a good gauge. If you could follow the material in there easily, then you might be ready for GNut.

On the other hand, if you don't feel like slugging through the appendix, you could still enjoy this book as a popular book written at a somewhat higher level than the standard popular literature about Einstein gravity.

Sitting between a toy and a nutshell, I feel that I can afford to be somewhat sketchier in some of my explanations. The way these sketches could be fleshed out calls for more math, not more words. I could always refer the motivated reader to further details in GNut.

A week after I signed the contract for this book, gravity waves were detected, and thus naturally, the book weaves around gravity waves, starting and ending with them. One thing I do not do is to go through a detailed description of the detector and the observational protocol, not because I don't think that's important, but for that, firsthand accounts by those who lived through the design, setup, and actual detection would be best.

Instead, I focus on the conceptual framework of Einstein's theory—and yes, its beauty—in keeping with my being, after all, a professor of theoretical physics. Reluctantly, I have to omit several topics. For instance, the reader will find no mention of the three classic tests of Einstein gravity, nor of such figures as Arthur Eddington, who through his observations of distant starlight curving in the gravitational field helped bring the new theory to the attention of the general public. But I do discuss Faraday, Maxwell, and Hertz, because I want to emphasize the concepts of field, wave, and action as fundamental to theoretical physics. With the example of the electromagnetic wave in front of us, we are led naturally to gravity waves, at least with

the benefit of hindsight. For a short book such as this, I am obliged to pick and choose. <>

[When Einstein Walked with Gödel: Excursions to the Edge of Thought](#) by Jim Holt [Farrar, Straus and Giroux, 9780374146702]

From Jim Holt, the New York Times bestselling author of Why Does the World Exist?, comes an entertaining and accessible guide to the most profound scientific and mathematical ideas of recent centuries in [When Einstein Walked with Gödel: Excursions to the Edge of Thought](#).
Does time exist? What is infinity? Why do mirrors reverse left and right but not up and down? In this scintillating collection, Holt explores the human mind, the cosmos, and the thinkers who've tried to encompass the latter with the former. With his trademark clarity and humor, Holt probes the mysteries of quantum mechanics, the quest for the foundations of mathematics, and the nature of logic and truth. Along the way, he offers intimate biographical sketches of celebrated and neglected thinkers, from the physicist Emmy Noether to the computing pioneer Alan Turing and the discoverer of fractals, Benoit Mandelbrot. Holt offers a painless and playful introduction to many of our most beautiful but least understood ideas, from Einsteinian relativity to string theory, and also invites us to consider why the greatest logician of the twentieth century believed the U.S. Constitution contained a terrible contradiction—and whether the universe truly has a future.

Excerpt: These essays were written over the last two decades. I selected them with three considerations in mind.

First, the depth, power, and sheer beauty of the ideas they convey. Einstein's theory of relativity (both special and general), quantum mechanics, group theory, infinity and the infinitesimal, Turing's theory of computability and the "decision problem," Gödel's incompleteness theorems, prime numbers and the Riemann zeta conjecture, category theory, topology, higher dimensions, fractals, statistical regression and the "bell curve," the theory of truth—these are among the most thrilling (and humbling) intellectual achievements I've

encountered in my life. All are explained in the course of these essays. My ideal is the cocktail-party chat: getting across a profound idea in a brisk and amusing way to an interested friend by stripping it down to its essence (perhaps with a few swift pencil strokes on a napkin). The goal is to enlighten the newcomer while providing a novel twist that will please the expert. And never to bore.

My second consideration is the human factor. All these ideas come with flesh-and-blood progenitors who led highly dramatic lives. Often these lives contain an element of absurdity. The creator of modern statistics (and originator of the phrase "nature versus nurture"), Sir Francis Galton, was a Victorian prig who had comical misadventures in the African bush. A central figure in the history of the "four-color theorem" was a flamboyantly eccentric mathematician/classicist called Percy Heawood—or "Pussy" Heawood by his friends, because of his feline whiskers.

More often the life has a tragic arc. The originator of group theory, Évariste Galois, was killed in a duel before he reached his twenty-first birthday. The most revolutionary mathematician of the last half century, Alexander Grothendieck, ended his turbulent days as a delusional hermit in the Pyrenees. The creator of the theory of infinity, Georg Cantor, was a kabbalistic mystic who died in an insane asylum. Ada Lovelace, the cult goddess of cyber feminism (and namesake of the programming language used by the U.S. Department of Defense), was plagued by nervous crises brought on by her obsession with atoning for the incestuous excesses of her father, Lord Byron. The great Russian masters of infinity, Dmitri Egorov and Pavel Florensky, were denounced for their anti-materialist spiritualism and murdered in Stalin's Gulag. Kurt Gödel, the greatest of all modern logicians, starved himself to death out of the paranoiac belief that there was a universal conspiracy to poison him. David Foster Wallace (whose attempt to grapple with the subject of infinity I examine) hanged himself. And Alan Turing—who conceived of the computer, solved the greatest logic problem of his time, and saved countless lives by cracking the Nazi "Enigma" code—took his own life, for reasons that remain mysterious, by biting into a cyanide-laced apple.

My third consideration in bringing these essays together is a philosophical one. The ideas they present all bear crucially on our most general conception of the world (metaphysics), on how we come to attain and justify our knowledge (epistemology), and even on how we conduct our lives (ethics).

Start with metaphysics. The idea of the infinitely small—the infinitesimal—raises the question of whether reality is more like a barrel of molasses (continuous) or a heap of sand (discrete). Einstein's relativity theory either challenges our notion of time or—if Gödel's ingenious reasoning is to be credited—abolishes it altogether. Quantum entanglement calls the reality of space into question, raising the possibility that we live in a "holistic" universe. Turing's theory of computability forces us to rethink how mind and consciousness arise from matter.

Then there's epistemology. Most great mathematicians claim insight into an eternal realm of abstract forms transcending the ordinary world we live in. How do they interact with this supposed "Platonic" world to obtain mathematical knowledge? Or could it be that they are radically mistaken—that mathematics, for all its power and utility, ultimately amounts to a mere tautology, like the proposition "A brown cow is a cow"? To make this issue vivid, I approach it in a novel way, by considering what is universally acknowledged to be the greatest unsolved problem in mathematics: the Riemann zeta conjecture.

Physicists, too, are prone to a romantic image of how they arrive at knowledge. When they don't have hard experimental/observational evidence to go on, they rely on their aesthetic intuition—on what the Nobel laureate Steven Weinberg unblushingly calls their "sense of beauty." The "beauty = truth" equation has served physicists well for much of the last century. But—as I ask in my essay "The String Theory Wars"—has it recently been leading them astray?

Finally, ethics. These essays touch on the conduct of life in many ways. The eugenic programs in Europe and the United States ushered in by the theoretical speculation of Sir Francis Galton cruelly illustrate how science can pervert ethics. The ongoing transformation of our habits of life by the computer

should move us to think hard about the nature of happiness and creative fulfillment (as I do in "Smarter, Happier, More Productive"). And the omnipresence of suffering in the world should make us wonder what limits there are, if any, to the demands that morality imposes upon us (as I do in "On Moral Sainthood").

The last essay in the volume, "Say Anything," begins by examining Harry Frankfurt's famous characterization of the bullshitter as one who is not hostile to the truth but indifferent to it. It then enlarges the picture by considering how philosophers have talked about truth—erroneously?—as a "correspondence" between language and the world. In a slightly ludic way, this essay bridges the fields of metaphysics, epistemology, and ethics, lending the volume a unity that I hope is not wholly specious.

And lest I be accused of inconsistency, let me (overconfidently?) express the conviction that the "Copernican principle," "Gödel's incompleteness theorems," "Heisenberg's uncertainty principle," "Newcomb's problem," and "the Monty Hall problem" are all exceptions to Stigler's law of eponymy.

When Einstein Walked with Gödel

In 1933, with his great scientific discoveries behind him, Albert Einstein came to America. He spent the last twenty-two years of his life in Princeton, New Jersey, where he had been recruited as the star member of the Institute for Advanced Study. Einstein was reasonably content with his new milieu, taking its pretensions in stride. "Princeton is a wonderful piece of earth, and at the same time an exceedingly amusing ceremonial backwater of tiny spindle-shanked demigods," he observed. His daily routine began with a leisurely walk from his house, at 112 Mercer Street, to his office at the institute. He was by then one of the most famous and, with his distinctive appearance—the whirl of pillow-combed hair, the baggy pants held up by suspenders—most recognizable people in the world.

A decade after arriving in Princeton, Einstein acquired a walking companion, a much younger man who, next to the rumpled Einstein, cut a dapper figure in a white linen suit and matching

fedora. The two would talk animatedly in German on their morning amble to the institute and again, later in the day, on their way homeward. The man in the suit might not have been recognized by many townspeople, but Einstein addressed him as a peer, someone who, like him, had singlehandedly launched a conceptual revolution. If Einstein had upended our everyday notions about the physical world with his theory of relativity, the younger man, Kurt Gödel, had had a similarly subversive effect on our understanding of the abstract world of mathematics.

Gödel, who has often been called the greatest logician since Aristotle, was a strange and ultimately tragic man. Whereas Einstein was gregarious and full of laughter, Gödel was solemn, solitary, and pessimistic. Einstein, a passionate amateur violinist, loved Beethoven and Mozart. Gödel's taste ran in another direction: his favorite movie was Walt Disney's Snow White and the Seven Dwarfs, and when his wife put a pink flamingo in their front yard, he pronounced it *furchtbar herzig*—"awfully charming." Einstein freely indulged his appetite for heavy German cooking; Gödel subsisted on a valetudinarian's diet of butter, baby food, and laxatives. Although Einstein's private life was not without its complications, outwardly he was jolly and at home in the world. Gödel, by contrast, had a tendency toward paranoia. He believed in ghosts; he had a morbid dread of being poisoned by refrigerator gases; he refused to go out when certain distinguished mathematicians were in town, apparently out of concern that they might try to kill him. "Every chaos is a wrong appearance," he insisted—the paranoiac's first axiom.

Although other members of the institute found the gloomy logician baffling and unapproachable, Einstein told people that he went to his office "just to have the privilege of walking home with Kurt Gödel." Part of the reason, it seems, was that Gödel was undaunted by Einstein's reputation and did not hesitate to challenge his ideas. As another member of the institute, the physicist Freeman Dyson, observed, "Gödel was ... the only one of our colleagues who walked and talked on equal terms with Einstein." But if Einstein and Gödel seemed to exist on a higher plane than the rest of humanity, it

was also true that they had become, in Einstein's words, "museum pieces." Einstein never accepted the quantum theory of Niels Bohr and Werner Heisenberg. Gödel believed that mathematical abstractions were every bit as real as tables and chairs, a view that philosophers had come to regard as laughably

naive. Both Gödel and Einstein insisted that the world is independent of our minds yet rationally organized and open to human understanding. United by a shared sense of intellectual isolation, they found solace in their companionship. "They didn't want to speak to anybody else," another member of the institute said. "They only wanted to speak to each other."

People wondered what they spoke about. Politics was presumably one theme. (Einstein, who supported Adlai Stevenson, was exasperated when Gödel chose to vote for Dwight D. Eisenhower in 1952.) Physics was no doubt another. Gödel was well versed in the subject; he shared Einstein's mistrust of the quantum theory, but he was also skeptical of the older physicist's ambition to supersede it with a "unified field theory" that would encompass all known forces in a deterministic framework. Both were attracted to problems that were, in Einstein's words, of "genuine importance," problems pertaining to the most basic elements of reality. Gödel was especially preoccupied by the nature of time, which, he told a friend, was the philosophical question. How could such a "mysterious and seemingly self-contradictory" thing, he wondered, "form the basis of the world's and our own existence"? That was a matter in which Einstein had shown some expertise.

Decades before, in 1905, Einstein proved that time, as it had been understood by scientist and layman alike, was a fiction. And this was scarcely his only achievement that year. As it began, Einstein, twenty-five years old, was employed as an inspector in a patent office in Bern, Switzerland. Having earlier failed to get his doctorate in physics, he had temporarily given up on the idea of an academic career, telling a friend that "the whole comedy has become boring." He had recently read a book by Henri Poincaré, a French mathematician of enormous reputation, that identified three fundamental unsolved problems in

science. The first concerned the "photoelectric effect": How did ultraviolet light knock electrons off the surface of a piece of metal? The second concerned "Brownian motion": Why did pollen particles suspended in water move about in a random zigzag pattern? The third concerned the "luminiferous ether" that was supposed to fill all of space and serve as the medium through which light waves moved, the way sound waves move through air, or ocean waves through water: Why had experiments failed to detect the earth's motion through this ether?

Each of these problems had the potential to reveal what Einstein held to be the underlying simplicity of nature. Working alone, apart from the scientific community, the unknown junior clerk rapidly managed to dispatch all three. His solutions were presented in four papers, written in March, April, May, and June of 1905. In his March paper, on the photoelectric effect, he deduced that light came in discrete particles, which were later dubbed photons. In his April and May papers,

he established once and for all the reality of atoms, giving a theoretical estimate of their size and showing how their bumping around caused Brownian motion. In his June paper, on the ether problem, he unveiled his theory of relativity. Then, as a sort of encore, he published a three-page note in September containing the most famous equation of all time: $E=mc^2$.

All these papers had a touch of magic about them and upset some deeply held convictions in the physics community. Yet, for scope and audacity, Einstein's June paper stood out. In thirty succinct pages, he completely rewrote the laws of physics. He began with two stark principles. First, the laws of physics are absolute: the same laws must be valid for all observers. Second, the speed of light is absolute; it, too, is the same for all observers. The second principle, though less obvious, had the same sort of logic to recommend it. Because light is an electromagnetic wave (this had been known since the nineteenth century), its speed is fixed by the laws of electromagnetism; those laws ought to be the same for all observers; and therefore everyone should see light moving at the same speed, regardless of their frame of reference. Still, it was

bold of Einstein to embrace the light principle, for its consequences seemed downright absurd.

Suppose—to make things vivid—that the speed of light is a hundred miles an hour. Now suppose I am standing by the side of the road and I see a light beam pass by at this speed. Then I see you chasing after it in a car at sixty miles an hour. To me, it appears that the light beam is outpacing you by forty miles an hour. But you, from inside your car, must see the beam escaping you at a hundred miles an hour, just as you would if you were standing still: that is what the light principle demands. What if you gun your engine and speed up to ninety-nine miles an hour? Now I see the beam of light outpacing you by just one mile an hour. Yet to you, inside the car, the beam is still racing ahead at a hundred miles an hour, despite your increased speed. How can this be? Speed, of course, equals distance divided by time. Evidently, the faster you go in your car, the shorter your ruler must become and the slower your clock must tick relative to mine; that is the only way we can continue to agree on the speed of light. (If I were to pull out a pair of binoculars and look at your speeding car, I would actually see its length contracted and you moving in slow motion inside.) So Einstein set about recasting the laws of physics accordingly. To make these laws absolute, he made distance and time relative.

It was the sacrifice of absolute time that was most stunning. Isaac Newton believed that time was objective, universal, and transcendent of all natural phenomena; "the flowing of absolute time is not liable to any change," he declared at the beginning of his Principia. Einstein, however, realized that our idea of time is something we abstract from our experience with rhythmic phenomena: heartbeats, planetary rotations and revolutions, the ticking of clocks. Time judgments always come down to judgments of simultaneity. "If, for instance, I say, 'That train arrives here at 7 o'clock,' I mean something like this: The pointing of the small hand of my watch to 7 and the arrival of the train are simultaneous events,' " Einstein wrote in the June paper. If the events in question are at some distance from each other, judgments of simultaneity can be made only by sending light signals back and forth. Working from his two basic principles, Einstein proved that whether an observer

deems two events to be happening "at the same time" depends

on his state of motion. In other words, there is no universal now. With different observers slicing up the timescape into "past," "present," and "future" in different ways, it seems to follow that all moments coexist with equal reality.

Einstein's conclusions were the product of pure thought, proceeding from the most austere assumptions about nature. In the more than a century since he derived them, they have been precisely confirmed by experiment after experiment. Yet his June 1905 paper on relativity was rejected when he submitted it as a dissertation. (He then submitted his April paper, on the size of atoms, which he thought would be less likely to startle the examiners; they accepted it only after he added one sentence to meet the length threshold.) When Einstein was awarded the 1921 Nobel Prize in Physics, it was for his work on the photoelectric effect. The Swedish Academy forbade him to make any mention of relativity in his acceptance speech. As it happened, Einstein was unable to attend the ceremony in Stockholm. He gave his Nobel lecture in Gothenburg, with King Gustav V seated in the front row. The king wanted to learn about relativity, and Einstein obliged him.

In 1906, the year after Einstein's annus mirabilis, Kurt Gödel was born in the city of Brno (now in the Czech Republic). Kurt was both an inquisitive child—his parents and brother gave him the nickname der Herr Warum, "Mr. Why?"—and a nervous one. At the age of five, he seems to have suffered a mild anxiety neurosis. At eight, he had a terrifying bout of rheumatic fever, which left him with the lifelong conviction that his heart had been fatally damaged.

Gödel entered the University of Vienna in 1924. He had intended to study physics, but he was soon seduced by the beauties of mathematics, and especially by the notion that abstractions like numbers and circles had a perfect, timeless existence independent of the human mind. This doctrine, which is called Platonism, because it descends from Plato's theory of ideas, has always been popular among mathematicians. In the philosophical world of 1920s Vienna, however, it was considered distinctly old-fashioned. Among the

many intellectual movements that flourished in the city's rich café culture, one of the most prominent was the Vienna Circle, a group of thinkers united in their belief that philosophy must be cleansed of metaphysics and made over in the image of science. Under the influence of Ludwig Wittgenstein, their reluctant guru, the members of the Vienna Circle regarded mathematics as a game played with symbols, a more intricate version of chess. What made a proposition like "2 + 2 = 4" true, they held, was not that it correctly described some abstract world of numbers but that it could be derived in a logical system according to certain rules.

Gödel was introduced into the Vienna Circle by one of his professors, but he kept quiet about his Platonist views. Being both rigorous and averse to controversy, he did not like to argue his convictions unless he had an airtight way of demonstrating that they were valid. But how could one demonstrate that mathematics could not be reduced to the artifices of logic? Gödel's strategy—one of preternatural cleverness and, in the words of the philosopher Rebecca Goldstein, "heart-stopping beauty"—was to use logic against itself. Beginning with a logical system for mathematics, a system presumed to be free from contradictions, he invented an ingenious scheme that allowed the formulas in it to engage in a sort of doublespeak. A formula that said something about numbers could also, in this scheme, be interpreted as saying something about other formulas and how they were logically related to one another. In fact, as Gödel showed, a numerical formula could even be made to say something about itself. Having painstakingly built this apparatus of mathematical self-reference, Gödel came up with an astonishing twist: he produced a formula that, while ostensibly saying something about numbers, also says, "I am not provable." At first, this looks like a paradox, recalling as it does the proverbial Cretan who announces, "All Cretans are liars." But Gödel's self-referential formula comments on its provability, not on its truthfulness. Could it be lying when it asserts, "I am not provable"? No, because if it were, that would mean it could be proved, which would make it true. So, in asserting that it cannot be proved, it has to be telling the truth. But the truth of this proposition can be seen only from outside the

logical system. Inside the system, it is neither provable nor disprovable. The system, then, is incomplete, because there is at least one true proposition about numbers (the one that says "I am not provable") that cannot be proved within it. The conclusion—that no logical system can capture all the truths of mathematics—is known as the first incompleteness theorem. Gödel also proved that no logical system for mathematics could, by its own devices, be shown to be free from inconsistency, a result known as the second incompleteness theorem.

Wittgenstein once averred that "there can never be surprises in logic." But Gödel's incompleteness theorems did come as a surprise. In fact, when the fledgling logician presented them at a conference in the German city of Königsberg in 1930, almost no one was able to make any sense of them. What could it mean to say that a mathematical proposition was true if there was no possibility of proving it? The very idea seemed absurd. Even the once great logician Bertrand Russell was baffled; he seems to have been under the misapprehension that Gödel had detected an inconsistency in mathematics. "Are we to think that $2 + 2$ is not 4, but 4.001?" Russell asked decades later in dismay, adding that he was "glad [he] was no longer working at mathematical logic." As the significance of Gödel's theorems began to sink in, words like "debacle," "catastrophe," and "nightmare" were bandied about. It had been an article of faith that armed with logic, mathematicians could in principle resolve any conundrum at all—that in mathematics, as it had been famously declared, there was no ignorabimus. Gödel's theorems seemed to have shattered this ideal of complete knowledge.

That was not the way Gödel saw it. He believed he had shown that mathematics has a robust reality that transcends any system of logic. But logic, he was convinced, is not the only route to knowledge of this reality; we also have something like an extrasensory perception of it, which he called "mathematical intuition." It is this faculty of intuition that allows us to see, for example, that the formula saying "I am not provable" must be true, even though it defies proof within the system where it lives. Some thinkers (like the physicist Roger Penrose) have taken this theme further, maintaining that Gödel's incompleteness theorems have

profound implications for the nature of the human mind. Our mental powers, it is argued, must outstrip those of any computer, because a computer is just a logical system running on hardware and our minds can arrive at truths that are beyond the reach of a logical system.

Gödel was twenty-four when he proved his incompleteness theorems (a bit younger than Einstein was when he created relativity theory). At the time, much to the disapproval of his strict Lutheran parents, he was courting an older Catholic divorcée by the name of Adele, who, to top things off, was employed as a dancer in a Viennese nightclub called Der Nachtfalter (the Moth). The political situation in Austria was becoming ever more chaotic with Hitler's rise to power in Germany, although Gödel seems scarcely to have noticed. In 1936, the Vienna Circle dissolved after its founder was assassinated by a deranged student. Two years later came the Anschluss. The perilousness of the times was finally borne in upon Gödel when a band of Nazi youths roughed him up and knocked off his glasses, before retreating under the umbrella blows of Adele. He resolved to leave for Princeton, where he had been offered a position by the Institute for Advanced Study. But, the war having broken out, he judged it too risky to cross the Atlantic. So the now married couple took the long way around, traversing Russia, the Pacific, and the United States and finally arriving in Princeton in early 1940. At the institute, Gödel was given an office almost directly above Einstein's. For the rest of his life, he rarely left Princeton, which he came to find "ten times more congenial" than his once beloved Vienna.

Although Gödel was still little known in the world at large, he had a godlike status among the cognoscenti. "There it was, inconceivably, K Goedel, listed just like any other name in the bright orange Princeton community phonebook," writes Rebecca Goldstein, who came to Princeton University as a graduate student of philosophy in the early 1970s, in her intellectual biography Incompleteness: The Proof and Paradox of Kurt Gödel (2005). "It was like opening up the local phonebook and finding B. Spinoza or I. Newton." She goes on to recount how she "once found the philosopher Richard Rorty standing in a bit of a

daze in Davidson's food market. He told me in hushed tones that he'd just seen Gödel in the frozen food aisle."

So naive and otherworldly was the great logician that Einstein felt obliged to help look after the practical aspects of his life. One much-retailed story concerns Gödel's decision after the war to become an American citizen. Gödel took the matter of citizenship with great solemnity, preparing for the exam by making a close study of the U.S. Constitution. On the appointed day, Einstein accompanied him to the courthouse in Trenton and had to intervene to quiet Gödel down when the agitated logician began explaining to the judge how the U.S. Constitution contained a loophole that would allow a dictatorship to come into existence.'

Around the same time that Gödel was studying the Constitution, he was also taking a close look at Einstein's relativity theory. The key principle of relativity is that the laws of physics should be the same for all observers. When Einstein first formulated the principle in his revolutionary 1905 paper, he restricted "all observers" to those who were moving uniformly relative to one another—that is, in a straight line and at a constant speed. But he soon realized that this restriction was arbitrary. If the laws of physics were to provide a truly objective description of nature, they ought to be valid for observers moving in any way relative to one another—spinning, accelerating, spiraling, whatever. It was thus that Einstein made the transition from his "special" theory of relativity of 1905 to his "general" theory, whose equations he worked out over the next decade and published in 1916. What made those equations so powerful was that they explained gravity, the force that governs the overall shape of the cosmos.

Decades later, Gödel, walking with Einstein, had the privilege of picking up the subtleties of relativity theory from the master himself.

Einstein had shown that the now or time depended on motion and gravity and that the division of events into "past" and "future" was relative. Gödel took a more radical view: he believed that time, as it was intuitively understood, did not exist at all. As usual, he was not content with a mere verbal argument. Philosophers ranging from Parmenides, in ancient times, to Immanuel Kant, in the eighteenth century, and on to J.M.E. McTaggart, at the beginning of the twentieth century, had produced such arguments, inconclusively. Gödel wanted a proof that had the rigor and certainty of mathematics. And he saw just what he wanted lurking within relativity theory. He presented his argument to Einstein for his seventieth birthday, in 1949, along with an etching. (Gödel's wife had knit Einstein a sweater, but she decided not to send it.)

What Gödel found was the possibility of a hitherto unimaginable kind of universe. The equations of general relativity can be solved in a variety of ways. Each solution is, in effect, a model of how the universe might be. Einstein, who believed on philosophical grounds that the universe was eternal and unchanging, had tinkered with his equations so that they would yield such a model—a move he later called "my greatest blunder." Another physicist (a Jesuit priest, as it happens) found a solution corresponding to an expanding universe born at some moment in the finite past. Because this solution, which has come to be known as the big bang model, was consistent with what astronomers observed, it seemed to be the one that described the actual cosmos.

But Gödel came up with a third kind of solution to Einstein's equations, one in which the universe was not expanding but rotating. (The centrifugal force arising from the rotation was what kept everything from collapsing under the force of gravity.) An observer in this universe would see all the galaxies slowly spinning around him; he would know it was the universe doing the spinning and not himself, because he would feel no dizziness. What makes this rotating universe truly weird, Gödel showed, is the way its geometry mixes up space and time. By completing a sufficiently long round trip in a rocket ship, a resident of Gödel's universe could travel back to any point in his own past.

Einstein was not entirely pleased with the news that his equations permitted something as Alice in Wonderland—like as spatial paths that looped backward in time; in fact, he confessed to being "disturbed" by Gödel's universe. Other physicists marveled that time travel, previously the stuff of science fiction, was apparently consistent with the laws of physics. (Then they started worrying about what would happen if you went back to a time

before you were born and killed your own grandfather.) Gödel himself drew a different moral. If time travel is possible, he submitted, then time itself is impossible. A past that can be revisited has not really passed. And the fact that the actual universe is expanding, rather than rotating, is irrelevant. Time, like God, is either necessary or nothing; if it disappears in one possible universe, it is undermined in every possible universe, including our own.

Gödel's strange cosmological gift was received by Einstein at a bleak time in his life. Einstein's quest for a unified theory of physics was proving fruitless, and his opposition to quantum theory alienated him from the mainstream of physics. Family life provided little consolation. His two marriages had been failures; a daughter born out of wedlock seems to have disappeared from history; of his two sons, one was schizophrenic, the other estranged. Einstein's circle of friends had shrunk to Gödel and a few others. One of them was Queen Elisabeth of Belgium, to whom he confided, in March 1955, that "the exaggerated esteem in which my lifework is held makes me very ill at ease. I feel compelled to think of myself as an involuntary swindler." He died a month later, at the age of seventy-six. When Gödel and another colleague went to Einstein's office at the institute to deal with his papers, they found the blackboard covered with dead-end equations.

After Einstein's death, Gödel became ever more withdrawn. He preferred to conduct all conversations by telephone, even if his interlocutor was a few feet distant. When he especially wanted to avoid someone, he would schedule a rendezvous at a precise time and place and then make sure he was somewhere far away. The honors the world wished to bestow upon him made him chary. He had shown up to collect an honorary doctorate in 1953 from Harvard, where his incompleteness theorems were hailed as the most important mathematical discovery of the previous hundred years, but he later complained of being "thrust quite undeservedly into the most highly bellicose company" of John Foster Dulles, a co-honoree. When he was awarded the National Medal of Science in 1974, he refused to go to Washington to meet Gerald Ford at the White House, despite the

offer of a chauffeur for him and his wife. He had hallucinatory episodes and talked darkly of certain forces at work in the world "directly submerging the good." Fearing that there was a plot to poison him, he persistently refused to eat. Finally, looking like (in the words of a friend) "a living corpse," he was taken to the Princeton Hospital. There, two weeks later, on January 14, 1978, he succumbed to self-starvation. According to his death certificate, the cause of death was "malnutrition and inanition" brought on by "personality disturbance."

A certain futility marked the last years of both Gödel and Einstein. What might have been most futile, however, was their willed belief in the unreality of time. The temptation was understandable. If time is merely in our minds, perhaps we can hope to escape it into a timeless eternity. Then we could say, like William Blake, "I see the Past, Present, and Future existing all at once / Before me." In Gödel's case, it might have been his childhood terror of a fatally damaged heart that attracted him to the idea of a timeless universe. Toward the end of his life, he told one confidant that he had long awaited an epiphany that would enable him to see the world in a new light but that it never came.

Einstein, too, was unable to make a clean break with time. "To those of us who believe in physics," he wrote to the widow of a friend who had recently died, "this separation between past, present, and future is only an illusion, if a stubborn one." When his own turn came, a couple of weeks later, he said, "It is time to go."

Gödel Takes On the U.S. Constitution

Aristotle, the second-greatest logician of all time, was also an expert on political constitutions. Can the same be said for the greatest logician of all time, Kurt Gödel? Gödel had a genius for detecting the paradoxical in unexpected places. He looked into the axioms of mathematics and saw incompleteness. He looked into the equations of general relativity and saw "closed time-like loops." And he looked into the Constitution of the United States and saw a logical loophole that could allow a dictator to take power. Or did he?

The scene was New Jersey, 1947. Sixteen years earlier, Gödel had stunned the intellectual world

by proving that no logical system could ever capture all the truths of mathematics—a result that, along with Heisenberg's uncertainty principle, was to become iconic of the limitations of human knowledge. He had left Austria for the United States when the Nazis took over, and for nearly a decade he had been a member of the Institute for Advanced Study in Princeton. It was time, he decided, to become an American citizen. Earlier that year, he had found a curious new solution to Einstein's cosmological equations, one that made space-time rotate rather than expand. In the "Gödel universe," it would be possible to journey in a big circle and arrive back at your starting point before you left.

But Gödel's research into time travel was interrupted by his citizenship hearing, scheduled for December 5 in Trenton. His character witnesses were to be his close friends Albert Einstein and the game theory co-inventor Oskar Morgenstern, who also served that day as his chauffeur. Being a fastidious man, Gödel decided to make a close study of American political institutions in preparation for the exam. On the eve of the hearing, he called Morgenstern in a state of agitation. He had found a logical inconsistency in the Constitution, he said. Morgenstern was amused by this, but he realized that Gödel was dead serious. He urged him not to mention the matter to the judge, fearing it would jeopardize his citizenship bid.

On the short drive to Trenton the next day, Einstein and Morgenstern tried to distract Gödel with jokes. When they arrived at the court, the judge, Phillip Forman, was impressed by Gödel's eminent I' witnesses, and he invited the trio into his chambers. After some small talk, he said to Gödel, "Up to now you have held German citizenship." No, Gödel corrected, Austrian. "Anyhow," continued the judge, "it was under an evil dictatorship ... but fortunately that's not possible in America."

"On the contrary, I know how that can happen," cried Gödel, and he began to explain how the Constitution might permit such a thing to occur. The judge, however, indicated that he was not interested, and Einstein and Morgenstern succeeded in quieting the examinee down. (This exchange was recounted in the 1998 book In the Light of Logic by

the logician Solomon Feferman, who apparently got it indirectly from Morgenstern.)

A few months later, Gödel took his oath of citizenship. Writing to his mother back in Vienna, he commented that "one went home with the impression that American citizenship, in contrast to most others, really meant something."

For those of us who have never read the Constitution all the way through, this anecdote cannot but be disturbing. What was the logical flaw that Gödel believed he had descried in the document? Could the Founding Fathers have inadvertently left open a legal door to fascism?

It should be remembered that while Gödel was supremely logical, he was also supremely paranoid and not a little naive. There was something sweetly Pnin-like about him. He believed in ghosts; had a morbid dread of refrigerator gases; pronounced the pink flamingo that his hoydenish wife placed outside his window furchtbar herzig (awfully charming); and was convinced, based on nose measurements he had made on a newspaper photograph, that General MacArthur had been replaced by an impostor. His paranoia, though, was decidedly tragic. "Certain forces" were at work in the world "directly submerging the good," he believed.

So was the contradiction in the Constitution, or was it in Gödel's head? I decided to consult a distinguished professor of constitutional law, Laurence Tribe. Besides teaching at Harvard Law School, Tribe had a knack for algebraic topology in his undergraduate days.

"It's unlikely that Gödel could have found anything of the form p and not -p in the Constitution," Tribe told me. "What might have bothered him, though, was Article V, which places almost no substantive constraints on how the Constitution can be amended. He could have interpreted this to mean that as long as an amendment is proposed and approved in the prescribed way, it automatically becomes part of the Constitution, even if it would eliminate the essential features of a republican form of government and obliterate virtually all the protections of human rights."

Tribe continued, "But if I'm correct, Gödel's concern rested on something of a non sequitur. The idea

that any constitution could so firmly entrench a set of basic rights and principles as to make them invulnerable to orderly repudiation is unrealistic. Nations like India that purport to make certain basic principles unamendable have in no sense experienced greater fidelity to human rights or democracy than has the United States."

A couple of other legal scholars I spoke to concurred with Tribe that Article V must have been what was vexing Gödel. But the mystery of whether he found something genuinely kinky in the Constitution remains a bit like the mystery of whether Fermat really had a "marvelous proof" of his last theorem. How I wish I had been the judge at that citizenship hearing. Imagine being presented with the opportunity to lean forward, look this agitated genius in the eye, and say, "Surely you must be joking, Mr. Gödel." <>

Origin Story: A Big History of Everything by David Christian [Little, Brown and Company, 9780316392006]

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Excerpt:

We tell stories to make sense of things. It's in our blood. - Lia Hills, "Return to the Heart"

The idea of a modern origin story is in the air. For me, it began with a course on the history of everything that I first taught at Macquarie University in Sydney in 1989. I saw that course as a way of getting at the history of humanity. At the time, I taught and researched Russian and Soviet history. But I worried that teaching a national or imperial history (Russia was both nation and empire) conveyed the subliminal message that humans are divided, at the most fundamental level, into competing tribes. Was that a helpful message to teach in a world with nuclear weapons? As a schoolboy during the Cuban missile crisis, I vividly remember thinking we were on the verge of an apocalypse. Everything was about to be destroyed. And I remember wondering if there were kids "over there" in the Soviet Union who were equally scared. After all, they, too, were humans. As a child, I had lived in Nigeria. That gave me a strong sense of a single, extraordinarily diverse human community, a feeling that was confirmed when, as a teenager, I went to Atlantic College, an international school in South Wales.

Several decades later as a professional historian, I began to think about how to teach a unified history of humanity. Could I teach about the heritage shared by all humans and tell that story with some of the grandeur and awe of the great national histories? I became convinced that we needed a story in which our Paleolithic ancestors and Neolithic farmers could play as important a role as the rulers, conquerors, and emperors who have dominated so much historical scholarship.

Eventually, I understood that these were not original ideas. In 1986, the great world historian

William McNeill argued that writing histories of "the triumphs and tribulations of humanity as a whole" was "the moral duty of the historical profession in our time."' Even earlier, but in the same spirit, H. G. Wells wrote a history of humanity as a response to the carnage of World War I.

There can be no peace now, we realize, but a common peace in all the world; no prosperity but a general prosperity. But there can be no common peace and prosperity without common historical ideas.... With nothing but narrow, selfish, and conflicting nationalist traditions, races and peoples are bound to drift towards conflict and destruction.

Wells understood something else, too: If you want to teach the history of humanity, you probably need to teach the history of everything. That's why his Outline of History turned into a history of the universe. To understand the history of humanity, you have to understand how such a strange species evolved, which means learning about the evolution of life on planet Earth, which means learning about the evolution of planet Earth, which means learning about the evolution of stars and planets, which means knowing about the evolution of the universe. Today, we can tell that story with a precision and scientific rigor that was unthinkable when Wells wrote.

Wells was looking for unifying knowledge—knowledge that links disciplines as well as peoples. All origin stories unify knowledge, even the origin stories of nationalist historiography. And the most capacious of them can lead you across many time scales and through many concentric circles of understanding and identity, from the self to the family and clan, to a nation, language group, or religious affiliation, to the huge circles of humanity and life, and eventually to the idea that you are part of an entire universe or cosmos.

But in recent centuries, increasing cross-cultural contacts have shown how embedded all origin stories and religions are in local customs and environments. That is why globalization and the spread of new ideas corroded faith in traditional knowledge. Even true believers began to see that there were multiple origin stories that said very different things. Some people responded with aggressive, even violent, defenses of their own religious, tribal, or national traditions. But many

simply lost faith and conviction, and along with them, they lost their bearings, their sense of their place in the universe. That loss of faith helps explain the pervasive anomie, the feeling of aimlessness, meaninglessness, and sometimes even despair that shaped so much literature, art, philosophy, and scholarship in the twentieth century. For many, nationalism offered some sense of belonging, but in today's globally connected world, it is apparent that nationalism divides humanity even as it connects citizens within a particular country.

I have written this book in the optimistic belief that we moderns are not doomed to a chronic state of fragmentation and meaninglessness. Within the creative hurricane of modernity, there is emerging a new, global origin story that is as full of meaning, awe, and mystery as any traditional origin story but is based on modern scientific scholarship across many disciplines.

That story is far from complete, and it may need to incorporate the insights of older origin stories about how to live well and how to live sustainably. But it is worth knowing, because it draws on a global heritage of carefully tested information and knowledge and it is the first origin story to embrace human societies and cultures from around the world. It is a collective global project, a story that should work as well in Buenos Aires as in Beijing, as well in Lagos as in London. Today, many scholars are engaged in the exciting task of building and telling this modern origin story, looking for the guidance and sense of shared purpose that it may provide, like all origin stories, but for today's globalized world.

My own attempts to teach a history of the universe began in 1989. In 1991, as a way to describe what I was doing, I started using the term big history.' Only as the story slowly came into focus did I realize that I was trying to tease out the main lines of an emerging global origin story. Today, big history is being taught in universities in many different parts of the world, and through the Big History Project, it is also being taught in thousands of high schools.

We will need this new understanding of the past as we grapple with the profound global challenges and opportunities of the twenty-first century. This

book is my attempt to tell an up-to-date version of this huge, elaborate, beautiful, and inspiring story.

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